Arizona

Arizona's Instrument To Measure Standards

2005
Technical Report

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Foreword

The technical information herein is intended for use by those who evaluate tests, interpret scores, or use test results in making educational decisions. It is assumed that the reader has technical knowledge of test construction and measurement procedures, as stated in Standards for Educational and Psychological Testing (American Educational Research Association, American Psychological Association, National Council on Measurement in Education, 1999).

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Figures and Tables

Part 1: Overview

This document provides information regarding processes and procedures implemented in the 2004-2005 Spring Arizona Instrument to Measure Standards (AIMS) assessments for the development of tests, analysis of data, calibration, scoring, scaling, and standard setting. This document also describes the results of the 2004-2005 Spring AIMS assessments. The technical information in this report is intended for those who evaluate tests, interpret scores, or use test results in making educational decisions.

This document also provides information relevant to the *Standards for Educational and Psychological Testing* (American Education Research Association, American Psychological Association, National Council on Measurement in Education, 1999). Each part of this technical report addresses different standards. The standards addressed by each part are listed at the beginning of each part. Part 1 of the technical report addresses standards 2.7, 3.2, 3.3, 6.3, 6.4, 6.15, and 13.6.

The 2005 Spring AIMS assessments were administered in reading, writing and mathematics to students in Grades 3-8 and high school. This was the first year that Grades 3-8 and high school were administered all content areas of the AIMS. Students in grades 3, 5, and 8 have been taking AIMS assessments since the 1998-99 school year, and students in high school began taking AIMS in reading and mathematics in 1999 and writing in 2000. All AIMS tests are written to Arizona content standards. The 2005 Spring AIMS assessments are designed to measure Arizona students' performance on the Arizona content standards adopted in March 2003.

The AIMS high school reading, writing, and mathematics tests are high school competency tests and passing scores are required to earn a diploma for students who will graduate beginning in Spring 2006. Students have five opportunities to pass the test prior to graduation. The AIMS high school tests in reading and mathematics are multiple-choice, criterion-referenced tests. The AIMS high school test in writing consists of a single prompt essay which is scored using a six-trait analytic rubric.

The AIMS tests for Grades 3-8 are dual purpose assessments (DPA)—both criterion and norm-referenced scores are given based on performance on the AIMS tests. Each test consists of criterion-referenced items written by Arizona teachers and norm-referenced items from CTB/McGraw-Hill's norm-referenced test, *TerraNova, The Second Edition*® (TerraNova; CTB/McGraw-Hill, 2001). Some of the TerraNova items serve as both criterion referenced items and norm-referenced items. This design eliminated the need for students to take two separate tests and was first implemented for the 2004-2005 testing period. The AIMS DPA tests include criterion-referenced tests in reading, writing, and mathematics as well as norm-referenced tests in reading, language, and mathematics. All reading, language, and mathematics tests consist of multiple choice items only. The writing tests are single prompt essay tests scored using a six-trait analytic rubric.

In addition to the scores for Reading, Writing, and Mathematics, a composite score for Language Arts is also reported. The Language Arts composite is the mathematical average of the Reading and Writing scale scores. Averaging the scale scores from separate content areas is a simple and proven method for obtaining a composite score that is commonly used. Given the multifactor characteristic of the Language Arts composite, reliability information is provided separately for Reading and Writing.

Part 2: Involvement of Arizona Educators at all Levels

Part 2 of the technical report addresses the involvement of Arizona educators in test development and standard setting. This part of the technical report addresses standard 3.5 of the *Standards for Educational and Psychological Testing* (AERA, APA, NCME, 1999).

Several committees met throughout the year in preparation for the 2004-2005 AIMS assessments. These committees included teachers, curriculum specialists, and administrators from across the state and were an integral part of the AIMS test development processes and AIMS results interpretation.

The committee meetings included:

- Item Writing, in which educators wrote items aligned to standards for the AIMS Item Bank;
- Content Review, in which educators reviewed items to ensure content was appropriate to the standards being assessed;
- Item Alignment, in which educators aligned items to the new articulated standards;
- Item Selection, in which educators chose items from the Item Bank to be included on the 2004-2005 assessments; and
- Standard Setting, in which educators examined the final tests and results to recommend cut scores for performance levels of Approaches the Standard, Meets the Standard, and Exceeds the Standard.

More information regarding the committee meetings is provided in sections 4 and 10 of this report. During all committee meetings testing materials were kept secure and committee members signed non-disclosure agreements.

Part 3: Test Design

Part 3 of the technical report provides information regarding test design. The following AERA/APA/NCME standards are addressed: 1.2, 1.6, 3.1, 3.2, 3.3, 3.11, 6.4, 6.15, 13.3, and 13.5.

3.1 Content Standards

The AIMS assessments are designed to measure performance on the Arizona content standards adopted in March 2003. These standards are organized by strand, concept, and performance objective. The AIMS reading and mathematics test blueprints are based on the concepts and strands of the Arizona content standards, presented in figures 3.1.1-3.1.2. The AIMS writing tests are scored on the Six Trait Writing Rubric. Table 3.1.3 presents the six traits.

Figure 3.1.1
Arizona Reading Concepts and Strands

Strand 1: Reading Process

- **Concept 1: Print Concepts**
- **Concept 2: Phonics**
- **Concept 3: Vocabulary**
- **Concept 4: Comprehension Strategies**

Strand 2: Comprehending Literary Text

- **Concept 1: Elements of Literature**
- **Concept 2: Historical and Cultural Aspects**

Strand 3: Comprehending Informational Text

- **Concept 1: Expository Text**
- **Concept 2: Functional Text**
- **Concept 3: Persuasive Text**

Figure 3.1.2
Arizona Mathematics Concepts and Strands

Strand 1: Number Sense and Operations

- **Concept 1: Number Sense**
- **Concept 2: Numerical Operations**
- **Concept 3: Estimation**

Strand 2: Data Analysis, Probability and Discrete Math

- **Concept 1: Data Analysis (Statistics)**
- **Concept 2: Probability**
- **Concept 3: Discrete Mathematics**

Strand 3: Patterns, Algebra and Functions

- **Concept 1: Patterns**
- **Concept 2: Functions and Relationships**
- **Concept 3: Algebraic Representations**
- **Concept 4: Analysis of Change**

Strand 4: Geometry and Measurement

- **Concept 1: Geometric Properties**
- **Concept 2: Transformation of Shapes**
- **Concept 3: Coordinate Geometry**
- **Concept 4: Measurement**

Strand 5: Structure and Logic

- **Concept 1: Algorithms and Algorithmic Thinking**
- **Concept 2: Logic and Reasoning**

Figure 3.1.3
Arizona Writing Traits

Trait 1: Ideas and Content

Trait 2: Organization

Trait 3: Voice

Trait 4: Word Choice

Trait 5: Sentence Fluency

Trait 6: Conventions

3.2 Test Blueprints

A test blueprint designates the percentage of items that should measure each strand and concept. All AIMS assessments were designed in accordance with the following blueprints. Further discussion of item selection to match the blueprints is included in Section 4 of this report.

Table 3.2.1
AIMS blueprint for Reading

Spring 2004-2005 AIMS Reading Blueprint

Grade		Strand 1						Strand 2		Strand 3		
		Concept 1	Concept 2	Concept 3	Concept 4	Concept 5	Concept 6	Concept 1	Concept 2	Concept 1	Concept 2	Concept 3
	% of test	7%	0%	9%	11%	0%	17%	22%	0%	11%	11%	11%
	% of strand on test	44%						22%		33%		
Grade	4	Strand 1						Strand 2		Strand 3		
		Concept 1	Concept 2	Concept 3	Concept 4	Concept 5	Concept 6	Concept 1	Concept 2	Concept 1	Concept 2	Concept 3
	% of test	0%	0%	0%	7%	0%	15%	31%	0%	24%	11%	11%
	% of strand on test	22%						31%		46%		
Grade	6	Strand 1						Strand 2		Strand 3		
		Concept 1	Concept 2	Concept 3	Concept 4	Concept 5	Concept 6	Concept 1	Concept 2	Concept 1	Concept 2	Concept 3
	% of test	0%	0%	0%	11%	0%	11%	31%	0%	24%	11%	11%
	% of strand on test	22%						31%		46%		
Grade	8	Strand 1						Strand 2		Strand 3		
		Concept 1	Concept 2	Concept 3	Concept 4	Concept 5	Concept 6	Concept 1	Concept 2	Concept 1	Concept 2	Concept 3
	% of test	0%	0%	0%	11%	0%	11%	31%	0%	24%	11%	11%
	% of strand on test	23%						31%		46%		
Grade	7	Strand 1						Strand 2		Strand 3		
		Concept 1	Concept 2	Concept 3	Concept 4	Concept 5	Concept 6	Concept 1	Concept 2	Concept 1	Concept 2	Concept 3
	% of test	0%	0%	0%	11%	0%	11%	24%	7%	22%	13%	11%
	% of strand on test	22%						31%		46%		
Grade	8	Strand 1						Strand 2		Strand 3		
		Concept 1	Concept 2	Concept 3	Concept 4	Concept 5	Concept 6	Concept 1	Concept 2	Concept 1	Concept 2	Concept 3
	% of test	0%	0%	0%	7%	0%	9%	26%	7%	24%	15%	11%
	% of strand on test	17%						33%		60%		
Grade	HS	Strand 1						Strand 2		Strand 3		
		Concept 1	Concept 2	Concept 3	Concept 4	Concept 5	Concept 6	Concept 1	Concept 2	Concept 1	Concept 2	Concept 3
	% of test	0%	0%	0%	7%	0%	7%	26%	7%	22%	15%	15%
	% of strand on test	16%						33%		62%		

January 2005

Source: http://www.ade.az.gov/standards/aims/blueprints/ReadingBlueprint2004-200509-09-04.pdf

Table 3.2.2
AIMS blueprint for Mathematics

Spring 2004-2005 AIMS Mathematics Blueprint

	Strand 1			Strand 2				Strand 3				Strand 4				Strand 5	
	C1	C2	C3	C1	C2	C3	C4	C1	C2	C3	C4	C1	C2	C3	C4	C1	C2
Grade 3																	
% of Test by Concept	15%	14%	6%	6%	6%	6%		11%		11%		8%		13%		6%	
% of Test by Strand	35%			17%				22%				21%				6%	
Grade 4																	
% of Test by Concept	13%	11%	6%	6%	6%	6%		12%		12%		10%		15%		6%	
% of Test by Strand	30%			17%				23%				24%				6%	
Grade 5																	
% of Test by Concept	10%	13%	6%	6%	6%	6%		12%		12%		10%		13%		6%	
% of Test by Strand	29%			18%				24%				24%				6%	
Grade 6																	
% of Test by Concept	6%	10%	6%	6%	6%	9%		12%		12%		12%		16%		6%	
% of Test by Strand	22%			21%				24%				28%				6%	
Grade 7																	
% of Test by Concept	7%	9%	6%	9%	6%	6%		12%		12%		13%		14%		6%	
% of Test by Strand	22%			21%				24%				28%				6%	
Grade 8																	
% of Test by Concept	6%	6%	6%	11%	6%	6%		6%	6%	15%		14%		6%	6%	6%	
% of Test by Strand	18%			23%				27%				26%				6%	
H. S.																	
% of Test by Concept	5%	5%	5%	9%	5%	5%		5%	7%	14%	5%	9%	5%	7%	6%	5%	5%
% of Test by Strand	14%			19%				31%				27%				9%	

Source:
http://www.ade.az.gov/standards/aims/blueprints/RevisedAIMSMathematicsBlueprint09-07-04.pdf

3.3 Description of AIMS 2005 Tests

The test blueprints were used with the processes described in detail in Section 4 to develop all AIMS tests. The resulting test configurations are as follows.

3.3.1 High School Reading (Criterion-referenced only)

The AIMS CRT high school reading test consisted of 54 multiple choice items developed by Arizona teachers. The raw scores ranged from 0-54 and scale scores were designed to range from 500 to 900. All items on the high school reading test reported to a criterion referenced score. No norm-referenced items were included in the high school reading test.

3.3.2 High School Writing (Criterion-referenced only)

The AIMS CRT high school writing test consisted of one extended response writing prompt. Responses to the prompt were scored on the 6-trait analytic rubric. Each trait received two ratings. Final scores for traits with adjacent ratings were derived by averaging the two ratings. The raw scores ranged from 0-36 and scale scores were designed to range from 500 to 900. There were two forms of the high school writing test,

A and T. Form T was used as a make-up form administered the week after the operational window. No norm-referenced items were included in the high school writing test.

3.3.3 High School Mathematics (Criterion-referenced only)

The AIMS CRT high school math test consisted of 85 multiple choice items developed by Arizona teachers. The raw scores ranged from 0-85 and scale scores were designed to range from 500 to 900. All items on the high school reading test reported to a criterion-referenced score. No norm-referenced items were included in the high school math test.

3.3.4 Grades 3-8 Reading and Language (Dual Purpose Assessment)

The AIMS reading tests for Grades 3-8 consisted of both a criterion-referenced and a norm-referenced component to allow for both criterion-referenced and norm-referenced scores. Some items reported to CRT scores only, some items reported to NRT scores only, and some items reported to both CRT and NRT scores.

The AIMS CRT reading tests for Grades 4-8 consisted of 39 items developed by Arizona teachers and 15 TerraNova items that map to the Arizona content standards for a total of 54 items. The AIMS CRT reading test for Grade 3 consisted of 42 items developed by Arizona teachers and 12 TerraNova items that map to the Arizona test blueprint for a total of 54 items. The raw scores on all tests ranged from 0-54. Scale score ranges are presented in Table 3.3.1. Scaling of AIMS CRT reading is discussed in Part 7 of this technical report.

The AIMS NRT reading tests for Grades 3-8 consisted of 25 TerraNova reading items from TerraNova Form D Complete Battery. The TerraNova items matched the test blueprint and statistical criteria of TerraNova Form D Complete Battery. The difference in blueprint representation at the strand level exceeded 5% in only one strand in the Grade 3 test. The difference in blueprint representation in all other strands in Grades 3-8 did not exceed 3%. The difference between test characteristic curves in terms of expected percent of maximum raw score did not exceed 2%. The TerraNova reading items were embedded within the AIMS DPA reading test. Scale scores are reported on the TerraNova reading NRT scale. Norms were reported using the 2000 TerraNova norms and a quarter month of 30.

The AIMS NRT language tests for Grades 3-8 consisted of 20 TerraNova language items from TerraNova Form D Complete Battery. The TerraNova items matched the test blueprint and statistical criteria of TerraNova Form D Complete Battery. The difference in blueprint representation did not exceed 5% at the strand level with the exception of one strand in Grade 4 and two strands in Grade 8 where the differences were 6%, 6%, and 8%, respectively. The difference between test characteristic curves in terms of expected percent of maximum raw score did not exceed 2%. The TerraNova language items were embedded within the AIMS DPA reading test. Scale scores are reported on the TerraNova language NRT scale. Norms were reported using the 2000 TerraNova norms and a quarter month of 30.

3.3.5 Grades 3-8 Writing

The AIMS writing test consisted of one extended response writing prompt per administration used for criterion-referenced testing only. Responses to the prompt were scored on the 6-trait analytic rubric. Each trait received one rating. The raw scores ranged

from 0-36. Scale score ranges are presented in Table 3.3.1. Scaling of AIMS DPA writing is discussed in Part 7 of this technical report.

3.3.6 Grades 3-8 Mathematics (Dual Purpose Assessment)

The AIMS mathematics tests for Grades 3-8 consisted of both criterion-referenced and norm-referenced components to allow for both criterion-referenced and norm-referenced scores. Some items applied to CRT scores only, some items applied to NRT scores only, and some items applied to both CRT and NRT scores.

The AIMS CRT mathematics tests for Grades 3-7 consisted of items developed by Arizona teachers and 15 TerraNova items that map to the Arizona blueprint for a total of approximately 70 items. The AIMS CRT mathematics test for Grade 8 consisted of items developed by Arizona teachers and 13 TN items that map to the Arizona blueprint for a total of 66 items. The raw scores ranged from 0- ~70. Scale score ranges are presented in Table 3.3.1. Scaling of AIMS CRT mathematics is discussed in Part 7 of this technical report.

The AIMS NRT mathematics tests for Grades 3-8 consisted of 25 TerraNova mathematics items from TerraNova Form D Complete Battery. The TerraNova items matched the test blueprint and statistical criteria of TerraNova Form D Complete Battery. The difference in blueprint representation at the strand level did not exceed 5% with the exception of one strand in Grade 6 (7%), one strand in Grade 7 (9%), and one strand in Grade 8 (6%). The difference between test characteristic curves in terms of expected percent of maximum raw score did not exceed 2%. The TerraNova mathematics items were embedded within the AIMS DPA mathematics test. Scale scores are reported on the TerraNova mathematics NRT scale. Norms were reported using the 2000 TerraNova norms and a quarter month of 30.

3.3.7 Language Arts Composite

A Language Arts composites score was also provided. This composite is the mathematical average of the Reading and Writing scale scores. The Language Arts score is not reported to students, parents, or teachers. This composite score is provided to ADE in the electronic data only for calculating and reporting annual yearly progress under NCLB legislation.

Table 3.3.1
Raw Score and Scale Score ranges of AIMS 2005 CRT Assessments

Content	Grade	Raw Score range	Scale Score range
Reading	3	0-54	200-640
	4	0-54	220-660
	5	0-54	240-675
	6	0-54	250-690
	7	0-54	260-720
	8	0-54	270-800
	HS[a]	0-54	500-900
Writing	3	0-36	200-650
	4	0-36	230-700
	5	0-36	255-740
	6	0-36	275-760
	7	0-36	290-770
	8	0-36	300-800
	HS[a]	0-36	500-900
Mathematics	3	0-72	200-650
	4	0-70	230-675
	5	0-68	255-700
	6	0-68	270-725
	7	0-68	290-740
	8	0-66	300-800
	HS[a]	0-85	500-900

[a]HS tests are not on the same scale as G3-8 tests. Scale scores are therefore not comparable between the HS and G3-8 tests.

Part 4: Test Development

Part 4 of the technical report provides a summary of the test development activities that occurred during the 2004-2005 contract year. Information is provided relating to the following topics:

- a general discussion of CTB's test book creation and editing process;
- descriptions of the alignment study and item selection committee meetings held in Arizona in which Arizona educators and CTB personnel participated;
- the process of selecting criterion-referenced test (CRT) items;
- the process of selecting norm-referenced test (NRT) items;
- the process of selecting field test items;
- the resolution of style and formatting concerns; and
- evidence of customer approvals.

A comprehensive, multi-segment development process guides the development of assessment materials. The following section outlines this process in general terms. The remainder of Part 4 provides details of how these processes were implemented in Arizona. This section of the technical report addresses the following AERA/APA/NCME standards: 1.6, 3.1, 3.5, 3.6, 3.7, 3.9, 3.11, 3.16, 6.4, 6.15, 7.3, 7.4, 7.7, 13.3, and 13.5.

4.1 Overall Test Book Creation and Editing Process

4.1.1 Solution Management

The first segment of test development is Solution Management. During this phase of the development process, the test design document is created which defines the content areas to be tested at each grade level and their respective reporting categories. Following creation of the test design, documents and materials necessary to guide development of the assessment materials are gathered, investigated, and studied. Content standards are thoroughly reviewed and discussed by content development staff in order to gain an understanding of what students should know and be able to do. Before proceeding, development staff members gain detailed knowledge of the intent and expectations of the strands, concepts, and performance objectives (POs).

4.1.2 Documents and Materials Development

During the Documents and Materials Development Segment, content staff members meet with teachers and the Department of Education staff to discuss item specifications and content limits and to write the test blueprints. During this meeting, teachers have the opportunity to exchange ideas, discuss a variety of viewpoints, and arrive at one common viewpoint that reflects what all students throughout the state should know and be able to do. The experience provides a greater understanding of the content standards; provides a greater understanding of realistic expectations for students; and motivates teachers to align their curriculum and instruction to state standards. In addition, item specifications allow for consistent decisions to be made as items are written and reviewed.

4.1.3 Item Development and Editing

The development of quality test items requires content and assessment expertise and the ability to be creative while adhering to the test blueprint, detailed item specifications, and content limits. The test blueprint and item specifications provide clear direction as items for each performance

objective are written and edited. Test items are developed using a template designed to capture all requirements and supporting information such as strand, concept, performance objective, score points, and content reference documentation. Test items are edited and revised by in-house content editors, style editors, art specialists, hand scoring staff, and research scientists before being presented to teachers and state-level administrators for review and approval.

Item development and subsequent test material development are guided by a detailed, multi-module Publishing Process. The Publishing Process provides all publishing staff with a detailed, common set of strategies, procedures, and documentation that governs the production of all test materials. The result is that, regardless of content area or grade level, all materials are prepared in accordance with the same stringent and exacting standards.

4.1.4 Quality Reviews

A smooth test administration requires that all test materials, including test books, answer documents, directions to students and test coordinators, and other manuals align with each other. All sample items, page numbers, and administration times must be accurate in all components of the test program. Non-alignment of test materials results in the necessity of reprinting materials (e.g., not enough answer bubbles were provided on an answer document). When materials are not in alignment, not only can rework and additional costs be incurred, but there is also the possibility of jeopardizing the validity of test results and creating poor publicity. Therefore, to help ensure that all documents required for the administration of a test are in alignment with each other, a materials integration review (MIR) is conducted prior to moving the materials on to the Quality Assurance (QA) Department.

During an MIR, a proctor simulates the test administration experience by administering the test to three test takers for each grade and content area using the examiner's manual and appropriate answer documents developed for the project. The purpose of this review is twofold: to ensure that the test materials are in alignment with each other and to verify that the answer keys are correct. A side benefit of this review is the possible revision of any unclear items prior to submission to Quality Assurance and the creation of camera copy, thus reducing the number of blue line changes required. The goal of this work module is to ensure that all test components are precisely coordinated and free of errors and ambiguities. Clear and error-free materials ensure a smooth test administration and reflect the high professional quality of CTB products and staff.

The purpose of the QA review is to ensure that all publishable products meet the high quality standards and expectations of CTB's customers. This QA review comes at the end of the process to augment the excellent work that takes place at each stage of the publishing cycle. It is QA's job to find any problems that have been overlooked by the project team. This review is an important and irreplaceable step in the publishing process.

4.2 Item Pool

4.2.1 Item Writing

Items for the AIMS CRT tests are written by Arizona teachers with the facilitation of the testing contractor. During item writing for the 2004-2005 testing year, the Arizona Department of Education was transitioning between the former contractor and CTB. CTB observed the Item Writing conference in July 2004.

The purpose of the observation of Item Writing was for CTB to become acquainted with the item writing process that is familiar to the Arizona educators. During this time CTB staff observed the item writing process for reading grades 3, 6, and high school and for mathematics grades 4, 5, 7, 8

and high school facilitated by representatives of the former contractor. CTB staff gained an understanding of how meetings were conducted by the former contractor and how the committee of teachers responded and interacted.

4.2.2 Content/Bias Review

Content and Bias Reviews were conducted on each item by Arizona educators and facilitated by the former contractor. CTB observed content and bias reviews to gain an understanding of how the reviews were conducted by the former contractor and how the committee of teachers responded and interacted.

4.2.3 Item Alignment

The purpose of the Alignment Study was to ensure that a collection of quality items were available for the AIMS 2005 assessments. The study included a review of multiple-choice items for the content areas of reading, language arts, and mathematics for grades 3 through 8 and high school. Participants determined the alignment of each item to the 2003 Arizona content standards. In addition, participants determined the level of depth of knowledge (DOK) for each performance objective and assigned a DOK level to each item.

The Alignment Study was conducted in four one-day sessions in July and August 2004. During the July sessions, participants aligned items in the AIMS item bank obtained from the previous contractor. During the August sessions, participants aligned the TerraNova, Forms C and D norm-referenced test (NRT) items available for the grade level assessment. Table 4.2.3.1 shows the composition of each session.

Table 4.2.3.1
Alignment Study Sessions and Participants

Date	Content	Grade	Number of Arizona Participants	CTB Participants
July 23, 2004	Reading	3, 6	6	Reading Supervisor
July 23, 2004	Mathematics	3, 4, 6, 7	12	Math Supervisor
July 30, 2004	Reading	4, 5, 7, 8	12	Reading Supervisor
July 30, 2004	Mathematics	5, 8	6	Math Supervisor
August 11, 2004	Reading	3, 5, 8, and high school	13	Reading Supervisor
August 11, 2004	Mathematics	8 and high school	5	Math Supervisor
August 12, 2004	Reading	8 and high school	5	Reading Supervisor
August 12, 2004	Mathematics	3, 5, 8, and high school	13	Math Supervisor

Led by a CTB Content Specialist, a maximum of 3 educators from each grade level participated in the Alignment Study for the items available for each grade level assessment and for the AIMS item bank. Participants used Arizona's content standards, Arizona's Cross-Walk for Standards and depth of knowledge (DOK) definitions as the basis for the alignment. They assigned each item to the appropriate PO and DOK level. Ultimately, results were recorded on Excel spreadsheets and included: item number; DOK level; performance objective; comments; and an indication of whether the item should be accepted for or eliminated from consideration. Table 4.2.3.2 shows the approximate number of items examined for each content area for each grade.

Table 4.2.3.2
Approximate Number of Items Examined for Alignment Study

Content Area	Approximate Number of NRT Items Per Grade	Approximate Number of CRT Items Per Grade (3, 5, 8 only)	Approximate Number of AIMS HS CRT Items
Reading/Language Arts	160	140	250
Mathematics	100	40-80	200

The percentage of NRT reading and language items aligning to the content standards was quite high, ranging from 95% to 100% for each grade level, while the alignment of AIMS items to the standards was considerably lower, ranging from a low of 39% at Grade 3 to a high of 70% at Grade 5. Tables 4.2.3.3 and 4.2.3.4 show the portions of reading/language arts items that aligned to the standards.

Table 4.2.3.3
Portion of NRT Items Aligned to Standards – Reading/Language Arts

	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8
Number of Items Examined	140	160	160	160	160	160
Number of Items Aligned	140	157	154	152	152	159
Portion of Items Aligned	100%	98%	96%	95%	95%	99%

Table 4.2.3.4
Portion of AIMS Items Aligned to Standards – Reading/Language Arts

	Grade 3	Grade 5	Grade 8	High School
Number of Items Examined	143	122	155	250
Number of Items Aligned	56	86	65	120
Portion of Items Aligned	39%	70%	42%	48%

The percentage of NRT mathematics items aligned to the content standards was also quite high at Grades 3 through 7, ranging from 70% to 83% for each grade level, and 40% at Grade 8. The alignment of AIMS items to the standards was considerably higher, ranging from 83% to 98%. Tables 4.2.3.5 and 4.2.3.6 show the portions of mathematics items that aligned to the standards.

Table 4.2.3.5
Portion of NRT Items Aligned to Standards – Mathematics

	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8
Number of Items Examined	100	114	114	112	114	112
Number of Items Aligned	83	81	80	83	84	45
Portion of Items Aligned	83%	71%	70%	74%	74%	40%

Table 4.2.3.6
Portion of AIMS Items Aligned to Standards – Mathematics

	Grade 3	Grade 5	Grade 8	High School
Number of Items Examined	40	47	78	196
Number of Items Aligned	38	39	73	193
Portion of Items Aligned	95%	83%	94%	98%

4.3 Item Selection of 2005 AIMS

4.3.1 AIMS CRT Item Selection

The purpose of the Item Selection meeting was to have Arizona educators select valid and reliable test forms for the 2005 Spring AIMS assessments for Grades 3 through 8 and high school for reading and mathematics using items from the AIMS item bank. CTB participants in the CRT selection were:

- Donna Ventura, Development Project Manager
- Toni Gibbs, Reading and Writing Development Supervisor
- Kellie Crain, Reading and Writing Content Editor
- Teresa Park, Reading and Writing Content Editor
- Dan Dube, Mathematics Development Supervisor
- Ric Garrido, Mathematics Content Editor
- Ted Slausen, Mathematics Development Supervisor

Arizona participants included four or five teachers per grade level for each of Grades 3 through 8 and high school; two grades worked within the same room.

The ADE provided a list of items and the POs to which they were aligned. All items were loaded onto laptop computers with projection devices that allowed all participants to view and discuss items together. For each grade level, between 300 and 400 items were available for selection. Two sets of criteria steered the selection of AIMS items: content considerations and statistical considerations.

Content considerations were addressed by the test blueprints. Tables 3.2.1 and 3.2.2 show the test blueprints for reading and mathematics for Grades 3 through 8 and high school. Careful adherence to the blueprints guaranteed the tests would validly measure the 'construct' of math and reading as represented in the Arizona state content standards, maintain consistency, link to instruction, and allow for selection of items from different performance objectives within each concept. Substantial variance from the test blueprint could alter the validity of the scores being reported. Items were selected to represent the significant content categories specified in the test blueprint in the same proportion as the content categories represented in the test blueprint. Item selection based on the test blueprints was guided by the following criteria:

- Criterion 1: Select a minimum of four items per concept except where the concepts have been combined. The concepts that are combined in the blueprint do not require four items per concept. For example, Math Grade 3 Strand 3 Concepts 1 and 2 are combined and show a total of eight items. It was not necessary to select four items for Concept 1 and four items for Concept 2.
- Criterion 2: Match the blueprint exactly at the concept level. This means selecting exactly the number of items as shown on the blueprint for each concept or each set of combined concepts.

- Criterion 3: If Criterion 2 could not be met, it was allowable to vary from the blueprint in terms of the number of items for each concept as long as there were four items for each concept or combined concept and the items selected within each strand represent the percentage for that strand as specified in the blueprint. For example, Math Grade 3 Strand 1 includes Concepts 1-3. Concepts 1 and 2 did not have to represent 15% and 14%, respectively, as long as Strand 1 represented 35% of the test.
- Criterion 4: If Criterion 3 could not be met, it was allowable to vary from the blueprint at the strand level by not more than 5% for Math and 10% for Reading while still maintaining Criterion 1.

Statistical considerations included item difficulty and other statistical characteristics of the items. A range of item difficulties are needed to measure well along the ability continuum. P-values were to be distributed between approximately .35 and .95 with fewer items at the extremes of difficulty and more items of moderate difficulty. The target mean p-value for each operational form was .67. Careful adherence to the distribution of p-values specified guaranteed students a reasonable opportunity to do well on a test that would be neither too easy nor too hard. In addition to selecting items with appropriate p-values, staff members were asked to avoid selecting items with the following characteristics:

- Point biserial on the correct answer < .20
- Positive point biserial on the distractors
- P-value < .35 or > .95
- Omit rates > 5%
- Substantial differential item functioning statistics for gender or ethnicity
- Poor fit statistics such that Infit > 2.0 or Outfit >2.0

Table 4.3.1 shows the number of AIMS items that were selected for each grade. All selections were approved by CTB research staff and ADE staff.

Table 4.3.1
Number of Items Selected by Committee

Content Area	Grade	Number Selected
Reading	**3 through 8**	**39**
Reading	**HS**	**54**
Math	**3**	**57**
Math	**4**	**55**
Math	**5, 6, 7**	**53**
Math	**8**	**51**
Math	**HS**	**85**

4.3.2 AIMS NRT Item Selection

The TerraNova norm-referenced scores for Arizona's Dual Purpose Assessment were derived from all the TerraNova items and only the TerraNova items included in each test. The NRT items, therefore, were selected to closely match the content and statistical criteria of TerraNova Form D Complete Battery. CTB content development staff selected these items in close cooperation with research staff and ADE staff according to an extremely tight timeline.

Twenty-five nationally normed TerraNova (TN) items per grade were used to provide norm-referenced scores. Selection of these items was governed by the same content principles as the selections of the AIMS items and the field test items. In addition, coverage for each objective was to be within 5% of the percentages of score points per objective in the TerraNova Form D test blueprint and the maximum expected percent difference between test characteristic curves was not to exceed .02. These criteria were more strict than usual because the TN items were being administered outside of their standardized context and would be used to provide norm-referenced scores based on national standardization data.

Item selection was facilitated by the ITEMWIN software (Burket, 2000). ITEMWIN allows the content editor to make informed decisions regarding an item selection. This software monitors the impact of each decision made during the item selection process and offers a variety of options for grouping, classifying, sorting, and ranking items to highlight key information as it is needed.

The ITEMWIN program has three parts. The first part is used to select a working item pool of manageable size from the larger tryout pool (in this case, TN Form D Complete Battery items); items clearly inappropriate to the target grade range are eliminated. There is information about each item in the pool, including the item format to which the item is assigned, a descriptive phrase about the item, the association of the item with a stimulus, a bias rating indicating whether the item shows DIF to a particular population of students, the item parameters, and a fit rating indicating how well the item fits the expectations based on the IRT model used.

The second part of the ITEMWIN program uses the working item pool created in the first step to perform the actual test selection. Typically, the developer begins by specifying the number of items to be included in the test and a target number of items for each item format. The program can then be prompted to select automatically a test that represents the best possible statistical combination of items. These automatic selections can then be used as a reference set to which other selections are compared. Successive selections are plotted on a graphic display that shows the test characteristic curve for each set of selected items. In the case of the AIMS NRT, the test characteristic curve for each grade and content area of TerraNova Form D Complete Battery was generated as a reference. Test characteristic curves for subsets of items that maintained the TerraNova blueprint criteria for each grade were then plotted and compared to the reference set.

In the third part of the program, a table shows both expected number correct and standard error of measurement as functions of scale score, as well as statistical and graphical summaries on bias, fit, and the average standard error of the test as selected. Any fault in the selection- whether the test is too easy or too difficult for the target grade, contains biased items, or does not adequately cover part of the range- becomes immediately apparent as the final statistics are generated. Content editors and research staff examined these statistics for each of the AIMS NRT selections to confirm that they closely matched the statistics of TerraNova Form D Complete Battery.

4.3.3 AIMS Field Test Item Selection

In addition to the AIMS items that were selected by committee member (see previous section), a small additional set of new items were to be included in the test books. The goal was to select an

additional 10 items for Grades 3—8 and 15 items for HS per content area (reading and mathematics) per form so that item data could be collected. Due to extremely tight timelines, item selection was performed by CTB development staff. Selections were subject to approval by Arizona teachers and ADE staff. The item selection team was comprised of the following members:

- Donna Ventura, Development Project Manager
- Toni Gibbs, Reading and Writing Development Supervisor
- Kellie Crain, Reading and Writing Content Editor
- Teresa Park, Reading and Writing Content Editor
- Dan Dube, Mathematics Development Supervisor
- Tanya Varilek, Mathematics Content Editor
- Darren Schmidt, Mathematics Content Editor
- Stacy Curry, Administrative Assistant

In order to ultimately contribute to an item bank of items that measure and support the curriculum and state content standards, selection of the field test items was guided by the test blueprints (See Tables 3.2.1 through 3.2.2.). Given the number of items being selected, and the need to be passage-efficient in the reading tests, the blueprints were adhered to as closely as possible. Table 4.3.3 shows that in all, 2,320 field test items were selected for inclusion in field test books.

Table 4.3.3
Number of Field Test Items Selected

Content Area	Number of Grades	Number of Forms	Number of Items Selected
Reading	**6 (Gr3 through 8)**	**16**	**960**
Reading	**1 (HS)**	**20**	**200**
Math	**6 (Gr3 through 8)**	**16**	**960**
Math	**1 (HS)**	**20**	**200**
TOTAL	**8**	**72**	**2,320**

4.4 Style and Format Decisions

A detailed Arizona Style Guide was used for style editing AIMS items. The Style Guide includes capitalization and punctuation conventions, abbreviations, wording and formatting preferences, use of symbols, and other specific and general editing guidelines. This guide was the result of many face-to-face discussions with the ADE prior to development of test materials and continued to evolve as the project progressed. Additional changes were made as test materials were reviewed prior to sign-off. Consequently, the original Style remains a fluid document.

The psychometric properties of the items need to remain stable across successive administrations. In order to achieve this stability, items should not be changed between successive administrations (e.g., field test and operational administration; operational and anchor administration). Furthermore, there should be no changes in the broader context in which the item is administered. Any editing or art change that may affect the statistical characteristics of an item should be avoided. Ideally, there should be no change in the wording of the stem or answer options,

position of key, or formatting of answer choices. Nevertheless, because the items used in AIMS 2005 originated from various sources, they did not give a unified appearance when organized into test books. In order for the items to appear unified and professional, some formatting changes were required. All changes to the items were reviewed and approved by CTB Research. Modification prior to the 2005 administration will have little to no impact on stability because all items will be calibrated using live operational data and placed on the new 2005 scales. The following general modifications were applicable to all grade levels:

- Fonts will match AIMS specifications.
- Font modifications will likely create line-break changes in some test items.
- Illustrative art has been eliminated.
- All NRT answer choices labeled FGHJ have been changed to ABCD format.
- Some of the screens and shadows have been eliminated.

Tables 4.4.1 through 4.4.5 show the resolution of general style issues and test material-specific issues that will be incorporated into the evolving Style Guide.

Table 4.4.1
General Style Issues

CTB Style	AIMS Style	CTB Recommendation	Decision
Ink color: Contents and covers are usually one color in addition to black.	Ink color: Contents are black only; covers are color and black.	Contents are one color and covers are two colors as provided by ADE.	Contents should be one color and covers are two colors as provided by ADE.
Uses boldface type for stems.	Uses regular type for stems.	Boldface type is more visible and recommended by Universal Design for emphasis.	Bold face text should be used for emphasis only. Do not boldface stems.
Item numbers are in screened boxes in black type.	Item numbers are in black ovals in reversed-out type.	Item numbers are without screening or borders.	Item numbers should be large, without screening or borders.
"Directions" box is screened, with text initial capital in black type	"Directions" box is black with reversed out, all capital text and colon	"Directions" box are without screening or border. The word "Direction" can be a larger font, bold and with initial capitalization.	"Directions" box should be with a border and screening. The word "Direction" should be a larger font, reversed-out text, and with initial capitalization, followed by a colon.
Go On indicators are on right-hand pages only	Go On indicators are on every page	Go On indications are on right-hand page only and above the page numbers.	Go On indicators should be placed at the bottom on right-hand page and on left-hand page and above the footer line.
Page numbers are located in bottom right corner on right-hand pages so that student can easily read with book open. Content title is located beside page numbers.	Page numbers are located in bottom left corner on all pages. Content titles are located at the top of each page.	Page numbers are located in footer and at the bottom right corner on right-hand pages and on left corner on left-hand pages. Content Area can be located in center of footer with page numbers. Solid line to appear across page to indicate footer.	Page numbers should be located in footer and at the bottom right corner on right-hand pages and on left corner on left-hand pages. Solid line should appear across bottom of page to indicate footer. Content Area should be located in center of header.
		Forms should be titled on front cover as A, B, C, etc.	Forms should be titled on front cover as A, B, C, etc. It is not necessary to identify form with content or administration year.

Table 4.4.2
Reading Style Issues

CTB Style	AIMS Style	CTB Recommendation	Decision
Uses complete statement in answer choices when quoting from passage.	Uses ellipses in answer choices.		When at all possible use full text and avoid use of sentences that are excessive in length and avoid use of ellipses. Use ellipses within sentences when it is necessary to use sentences that are excessive in length.
Uses italics for words referred to as words (e.g., "the word carefully").	Uses underline for words referred to as words (e.g., "the word carefully").		Use underline for words referred to as words (e.g., "the word carefully").
Answer choices of open stem items do not end in terminal punctuation.	Some open stem items end stem with em-dash, others use terminal punctuation in answer choices; inconsistent		Do not use em-dash at the end of open stem items. Use terminal punctuation in answer choices to end a complete thought.
In stems, underline is used for emphasis.	In stems, all caps are used for emphasis, though inconsistent in whether boldface or regular type is used	Boldface type is more visible and recommended by Universal Design for emphasis.	Bold face text should be used for emphasis only. Do not boldface stems.
In stems, sentences that are quoted from passage are in italic type and indented.	In stems, sentences from passage are in boldface type, not indented.		In stems, sentences that are quoted from passages should be in boldface type and should be indented.

Table 4.4.3
Mathematics Style Issues

CTB Style	AIMS Style	CTB Recommendation	Decision
Space between numeral and measurement unit in art (“20 ft”).	In some cases, there is no space between numeral and measurement unit (“20ft”).	There should be a space between numeral and measurement unit in art (“20 ft”).	There should be a space between numeral and measurement unit in art (“20 ft”).
Align numbers by decimal.	There is inconsistent alignment for numbers.	Align numbers by decimal.	Align numbers by decimal.
Negative signs are at “shoulder height” of numbers	Negative signs are at middle of number, resembling a minus sign	Negative signs are at “shoulder height” of numbers	Negative signs should be at middle of number, resembling a minus sign.
Titles of graphs/charts are initial capital letters.	Titles are all capital letters.	Titles of graphs/charts Should be initial capital letters.	Titles of graphs/charts should be initial capital letters.
In geometric figures, measurement lines are deleted if they crash.	Measurement lines crash.	In geometric figures, measurement lines are deleted if they crash.	In geometric figures of new development items, measurement lines should be deleted if they crash.
Spinners are placed on line.			Spinners should be placed on line.

Table 4.4.4
Test Directions Style Issues

CTB Style	AIMS Style	CTB Recommendation	Decision
Ink color: Color and black on covers. Black in text.	Ink color: Color and black on covers. Black in text. (Same as CTB style.)	Ink color: Color and black on covers. Black in text.	Ink color: Color and black on covers. Black in text.
Text read aloud by teacher is in boldface type.	Text read aloud by teacher is in boldface type and enclosed in a box.	Text read aloud by teacher is in boldface type.	Text read aloud by teacher is in boldface type.
"SAY" is in boldface type, or in reversed out type in shaded arrow	"SAY" is in regular type.	"SAY" is in boldface type, or in reversed out type in shaded arrow	"SAY" is in boldface type, or in reversed out type in shaded arrow
"Pause" is in italic type.	"Pause" is in regular type.	"Pause" is in italic type.	"Pause" is in italic type.
CTB manuals employ checklists, open visual space, reminders to the teacher in the margins, and symbols for "SAY," timing, and calculator restrictions. Sample items from the test may appear in the manual.	Uses a very basic, simple text style with no art, icons, screens, drop shadows, or any kind of visually pleasing elements.	Manuals should employ checklists, open visual space, reminders to the teacher in the margins, and symbols for "SAY," timing, and calculator restrictions. Sample items from the test may appear in the manual.	Manuals should employ checklists, open visual space, reminders to the teacher in the margins, and symbols for "SAY," timing, and calculator restrictions. Sample items from the test should not appear in the manual. Sample items could all have the same position for the correct answer to simplify scripting in the manuals.

Table 4.4.5
Answer Book Style Issues

CTB Style	AIMS Style	CTB Recommendation	Decision
Contents and covers are usually one color in addition to black.	Contents are black only; covers are color and black.	Contents are one color and covers are two colors as provided by ADE.	Contents should be one color and covers are two colors as provided by ADE. Colors should coordinate with colors of test book.
Biogrid on back cover.	Biogrid and other student information are on both IBC and back cover.	Biogrid should be one page and placed on back cover.	Biogrid should be one page and placed on back cover.
Blank page text usually reads "Do Not Mark on this Page" in reversed-out type.	Blank page text reads "Do Not Write Here" in black type.	Blank page text should read "Do Not Mark on this Page" in reversed-out type.	Blank page text should read "Do Not Mark on this Page" in reversed-out type.
Copyright line is on inside front cover.	Copyright line is on inside back cover.	Copyright line should be on inside front cover.	Copyright line should be on inside front cover.
Items are divided by test section (e.g., Part 1, Part 2, etc.); line space between items	Items are grouped in list form by content area; no line space between items	Items should be divided by test section (e.g., Part 1, Part 2, etc.); line space between items	Items should be divided by test section (e.g., Part 1, Part 2, etc.); line space between items
Student ID label is placed on the front cover.	Student ID label is placed on the back cover.	Student ID label should be placed on the front cover.	Student ID label should be placed on the front cover.

4.5 Customer Approvals

Approvals from ADE staff were obtained during several phases of development: during selection of the NRT items; after second pages were created; at the completion of the MIR review; and when pre-press test books were available. Each is described below.

4.5.1 Item Selection Approval

Due to extremely tight timelines, item selection approvals were obtained on a staggered basis according to the Key Events schedule. ADE staff members were sent lists of item identification numbers and related passage codes (if the items were reading items). Each item was also classified with the PO it tested. Approval was signified verbally or via email.

4.5.2 Second Pages Approvals

At the second pages phase of development, items had been arranged into test book format. That is, they were no longer treated as individual items, but appeared in page layouts as they would appear in the final, printed test books. By this point, all content issues had been resolved. That is, the focus of the approval was on format and presentation issues, rather than on content issues. No formal approval was required. Instead, the approval was to focus on any layout/format changes that were needed. These changes were communicated verbally or via email.

4.5.3 MIR Review

The MIR review provides an opportunity for staff members who have not previously seen the test materials to review them. They provide an MIR summary listing any anomalies they find. This summary was forwarded to ADE staff for review along with any last-minute changes the content editors may have found.

4.5.4 Final Sign-off

A final, formal approval was required as test books became available for printing. ADE staff members were provided with a list of item numbers that comprised the operational items and field test items in each form. Also included in the sign-off packet were the MIR summaries (for verification that the corrections had been made) and two copies of the test book – one to keep and one to sign and return. A formal approval form was also included to be signed and returned. Many of these approval forms were returned and are on file. For those forms that do not have approval forms on file, the signed test books serve that purpose.

Part 5: Test Administration

Part 5 of the technical report describes administration procedures, including accommodations, security, and written procedures available to test administrators and school personnel. The following AERA/APA/NCME standards are addressed: 1.13, 3.3, 3.19, 3.20, 3.21, 5.1, 5.2, 5.3, 5.4, 5.5, 5.6, 5.7, 6.11, 6.15, 9.1, 10.1, and 10.2.

5.1 Accommodations

The same accommodations were made available for all of the 2005 AIMS tests, including AIMS HS, AIMS DPA, and AIMS NRT. In addition, in Grades 2 and 9, students were assessed in reading, language arts, and mathematics using TerraNova, a norm-referenced test published by CTB/McGraw-Hill. TerraNova was normed in 2000. The norming group included students with disabilities who received accommodations and students identified as English Learners. Therefore, all of the Arizona state assessments (AIMS HS, AIMS DPA, and TerraNova) have the same accommodations and include students who have received accommodations.

Students with disabilities who have an Individualized Education Program (IEP), or who have a 504 plan, may be considered for standard accommodations. Also, students identified as Limited English Proficient (LEP) and students who have been identified as Fluent English Proficient (FEP) for no more than two years may be considered for standard accommodations.

For the purposes of assessment, a Special Education student is eligible to receive services under the Individuals with Disabilities Education Act – 1997 and has an Individualized Education Program (IEP). For the purposes of assessment, a 504 student is eligible under Section 504 of the Rehabilitation Act of 1973 and has a 504 Accommodation Plan.

An English Learner (EL) is a student whose native language is other than English and is learning English as a second language. The Stanford English Language Proficiency (SELP) Assessment, a language proficiency assessment developed by Harcourt Brace, is given to determine a student's proficiency in English and respective instructional placement. Limited English Proficient (LEP) is a term used to refer to a student whose English proficiency is still developing. Fluent English Proficient (FEP) is a term that is used to refer to a student that scores at the proficient level of the state mandated English language proficiency assessment.

5.1.1 Standard Accommodations

Standard accommodations are provisions made in how a student accesses and demonstrates learning. These do not substantially change the instructional level, the content, or the performance criteria. The changes are made in order to provide a student equal access to learning and equal opportunity to demonstrate what is known. Standard accommodations are changes in the routine conditions under which students take assessments, and involve changes in:

- Timing or scheduling of the test (i.e., administration of the test in short intervals or at a time of day that takes into account a student's medical needs);
- Test setting (i.e., administration of the test individually or in a small group setting, under special lighting, or using special furniture);
- Test presentation (i.e., test questions presented in large print or Braille, repeated directions, or explanation of directions); or
- How the student responds to test questions (i.e., the student points to answers or records answers in the test booklet instead of the answer booklet).

A standard accommodation that is available to English Learners is limited oral translation in the student's native language. When this accommodation is provided on state assessments only the verbal directions stated by the Test Administrator and the written directions that the student is expected to read may be orally translated into the student's native language. The translation must be an exact translation which is as close to verbatim as possible, and translation is to be provided on an as needed basis only. Translating any test item or translations that paraphrase, simplify, or clarify directions, or written translations are not permitted.

Table 5.1.1 describes in detail all standard accommodations made available for the 2005 Spring AIMS assessments. An "A" indicates that the accommodation was available for all categories of students who receive accommodations; a "1" indicates that the accommodation was available for students with an IEP; a "2" indicates that the accommodation was available for students with a 504 Plan; and a "3" indicates that the accommodation was available for LEP or FEP students. This list of standard accommodations was made available to test administrators as a list of examples and is in no way exhaustive.

Table 5.1.1
2005 Spring AIMS Standard Accommodations

Standard Accommodation	AIMS HS	AIMS DPA	TERRA NOVA
Change in timing or scheduling of test			
Extended testing time (same day)	A	A	A
More Breaks	A	A	A
Administer in several shorter sessions	A	A	A
Change in test setting			
Administer in separate location, separate room, or study carrel	A	A	A
Administer the test in a small group	A	A	A
One on one testing	A	A	A
Student given preferential seating	A	A	A
Administer the test under special lighting	A	A	A
Student wears noise buffers (after directions)	A	A	A
Student uses special furniture	A	A	A
Changes in test presentation			
Familiar test administrator	A	A	A
Repeat directions	A	A	A
Clarify or simplify language in directions in English	A	A	A
Read or sign directions	A	A	A
Exact sign language interpretation of math/writing	A	A	A
Use amplification equipment	A	A	A
Use place marker	A	A	A
Use color overlay	A	A	A
Use of magnification device	A	A	A
Exact oral translation of directions as needed	A	A	A
Read items for math or writing in English	A	A	A
Provide translation dictionary	3	3	3
Administer large-print edition of test	A	A	A
Administer Braille edition of the test	1, 2	1, 2	1, 2
Use of an abacus on math portion by a student who is blind	1	1	1
Changes in response to test questions			
Braille writers	1, 2	1, 2	1,2
Record or dictate responses to a scribe orally-- reading/math only. Scribe may not alter student responses in any way--must record word for word	1,2	1, 2	1, 2
Answers recorded or typed by student using assistive technology --spell check and grammar check turned off and predict ahead functions turned off	1, 2	1, 2	1, 2

Note. 1 = student with IEP, 2 = student with 504, 3 = LEP student or FEP student (2 or fewer years),
A = all categories of students who receive accommodations.

5.1.2 Non-standard Accommodations

Non-standard accommodations reflect changes in the test administration that affect standardization and, thus, the comparability of scores, and may also involve substantial changes in what a student is expected to learn and/or in the way that learning is demonstrated. Such changes are made to provide a student with meaningful and productive learning experiences, environments, and assessments based on individual needs and abilities. IEP teams should exercise caution in considering whether a student requires a non-standard accommodation in order to access the test. Given that non-standard accommodations involve substantial changes in what a student is expected to learn and to demonstrate, students considered for these accommodations should receive at least part of their instruction in special education.

Non-standard accommodations may not provide verbal or other clues or suggestions that hint at or give away the correct response to the student. Therefore, it is not permissible to simplify, paraphrase, explain, or eliminate any test item, prompt, or multiple-choice option.

Students with disabilities who have an Individualized Education Program (IEP) may be considered for non-standard accommodations. Under unusual circumstances, a student with a 504 plan may need non-standard accommodations. This decision must be approved by the Assessment Section of ADE. If a non-standard accommodation was used, parents were notified and the provided accommodation explained.

Table 5.1.2 describes non-standard accommodations available during the 2005 Spring AIMS tests. These accommodations were available only to students with IEPs. This list of non-standard accommodations was made available to test administrators as a list of examples and is in no way exhaustive.

Table 5.1.2
2005 Spring AIMS Non-standard Accommodations

Non-standard Accommodation	AIMS HS	AIMS DPA	TERRA NOVA
Reading aloud the reading portions of the test	1	1	1
Interpreting through sign language systems the reading portion	1	1	1
Provide reading portions on audiotape	1	1	1
Dictate writing to a scribe orally or to a recording device--scribe may not alter student responses in any way--must record word for word--(student must provide spelling, grammar, and language conventions) - writing section Must be transcribed onto the answer document	1	1	1
Use assistive technology with spell/grammar check or predict-ahead function - writing section Must be transcribed onto the answer document	1	1	1
Use of a calculator, number chart, arithmetic tables, manipulatives, or abacus on Mathematics portion of test	1	1	1

Note. 1 = student with IEP, 2 = student with 504, 3 = LEP student or FEP student (2 or fewer years),
A = all categories of students who receive accommodations.

5.1.3 Reporting Results of Assessments Taken with Accommodations

Scores of assessments taken with standard accommodations will be included with the results of students who took these tests under standard conditions at the school, district, and state level. Scores of assessments taken with non-standard accommodations will not be included in aggregate results at the school, district, and state level.

ADE will maintain a record of the number of students in each school and district taking assessments with non-standard accommodations. Given that test results with non-standard accommodations cannot be interpreted in the same way, guidance for appropriate interpretation will be provided.

ADE is obligated to closely monitor schools and districts to ensure the proper use of non-standard accommodations and will provide technical assistance to those schools with excessive usage. The goal of ADE will be to work with those schools having high numbers of non-standard accommodations to determine why this is occurring and how best to remedy the situation.

5.2 Test Security

All AIMS tests were administered under secure testing conditions. Figure 5.2.1 includes the security agreement signed by personnel involved with testing administration.

5.3 Test Administration

In order to ensure standardized testing administration for all students, a Test Coordinator's manual was made available to all test coordinators (ADE, 2005). The manual included the following topics:

- Security
- Schedule of Important Dates
- District/Charter Holder Test Coordinator's Responsibilities
- Scheduling Test Administration
- Test Setting
- Students to be Tested
- Standard and Non-standard Accommodations
- Data Grid
- Word Processors, Scribes, Tape Recorders, and Large Print and Braille Tests
- Test Materials
- Receiving Test Materials
- Inventorying Test Materials
- Procedures During Test Administration
- Procedures Following Test Administration
- Returning Materials to CTB/McGraw-Hill
- Test Security Agreement

In addition, Test Administration Directions (ADE, 2005) were made available to all test administrators. They included the following:

- Arrangements Prior to Test Administration
- Test Materials and Testing Schedule
- Test Administration Guidelines
- Student Identification Information
- Explanation of Symbols
- Detailed Scripts for Administration of Each Part of Each Test
- Procedures Following Test Administration

For specific information related to test administration, refer to the Test Coordinator's Manual and/or the Test Administration Directions.

Figure 5.2.1
2005 Spring AIMS Test security agreement

Arizona Instrument to Measure Standards
AIMS HS/AIMS DPA
Test Security Agreement

The user (state agency, school district, charter holder and/or school professional staff) acknowledges that AIMS DPA (Dual Purpose Assessment) and High School AIMS are secure tests and agrees to the following conditions of use to ensure the test's security of the tests:

1. a) The user will take all necessary precautions to safeguard all test materials by limiting access to persons with the school district or agency with a responsible, professional interest in the test's security.

   b) The names of all persons having access to the materials will be kept on file by the user.

   c) All persons having access to the materials (other than students to whom the test is administered) will sign a security affidavit, which will be kept on file.
      i. School Principals will maintain signed agreements of building staff.
      ii. District will maintain signed agreements of building administrators.
      iii. Superintendent/charter holder will sign for district and submit security agreement to ADE.
      iv. ADE will maintain signed agreements of superintendents/charter holders.

2. a) The user will keep the test materials under lock and key, except on actual testing dates, limiting access to those responsible for their security.

   b) Secure test materials, including test books and directions, will be delivered to examiners no sooner than the date of testing, unless logistics dictate an earlier delivery date.

   c) Test materials will be kept secure until they are actually distributed to students.

   d) In no case will students be permitted to remove test material from the room where testing takes place except under supervision of staff (students completing test).

3. a) The user will not examine the test to determine the content beyond the requirements to administer the test.

   b) The user will not disclose or allow to be disclosed the content of the test.

4. Upon completion of testing, the user will return all test materials to the designated testing coordinator of the school/district.

5. The user will develop, distribute, and enforce disciplinary procedures for the violation of test security by district or agency staff.

6. The user will follow the guidelines approved by the State Board of Education in January 2003 in the document *Test Preparation and Administration Practices*

By signing my name to this document, I am assuring the ADE that I and anyone having access to the test materials will abide by the above conditions.

BY: _____

PRINTED NAME: _____

TITLE: _____

DATE: _____

SCHOOL/DISTRICT/
CHARTERHOLDER: _____

ADDRESS: _____

CITY: _____

FAX Superintendent/Charter Holder signature to: 602-542-5467

Part 6: Data for Operational Analysis

Part 6 of the technical report describes the data that were used for calibration and scaling. This part also presents classical test statistics and item analysis statistics for each content area and grade level (CRT and NRT) computed with the data used for calibration and scaling. Addressed in this part of the technical report are the following AERA/APA/NCME standards: 1.5, 1.13, 2.4, 2.8, 3.18, 6.5, and 7.1.

6.1 Early Returns Samples

Arizona had two test windows for operational testing in Spring 2005. The high school reading and writing tests were administered on February 22 and 23. High school math and Grades 3-8 reading, writing, and math were administered the week of April 11.

To facilitate timely return of score reports for the Grades 3-8 and high school mathematics tests, early returns samples were used to calibrate and scale the tests. Early returns samples were carefully designed to be representative of the state population. Schools in the early returns sample administered the tests during the beginning of the operational test window, returned their test books to CTB via overnight mail, and were expedited through the CTB Scoring department.

The early returns sample was designed to include at least 3,000 Arizona students in each grade. Actual returns totaled close to 4,000 due to a high level of participation. Samples were selected for each of three school types: elementary school, middle school, and high school. A target grade was used to identify and select schools from each school type. Target grades were Grade 4 for elementary school, Grade 8 for middle school, and Grade 10 for high school. Selected schools were asked to return materials for all grades and for all content areas.

6.1.1 Early Returns Sampling Method

The ADE provided data at the school level for sampling purposes. The goal of the sampling method was to make the resulting samples representative of the student population of Arizona with regard to scale score (SS) means and standard deviations (SD) and overall ethnic distribution. The sampling unit for this study was the school. Three stratifying variables were used: telephone area code (a proxy for region), proportion of students in ELL programs, and proportion of students receiving free and reduced lunch (a proxy for socioeconomic status). School size was used as an implicit stratum to select schools with a probability proportionate to size. The categories for each stratification variable were established through simulation in order to make the variance within each cell as small as possible. Simulation also helped ensure that the SS means, SD, and ethnic percentages of the sample closely matched those of the state as a whole.

Simulation was used to determine the thresholds for each stratification variable for the linking study. The thresholds were as follows:

- Region: 602, 480, all others
- SES: <0.5 and >=0.5
- ELL: <0.094 and Others

Simulations were run for each of elementary school, middle school, and high school samples. Then, every school in the pool was assigned a cell and rank. The cells were based on the stratification as described above. Rank was based on student performance on the SAT9.

Schools were then randomly selected from each cell proportionate to size. Ethnicity was used as a reference variable to help ensure that the selected samples matched the state population in terms of

the distribution of ethnicity. For schools that declined participation in the early returns sample, replacement schools that matched the target school's cell and rank were chosen from the pool.

6.1.2 Comparison of Early Returns Samples to Population

The following tables provide detailed descriptions of the characteristics of the calibration samples and population for each grade and content area. Table 6.1.2.1 provides raw score descriptive statistics for the samples and populations. Tables 6.1.2.2 through 6.1.2.4 show the percentage of students in each ethnic category and for each gender for both the samples and population. The data in these tables suggest that the calibration sample accurately represented their respective populations both in terms of performance on the AIMS tests and in terms of ethnic and gender. Differences in raw score mean between the samples and populations were small and typically did not exceed one fifth of a standard deviation. In fact, many differences were less than one twentieth of a standard deviation. The close representation of the samples to their respective populations provides evidence that scaling and calibration conducted using the samples are valid representation of the population.

Table 6.1.2.1
2005 Spring AIMS Raw Score Means, Calibration Sample vs. Population

	Calibration Sample			Population			Difference (Pop-Cal)	
Test	N	RS M	RS SD	N	RS M	RS SD	RS M	RS SD
Math								
03	3868	50.93	12.87	77443	50.38	12.94	-0.55	0.07
04	3953	50.65	12.42	76152	50.05	12.65	-0.60	0.23
05	4039	48.33	12.77	76719	47.74	13.21	-0.59	0.44
06	3959	48.27	13.38	75884	46.40	13.39	-1.86	0.02
07	2921	47.54	12.68	77084	46.65	13.05	-0.90	0.36
08	2941	45.34	11.93	75599	43.74	12.78	-1.60	0.85
HS	4095	56.48	15.72	66788	57.62	16.95	1.14	1.23
Reading								
03	3835	36.12	10.80	77047	35.69	11.03	-0.44	0.23
04	3916	37.60	11.52	75685	37.13	11.62	-0.48	0.10
05	4000	36.64	10.93	76379	36.32	11.05	-0.33	0.12
06	3939	37.16	10.67	75940	35.56	10.75	-1.61	0.08
07	2935	36.97	10.59	77541	35.94	10.86	-1.03	0.27
08	2972	36.24	9.82	76356	34.49	10.14	-1.75	0.31
HS[a]	68302	36.82	10.63	68788	36.74	10.67	-0.08	0.04
Writing								
03	3864	19.66	6.09	77058	19.84	6.23	0.19	0.14
04	3946	18.98	6.12	76049	18.39	6.01	-0.60	-0.11
05	4045	20.29	5.31	76681	19.60	5.50	-0.69	0.20
06	3980	19.73	4.83	76125	19.15	4.76	-0.59	-0.07
07	2964	19.84	4.86	77537	19.28	4.46	-0.56	-0.40
08	2985	22.37	4.93	76227	21.38	4.89	-0.99	-0.04
HS-A[a]	64113	44.16	8.96	65850	43.93	9.11	-0.22	0.15
HS-T[a]	1631	39.13	11.09	2422	39.68	11.33	0.54	0.24

[a]No early returns sample was collected for high school reading and writing. High school reading and writing analyses were completed with a calibration sample close to the population for grade 10 students.

Table 6.1.2.2
2005 Spring AIMS Ethnic and Gender Composition, Calibration Sample vs. Population Mathematics

Grade		N	% Ethnicity						% Gender		
			A	B	H	I	W	NR	Male	Female	NR
03	C	3868	2.87	4.37	37.20	7.45	47.91	0.21	50.78	48.81	0.41
	P	77443	2.43	5.02	40.82	6.19	45.26	0.28	50.46	49.03	0.51
04	C	3953	2.61	4.93	37.87	8.20	46.32	0.08	50.75	48.77	0.48
	P	76152	2.54	4.96	40.31	6.21	45.73	0.25	50.35	49.15	0.50
05	C	4039	2.80	4.85	36.25	8.96	46.97	0.17	49.67	49.91	0.42
	P	76719	2.35	5.07	39.91	6.66	45.79	0.22	50.26	49.32	0.43
06	C	3959	3.18	4.40	28.32	9.37	54.66	0.08	50.09	49.58	0.33
	P	75884	2.33	5.16	38.75	7.04	46.41	0.31	50.14	49.33	0.53
07	C	2921	2.29	4.18	28.55	10.65	54.06	0.27	50.02	49.23	0.75
	P	77084	2.13	5.06	38.39	7.09	46.99	0.35	50.09	49.25	0.66
08	C	2941	2.86	3.94	28.43	10.91	53.59	0.27	48.86	50.49	0.65
	P	75599	2.24	5.06	36.69	7.12	48.57	0.32	50.36	48.91	0.74
HS	C	4095	1.49	3.61	33.63	9.40	51.43	0.44	50.43	48.77	0.81
	P	66788	2.64	4.89	33.39	7.13	51.45	0.51	49.40	49.63	0.97

Note. A=Asian or Pacific Islander, B=Black or African American (Not Hispanic), H=Hispanic or Latino, I=American Indian or Alaskan Native, W=White (Not Hispanic), NR= Not reported, C=Calibration sample, P=Population.

Table 6.1.2.3
2005 Spring AIMS Ethnic and Gender Composition, Calibration Sample vs. Population Reading

Grade		N	% Ethnicity						% Gender		
			A	B	H	I	W	NR	Male	Female	NR
03	C	3835	2.89	4.43	37.16	7.38	47.93	0.21	50.59	49.00	0.42
	P	77047	2.43	5.04	40.83	6.18	45.25	0.28	50.30	49.18	0.52
04	C	3916	2.60	4.95	37.49	8.27	46.60	0.08	50.38	49.13	0.49
	P	75685	2.55	4.95	40.20	6.21	45.83	0.25	50.21	49.29	0.50
05	C	4000	2.83	4.88	36.10	8.98	47.05	0.18	49.50	50.05	0.45
	P	76379	2.36	5.07	39.82	6.66	45.86	0.22	50.15	49.42	0.43
06	C	3939	3.17	4.37	28.26	9.32	54.81	0.08	49.86	49.83	0.30
	P	75940	2.32	5.18	38.68	7.05	46.45	0.31	50.08	49.39	0.53
07	C	2935	2.21	4.22	28.55	10.90	53.80	0.31	50.05	49.13	0.82
	P	77541	2.12	5.08	38.29	7.10	47.05	0.36	50.13	49.20	0.67
08	C	2972	2.89	4.04	28.33	10.94	53.53	0.27	49.09	50.27	0.64
	P	76356	2.22	5.09	36.58	7.16	48.63	0.32	50.45	48.81	0.73
HS[a]	C	68302	2.47	4.89	33.39	7.01	51.73	0.50	49.87	49.43	0.69
	P	68788	2.46	4.87	33.27	7.45	51.45	0.52	49.97	49.33	0.70

Note. A=Asian or Pacific Islander, B=Black or African American (Not Hispanic), H=Hispanic or Latino, I=American Indian or Alaskan Native, W=White (Not Hispanic), NR= Not reported, C=Calibration sample, P=Population.

[a]No early returns sample was collected for high school reading and writing. High school reading and writing analyses were completed with a calibration sample close to the population for grade 10 students.

Table 6.1.2.4
2005 Spring AIMS Ethnic and Gender Composition, Calibration Sample vs. Population Writing

Grade		N	% Ethnicity						% Gender		
			A	B	H	I	W	NR	Male	Female	NR
03	C	3864	2.87	4.40	37.24	7.61	47.67	0.21	50.65	48.99	0.36
	P	77058	2.43	5.02	40.74	6.20	45.33	0.28	50.35	49.15	0.51
04	C	3946	2.56	4.89	38.01	8.21	46.25	0.08	50.53	49.01	0.46
	P	76049	2.54	4.97	40.34	6.20	45.71	0.25	50.23	49.29	0.48
05	C	4045	2.79	4.92	36.39	9.02	46.67	0.20	49.49	50.04	0.47
	P	76681	2.34	5.10	39.87	6.69	45.79	0.22	50.16	49.40	0.44
06	C	3980	3.14	4.42	28.32	9.32	54.72	0.08	49.87	49.80	0.33
	P	76125	2.31	5.18	38.70	7.11	46.39	0.31	50.08	49.39	0.53
07	C	2964	2.19	4.22	28.81	10.73	53.74	0.30	50.20	48.99	0.81
	P	77537	2.11	5.07	38.40	7.13	46.94	0.35	50.05	49.28	0.67
08	C	2985	2.88	4.02	28.38	11.02	53.43	0.27	49.08	50.32	0.60
	P	76227	2.22	5.09	36.61	7.17	48.58	0.33	50.39	48.89	0.73
HS-A[a]	C	64113	2.54	4.90	33.38	6.69	52.06	0.44	49.58	49.79	0.63
	P	65850	2.50	4.89	33.38	7.23	51.54	0.48	49.83	49.52	0.65
HS-T[a]	C	1631	1.41	4.97	30.35	13.30	48.93	1.04	53.16	45.80	1.04
	P	2422	1.90	5.16	30.55	11.48	49.67	1.24	52.85	45.62	1.53

Note. A=Asian or Pacific Islander, B=Black or African American (Not Hispanic), H=Hispanic or Latino, I=American Indian or Alaskan Native, W=White (Not Hispanic), NR= Not reported, C=Calibration sample, P=Population.

[a]No early returns sample was collected for high school reading and writing. High school reading and writing analyses were completed with a calibration sample close to the population for grade 10 students.

6.2 Ensuring Valid Records in Calibration Sample

In order to ensure valid calibration results, several data cleaning steps occurred upon receipt of raw data from the scanning and scoring processes. These steps allowed for calibration to be conducted on valid student responses only at the targeted grade level. The steps also ensured that the calibration data included only students from early returns schools to maintain integrity of the early returns sample. Records for students taking all forms of the tests were included.

The cleaning process removed the following records from the calibration datasets for each content area and grade level:

- Records with invalid tests noted by all response options to the first six items in each section marked;
- Records with non-valid attempts noted by less than one response in each of the test sessions;
- Records with invalid tests noted by a condition code of A (writing tests only);
- Records for Bureau of Indian Affairs schools, private schools, and home schools;
- Records where a student indicated they had already met expectations (high school tests only);
- Records for students in grades 11 or 12 (high school tests only);
- Records which indicated the student took a test other than their grade level test;

- Records marked as taken with non-standard accommodations;
- Records from schools not in the designated early returns sample; and
- Duplicate records.

In addition, because of the calibration design for high school writing tests, only students who had both a valid reading and a valid writing test were included in the high school writing calibration sample. More details on calibration are included in Part 7 Calibration and Scaling.

6.3 Descriptive Statistics by Test

Table 6.3.1 presents descriptive statistics by test (content area and grade level) computed with the early returns samples in Grades 3-8 and high school math and computed with the population data in high school reading and writing. Shown in the table are the number of students (N), the maximum raw score (Max RS), the raw score mean (RS M), the raw score standard deviation (RS SD), the average p-value (P-value M), the average adjusted item to total correlation (Adj *r* M), and K-R 20 as a measure of internal consistency. The item to total correlation is computed as a point biserial correlation for dichotomous items and as a Pearson product-moment correlation for polytomous items.

Note that internal consistency is not reported for the writing tests. This is because, although Cronbach's alpha could be used as a measure of internal consistency for the 2005 Spring AIMS CRT writing tests, this measure would likely overestimate the coefficient because the trait scores are based on the same response. Furthermore, split-half reliability for a single prompt test may not be a valid estimate of reliability for a single prompt test.

Table 6.3.1
2005 Spring AIMS Classical Test Analysis Statistics

Test	N	Max RS	RS M	RS SD	P-value M	Adj *r* M	Internal Consistency
CRT							
Math							
03	3868	72	50.93	12.87	0.71	0.39	0.93
04	3953	70	50.65	12.42	0.72	0.39	0.93
05	4039	68	48.33	12.77	0.71	0.41	0.94
06	3959	68	48.27	13.38	0.71	0.43	0.94
07	2921	68	47.54	12.68	0.70	0.40	0.93
08	2941	66	45.34	11.93	0.69	0.38	0.92
HS	4095	85	56.48	15.72	0.66	0.39	0.94
Reading							
03	3835	54	36.12	10.80	0.67	0.42	0.93
04	3916	54	37.60	11.52	0.70	0.45	0.94
05	4000	54	36.64	10.93	0.68	0.41	0.92
06	3939	54	37.16	10.67	0.69	0.42	0.92
07	2935	54	36.97	10.59	0.68	0.40	0.92
08	2972	54	36.24	9.82	0.67	0.37	0.90
HS	68302	54	36.82	10.63	0.68	0.40	0.92
Writing							
03	3864	36	19.62	6.20	0.55	0.84	--
04	3946	36	18.94	6.25	0.53	0.85	--
05	4045	36	20.25	5.46	0.56	0.81	--
06	3980	36	19.71	4.91	0.55	0.78	--
07	2964	36	19.84	4.87	0.55	0.78	--
08	2985	36	22.39	4.92	0.62	0.78	--
HS-A	64113	72	44.16	8.96	0.61	0.80	--
HS-T	1631	72	39.13	11.09	0.54	0.87	--
NRT							
Math							
03	3868	25	18.80	4.37	0.75	0.36	0.82
04	3953	25	18.26	4.73	0.73	0.37	0.84
05	4039	25	17.54	4.99	0.70	0.38	0.84
06	3959	25	17.56	5.44	0.70	0.43	0.87
07	2921	25	15.16	5.36	0.61	0.39	0.85
08	2941	25	16.12	4.84	0.64	0.35	0.82
Reading							
03	3835	25	16.24	5.01	0.65	0.37	0.83
04	3916	25	17.97	5.30	0.72	0.42	0.87
05	4000	25	16.71	4.97	0.67	0.37	0.83
06	3939	25	17.61	4.82	0.70	0.37	0.83
07	2935	25	15.82	5.65	0.63	0.42	0.87
08	2972	25	18.04	4.63	0.72	0.36	0.82
Language							
03	3811	20	12.83	3.95	0.64	0.36	0.79
04	3880	20	13.28	4.00	0.66	0.35	0.79
05	3971	20	12.55	4.63	0.63	0.41	0.84
06	3908	20	13.09	4.57	0.65	0.42	0.84
07	2924	20	13.66	4.26	0.68	0.39	0.82
08	2959	20	13.13	4.02	0.66	0.37	0.80

Note. CRT= Criterion-referenced test, NRT= Norm-referenced test, HS-A= High School Prompt A, HS-T= High School Prompt T. High school writing tests have a maximum raw score of 72 because 6 traits were scored by two raters each, treated in analysis as 12 6-point items. The statistics presented in this table represent the early returns sample only.

6.4 Classical Item Analysis

Classical item analysis was conducted for the early returns sample for all grades and content areas except high school reading and writing which used population data. Tables 6.4.1—6.4.22 present item statistics for the CRT tests and Tables 6.4.23—6.4.40 present item statistics for the NRT tests. The tables show the number of students (N), the item difficulty (P-Value), adjusted point biserial (Adj r_{pb}) for dichotomous items, adjusted item to total Pearson product-moment correlation (Adj *r*) for polytomous items, percentage of students who omitted the item (% Omit), and the percentage of students responding to and point biserial for the key and each distractor.

Table 6.4.1
2005 Spring AIMS Classical Item Analysis
Mathematics CRT Grade 3

					Key	Distractor 1		Distractor 2		Distractor 3	
Item	N	P-Value	Adj *r* pb	% Omit	%	%	*r* pb	%	*r* pb	%	*r* pb
1	3868	0.88	0.32	0.18	87.51	8.35	-0.33	1.45	-0.14	2.51	-0.05
2	3868	0.80	0.46	0.13	79.65	5.77	-0.19	6.26	-0.26	8.20	-0.32
3	3868	0.66	0.51	0.28	65.90	13.47	-0.40	13.21	-0.11	7.14	-0.31
4	3868	0.88	0.43	0.57	87.98	4.58	-0.26	3.67	-0.27	3.21	-0.23
5	3868	0.78	0.49	0.90	78.31	10.21	-0.27	6.41	-0.32	4.16	-0.24
6	3868	0.98	0.17	0.21	98.40	0.39	-0.11	0.41	-0.10	0.59	-0.10
7	3868	0.73	0.36	0.52	72.62	8.97	-0.25	10.68	-0.19	7.21	-0.16
8	3868	0.71	0.56	0.93	71.23	11.07	-0.31	8.82	-0.30	7.96	-0.29
9	3868	0.79	0.50	0.44	79.16	6.23	-0.31	10.83	-0.35	3.34	-0.16
10	3868	0.61	0.24	0.47	60.81	4.99	-0.21	16.75	-0.12	16.99	-0.12
11	3868	0.79	0.43	0.70	78.54	13.78	-0.36	5.69	-0.18	1.29	-0.16
12	3868	0.80	0.37	1.06	79.65	1.11	-0.17	13.19	-0.19	4.99	-0.34
13	3868	0.49	0.36	0.67	49.17	24.25	-0.13	14.48	-0.27	11.43	-0.14
14	3868	0.82	0.26	0.83	82.14	1.40	-0.11	13.11	-0.21	2.53	-0.16
15	3868	0.94	0.27	0.52	93.92	2.40	-0.19	1.94	-0.18	1.22	-0.12
16	3868	0.75	0.50	1.29	74.79	10.01	-0.35	9.69	-0.28	4.21	-0.19
17	3868	0.64	0.46	0.57	63.65	2.30	-0.10	6.72	-0.14	26.76	-0.42
18	3868	0.62	0.60	0.59	62.49	23.19	-0.54	9.41	-0.25	4.32	-0.01
19	3868	0.80	0.56	0.49	79.52	6.62	-0.26	7.55	-0.35	5.82	-0.32
20	3868	0.67	0.23	5.69	66.78	15.28	-0.14	7.26	-0.12	4.99	-0.16
21	3868	0.64	0.47	0.98	63.75	13.75	-0.21	9.31	-0.28	12.20	-0.25
22	3868	0.76	0.50	0.08	75.75	1.89	-0.19	18.72	-0.39	3.57	-0.26
23	3868	0.75	0.25	0.59	75.05	1.37	-0.16	1.86	-0.20	21.12	-0.18
24	3868	0.94	0.38	0.78	94.00	1.27	-0.18	1.60	-0.25	2.35	-0.24
25	3868	0.85	0.27	0.18	84.69	0.98	-0.18	12.13	-0.17	2.02	-0.24
26	3868	0.69	0.28	0.36	69.18	8.48	-0.25	11.79	-0.12	10.19	-0.12
27	3868	0.58	0.33	0.62	57.86	13.31	-0.12	15.18	-0.20	13.03	-0.20
28	3868	0.82	0.31	0.41	82.29	9.62	-0.20	4.89	-0.18	2.79	-0.17
29	3868	0.38	0.31	0.34	38.47	27.79	0.08	30.82	-0.38	2.59	-0.17
30	3868	0.83	0.37	0.54	82.96	5.97	-0.18	2.59	-0.20	7.94	-0.27
31	3868	0.63	0.46	0.59	63.42	12.64	-0.20	10.06	-0.23	13.29	-0.29
32	3868	0.86	0.43	0.49	85.81	5.87	-0.30	3.59	-0.25	4.24	-0.19
33	3868	0.93	0.30	1.91	93.07	3.02	-0.21	1.16	-0.18	0.83	-0.15
34	3868	0.51	0.39	1.76	50.98	33.38	-0.19	10.52	-0.36	3.36	-0.05
35	3868	0.79	0.38	0.57	78.62	6.13	-0.14	3.10	-0.22	11.58	-0.29

Note. Item number is not the item number in test booklet due to the nature of the dual purpose assessment and imbedded field test items. This test included multiple choice items only. The statistics presented in this table represent the early returns sample only.

(table continues)

Table 6.4.1 (continued)
2005 Spring AIMS Classical Item Analysis
Mathematics CRT Grade 3

					Key	Distractor 1		Distractor 2		Distractor 3	
Item	N	P-Value	Adj *r* pb	% Omit	%	%	*r* pb	%	*r* pb	%	*r* pb
36	3868	0.83	0.40	0.62	83.12	4.47	-0.25	3.26	-0.25	8.53	-0.22
37	3868	0.57	0.54	0.75	57.19	11.53	-0.25	27.56	-0.39	2.97	-0.16
38	3868	0.76	0.41	1.03	76.32	5.82	-0.16	5.61	-0.26	11.22	-0.27
39	3868	0.45	0.18	0.78	44.75	5.79	-0.26	8.84	-0.25	39.84	0.05
40	3868	0.42	0.29	0.36	41.60	23.29	-0.14	15.23	-0.12	19.52	-0.15
41	3868	0.49	0.45	0.41	48.58	26.55	-0.25	10.81	-0.11	13.65	-0.27
42	3868	0.87	0.50	0.49	86.61	4.65	-0.32	4.03	-0.28	4.21	-0.26
43	3868	0.79	0.33	0.26	78.75	5.87	-0.21	10.57	-0.21	4.55	-0.16
44	3868	0.86	0.26	0.44	85.57	6.36	-0.16	5.33	-0.16	2.30	-0.16
45	3868	0.88	0.39	0.21	88.37	3.39	-0.28	6.23	-0.22	1.81	-0.19
46	3868	0.84	0.49	0.23	83.51	4.68	-0.28	9.07	-0.33	2.51	-0.23
47	3868	0.53	0.34	0.28	52.77	19.31	-0.12	12.33	-0.19	15.31	-0.22
48	3868	0.64	0.44	0.78	64.04	10.75	-0.26	14.66	-0.18	9.77	-0.27
49	3868	0.56	0.49	0.83	56.44	11.27	-0.35	14.22	-0.24	17.24	-0.16
50	3868	0.51	0.46	0.52	51.45	14.14	-0.26	11.53	-0.21	22.36	-0.21
51	3868	0.71	0.38	1.71	71.41	5.33	-0.21	19.29	-0.26	2.28	-0.19
52	3868	0.59	0.25	1.03	58.66	18.61	-0.12	13.47	-0.17	8.22	-0.13
53	3868	0.85	0.19	0.52	84.93	2.30	-0.12	8.32	-0.10	3.93	-0.17
54	3868	0.63	0.44	1.55	63.21	15.93	-0.15	11.56	-0.29	7.76	-0.28
55	3868	0.91	0.46	0.78	90.85	3.52	-0.28	4.19	-0.35	0.67	-0.11
56	3868	0.66	0.45	0.39	66.26	8.45	-0.19	7.99	-0.30	16.91	-0.24
57	3868	0.84	0.36	2.09	83.97	4.60	-0.22	6.57	-0.22	2.77	-0.19
58	3868	0.53	0.36	0.83	53.39	17.45	-0.16	21.77	-0.20	6.57	-0.22
59	3868	0.85	0.37	1.06	84.88	4.24	-0.15	5.58	-0.29	4.24	-0.20
60	3868	0.78	0.41	0.57	78.15	11.87	-0.27	6.95	-0.23	2.46	-0.23
61	3868	0.61	0.51	1.22	61.48	8.53	-0.30	17.45	-0.28	11.32	-0.21
62	3868	0.66	0.54	0.65	66.13	14.66	-0.23	7.32	-0.23	11.25	-0.39
63	3868	0.88	0.40	0.88	88.08	1.99	-0.22	5.09	-0.21	3.96	-0.28
64	3868	0.76	0.45	0.41	76.29	8.12	-0.27	7.94	-0.29	7.24	-0.19
65	3868	0.38	0.34	0.62	37.85	15.95	-0.20	6.18	-0.17	39.40	-0.14
66	3868	0.37	0.38	0.90	37.41	19.31	-0.22	9.98	-0.33	32.39	-0.03
67	3868	0.94	0.32	0.59	93.51	1.65	-0.19	1.94	-0.21	2.30	-0.18
68	3868	0.77	0.55	1.03	77.04	11.17	-0.38	1.89	-0.21	8.87	-0.30
69	3868	0.42	0.33	1.63	42.43	17.24	-0.30	10.19	-0.23	28.52	0.01
70	3868	0.58	0.50	2.35	58.43	18.64	-0.26	9.07	-0.23	11.50	-0.27
71	3868	0.63	0.53	0.80	63.03	9.77	-0.26	14.22	-0.24	12.18	-0.33
72	3868	0.49	0.19	0.96	48.71	40.02	0.01	5.82	-0.25	4.50	-0.29

Note. Item number is not the item number in test booklet due to the nature of the dual purpose assessment and imbedded field test items. This test included multiple choice items only. The statistics presented in this table represent the early returns sample only.

Table 6.4.2
2005 Spring AIMS Classical Item Analysis
Mathematics CRT Grade 4

					Key	Distractor 1		Distractor 2		Distractor 3	
Item	N	P-Value	Adj *r* pb	% Omit	%	%	*r* pb	%	*r* pb	%	*r* pb
1	3953	0.89	0.35	0.03	89.38	2.00	-0.17	7.08	-0.26	1.52	-0.21
2	3953	0.71	0.51	0.10	70.53	24.21	-0.44	3.57	-0.22	1.59	-0.15
3	3953	0.89	0.19	0.13	88.95	3.01	-0.04	2.91	-0.21	5.01	-0.13
4	3953	0.79	0.46	0.25	79.28	7.64	-0.24	4.96	-0.22	7.87	-0.31
5	3953	0.71	0.31	0.13	71.09	17.23	-0.29	6.86	-0.05	4.71	-0.15
6	3953	0.63	0.36	0.23	62.79	26.61	-0.23	4.60	-0.18	5.77	-0.22
7	3953	0.87	0.24	0.13	87.43	7.01	-0.14	3.39	-0.18	2.05	-0.14
8	3953	0.61	0.36	0.13	61.12	6.88	-0.19	14.22	-0.19	17.66	-0.20
9	3953	0.89	0.40	0.18	89.12	5.64	-0.21	1.90	-0.22	3.16	-0.29
10	3953	0.85	0.40	0.20	84.77	8.45	-0.26	4.17	-0.23	2.40	-0.22
11	3953	0.62	0.41	0.18	62.23	20.47	-0.26	6.83	-0.21	10.30	-0.18
12	3953	0.88	0.33	0.13	87.50	0.91	-0.16	3.09	-0.24	8.37	-0.21
13	3953	0.68	0.50	0.40	67.92	3.59	-0.21	4.48	-0.21	23.60	-0.39
14	3953	0.82	0.43	0.20	82.01	7.77	-0.30	6.17	-0.20	3.85	-0.23
15	3953	0.84	0.44	0.13	83.81	5.74	-0.24	5.24	-0.32	5.08	-0.20
16	3953	0.66	0.35	0.23	65.98	7.36	-0.23	22.82	-0.18	3.62	-0.24
17	3953	0.83	0.57	0.15	82.54	5.77	-0.35	5.14	-0.30	6.40	-0.31
18	3953	0.50	0.32	0.15	50.01	44.55	-0.26	3.26	-0.17	2.02	-0.14
19	3953	0.82	0.21	0.23	81.63	1.34	-0.17	15.20	-0.14	1.59	-0.18
20	3953	0.86	0.47	0.25	86.39	5.62	-0.24	3.69	-0.30	4.05	-0.28
21	3953	0.58	0.38	0.23	58.06	8.80	-0.18	17.33	-0.20	15.58	-0.21
22	3953	0.59	0.33	0.25	58.69	3.57	-0.23	8.83	-0.22	28.66	-0.16
23	3953	0.73	0.55	0.28	72.98	16.52	-0.38	5.67	-0.30	4.55	-0.23
24	3953	0.35	0.36	0.25	34.83	17.94	-0.09	44.52	-0.25	2.45	-0.17
25	3953	0.92	0.24	0.28	91.63	5.06	-0.15	1.87	-0.13	1.16	-0.19
26	3953	0.86	0.29	0.03	85.53	4.71	-0.17	6.83	-0.20	2.91	-0.15
27	3953	0.68	0.17	0.18	68.18	1.42	-0.12	1.21	-0.13	29.02	-0.15
28	3953	0.73	0.50	0.15	73.31	12.40	-0.33	9.69	-0.26	4.45	-0.25
29	3953	0.59	0.53	0.15	58.82	14.82	-0.12	15.30	-0.40	10.90	-0.29
30	3953	0.86	0.46	0.46	85.61	3.64	-0.24	6.91	-0.31	3.39	-0.24
31	3953	0.71	0.27	0.15	71.09	8.60	-0.12	10.95	-0.16	9.21	-0.18
32	3953	0.72	0.45	0.25	72.17	3.24	-0.26	10.88	-0.22	13.46	-0.30
33	3953	0.72	0.54	0.25	71.97	19.50	-0.41	3.90	-0.29	4.38	-0.16
34	3953	0.80	0.44	0.20	79.59	3.14	-0.23	10.85	-0.26	6.22	-0.28
35	3953	0.87	0.26	0.18	87.33	3.82	-0.17	5.89	-0.17	2.78	-0.12
36	3953	0.94	0.33	0.28	93.52	1.85	-0.23	2.93	-0.17	1.42	-0.20
37	3953	0.85	0.45	0.18	85.00	5.03	-0.30	4.45	-0.26	5.34	-0.22
38	3953	0.70	0.40	0.28	69.97	2.83	-0.23	4.63	-0.26	22.29	-0.25
39	3953	0.88	0.42	0.15	88.11	2.78	-0.24	3.87	-0.25	5.08	-0.25
40	3953	0.59	0.32	0.18	59.32	7.11	-0.25	4.96	-0.24	28.43	-0.13

Note. Item number is not the item number in test booklet due to the nature of the dual purpose assessment and imbedded field test items. This test included multiple choice items only. The statistics presented in this table represent the early returns sample only.

(table continues)

Table 6.4.2 (continued)
2005 Spring AIMS Classical Item Analysis
Mathematics CRT Grade 4

					Key	Distractor 1		Distractor 2		Distractor 3	
Item	N	P-Value	Adj *r* pb	% Omit	%	%	*r* pb	%	*r* pb	%	*r* pb
41	3953	0.63	0.39	0.30	63.02	10.78	-0.17	10.35	-0.25	15.56	-0.20
42	3953	0.81	0.36	0.33	80.93	5.79	-0.31	10.60	-0.16	2.35	-0.18
43	3953	0.43	0.25	0.25	43.11	23.00	-0.22	17.53	-0.07	16.11	-0.06
44	3953	0.70	0.43	0.25	70.45	4.71	-0.20	14.01	-0.16	10.57	-0.35
45	3953	0.59	0.50	0.40	59.12	27.50	-0.42	6.93	-0.15	6.05	-0.14
46	3953	0.74	0.43	0.25	74.37	14.39	-0.25	7.06	-0.23	3.92	-0.27
47	3953	0.79	0.45	0.33	79.16	6.98	-0.21	8.20	-0.33	5.34	-0.22
48	3953	0.62	0.53	0.58	62.23	12.02	-0.27	11.43	-0.24	13.74	-0.30
49	3953	0.78	0.17	0.08	78.45	6.05	-0.10	8.15	-0.10	7.29	-0.12
50	3953	0.67	0.25	0.10	66.71	1.14	-0.18	2.48	-0.22	29.57	-0.18
51	3953	0.75	0.37	0.15	74.75	5.74	-0.24	10.14	-0.34	9.21	-0.06
52	3953	0.76	0.60	0.18	75.64	14.12	-0.43	5.06	-0.24	5.01	-0.28
53	3953	0.84	0.44	0.40	83.99	2.96	-0.24	7.56	-0.27	5.08	-0.26
54	3953	0.45	0.29	0.23	45.48	20.47	-0.15	17.53	-0.13	16.29	-0.14
55	3953	0.87	0.43	0.20	86.67	2.50	-0.27	7.46	-0.26	3.16	-0.24
56	3953	0.72	0.50	0.18	71.69	14.80	-0.35	7.36	-0.26	5.97	-0.19
57	3953	0.73	0.56	0.20	73.08	11.56	-0.35	7.29	-0.34	7.87	-0.21
58	3953	0.62	0.38	0.18	61.60	25.12	-0.36	10.73	-0.07	2.38	-0.16
59	3953	0.49	0.24	0.23	49.18	9.74	-0.18	26.99	0.04	13.86	-0.29
60	3953	0.88	0.35	0.25	88.34	4.71	-0.24	3.92	-0.20	2.78	-0.17
61	3953	0.53	0.49	0.20	53.38	14.19	-0.23	21.58	-0.20	10.65	-0.30
62	3953	0.79	0.37	0.20	79.41	14.24	-0.26	3.92	-0.21	2.23	-0.19
63	3953	0.57	0.40	0.33	57.20	12.47	-0.14	19.43	-0.25	10.57	-0.23
64	3953	0.37	0.25	0.23	36.73	24.94	-0.18	24.39	-0.03	13.71	-0.14
65	3953	0.58	0.46	0.20	57.50	25.35	-0.20	8.37	-0.27	8.58	-0.30
66	3953	0.69	0.53	0.28	68.91	10.80	-0.28	13.10	-0.28	6.91	-0.28
67	3953	0.85	0.40	0.30	84.54	3.79	-0.26	6.53	-0.21	4.83	-0.25
68	3953	0.69	0.38	0.33	68.81	13.13	-0.20	9.79	-0.21	7.94	-0.22
69	3953	0.90	0.35	0.23	89.73	3.34	-0.21	3.54	-0.20	3.16	-0.21
70	3953	0.81	0.27	0.46	80.62	3.34	-0.27	12.50	-0.11	3.09	-0.17

Note. Item number is not the item number in test booklet due to the nature of the dual purpose assessment and imbedded field test items. This test included multiple choice items only. The statistics presented in this table represent the early returns sample only.

Table 6.4.3
2005 Spring AIMS Classical Item Analysis
Mathematics CRT Grade 5

					Key	Distractor 1		Distractor 2		Distractor 3	
Item	N	P-Value	Adj *r* pb	% Omit	%	%	*r* pb	%	*r* pb	%	*r* pb
1	4039	0.69	0.28	0.07	69.27	13.86	-0.24	2.33	-0.19	14.46	-0.09
2	4039	0.74	0.21	0.07	74.30	2.85	-0.14	17.45	-0.16	5.32	-0.10
3	4039	0.57	0.23	0.12	56.77	14.58	-0.08	12.31	-0.20	16.22	-0.11
4	4039	0.86	0.39	0.12	86.46	4.51	-0.27	3.84	-0.20	5.08	-0.21
5	4039	0.72	0.54	0.10	72.27	15.47	-0.36	4.78	-0.26	7.38	-0.26
6	4039	0.87	0.45	0.07	87.13	4.73	-0.29	4.06	-0.27	4.01	-0.22
7	4039	0.32	0.31	0.07	32.29	20.62	-0.30	45.70	-0.05	1.31	-0.12
8	4039	0.88	0.26	0.07	87.60	4.78	-0.15	5.47	-0.17	2.08	-0.15
9	4039	0.67	0.45	0.20	67.05	10.27	-0.25	10.37	-0.28	12.11	-0.20
10	4039	0.69	0.35	0.12	68.63	2.62	-0.20	13.22	-0.25	15.40	-0.17
11	4039	0.84	0.24	0.27	84.40	7.08	-0.15	4.31	-0.16	3.94	-0.13
12	4039	0.80	0.36	0.32	79.77	9.14	-0.19	6.98	-0.21	3.79	-0.25
13	4039	0.78	0.40	0.40	78.16	9.06	-0.18	6.81	-0.24	5.57	-0.28
14	4039	0.63	0.41	0.35	62.79	15.33	-0.18	9.90	-0.24	11.64	-0.24
15	4039	0.70	0.45	0.37	69.89	18.62	-0.33	7.75	-0.19	3.37	-0.21
16	4039	0.62	0.56	0.40	62.02	12.60	-0.30	18.30	-0.39	6.68	-0.14
17	4039	0.90	0.38	0.40	90.17	2.57	-0.20	4.04	-0.25	2.82	-0.21
18	4039	0.76	0.29	0.37	76.38	2.03	-0.21	2.87	-0.18	18.35	-0.20
19	4039	0.94	0.36	0.42	94.03	2.18	-0.24	1.61	-0.21	1.76	-0.18
20	4039	0.68	0.32	0.02	67.67	14.31	-0.17	10.10	-0.21	7.90	-0.15
21	4039	0.83	0.52	0.05	83.26	9.21	-0.40	3.71	-0.24	3.76	-0.22
22	4039	0.75	0.37	0.07	74.65	12.45	-0.20	8.59	-0.26	4.23	-0.18
23	4039	0.80	0.33	0.10	79.80	11.64	-0.22	6.02	-0.21	2.45	-0.16
24	4039	0.65	0.57	0.02	65.14	8.74	-0.27	4.63	-0.23	21.47	-0.39
25	4039	0.57	0.47	0.07	57.37	12.60	-0.12	22.80	-0.40	7.16	-0.16
26	4039	0.82	0.48	0.07	81.75	7.08	-0.27	4.56	-0.23	6.54	-0.30
27	4039	0.83	0.43	0.05	83.24	3.64	-0.23	10.65	-0.28	2.43	-0.25
28	4039	0.80	0.54	0.20	80.04	7.60	-0.28	7.65	-0.32	4.51	-0.31
29	4039	0.90	0.19	0.00	90.44	2.97	-0.12	4.48	-0.10	2.10	-0.14
30	4039	0.67	0.42	0.15	67.17	8.20	-0.26	7.65	-0.26	16.84	-0.19
31	4039	0.55	0.34	0.15	54.84	17.23	-0.24	13.49	-0.08	14.29	-0.19
32	4039	0.36	0.32	0.15	36.07	16.04	-0.09	34.24	-0.20	13.49	-0.11
33	4039	0.90	0.38	0.07	90.07	5.72	-0.28	1.91	-0.18	2.23	-0.21
34	4039	0.87	0.46	0.00	86.68	3.99	-0.25	6.31	-0.29	3.02	-0.26
35	4039	0.57	0.35	0.00	56.75	9.01	-0.21	22.80	-0.25	11.44	-0.09
36	4039	0.88	0.46	0.00	88.04	4.28	-0.28	4.28	-0.30	3.39	-0.22
37	4039	0.81	0.51	0.15	81.43	6.88	-0.28	5.72	-0.22	5.82	-0.35
38	4039	0.72	0.47	0.17	71.87	6.78	-0.24	11.27	-0.27	9.90	-0.26
39	4039	0.66	0.55	0.00	65.61	20.20	-0.41	9.80	-0.21	4.38	-0.22
40	4039	0.67	0.54	0.02	67.02	13.57	-0.43	11.19	-0.23	8.20	-0.17

Note. Item number is not the item number in test booklet due to the nature of the dual purpose assessment and imbedded field test items. This test included multiple choice items only. The statistics presented in this table represent the early returns sample only.

(table continues)

Table 6.4.3 (continued)
2005 Spring AIMS Classical Item Analysis
Mathematics CRT Grade 5

					Key	Distractor 1		Distractor 2		Distractor 3	
Item	N	P-Value	Adj *r* pb	% Omit	%	%	*r* pb	%	*r* pb	%	*r* pb
41	4039	0.81	0.43	0.02	80.91	2.10	-0.21	13.32	-0.32	3.64	-0.22
42	4039	0.62	0.46	0.07	61.80	22.85	-0.25	7.68	-0.26	7.60	-0.25
43	4039	0.88	0.25	0.02	88.19	2.25	-0.17	3.12	-0.18	6.41	-0.12
44	4039	0.75	0.50	0.07	75.12	9.46	-0.26	8.72	-0.29	6.64	-0.27
45	4039	0.76	0.44	0.10	75.79	6.24	-0.26	11.17	-0.16	6.71	-0.34
46	4039	0.67	0.59	0.05	67.19	9.23	-0.34	10.77	-0.31	12.75	-0.29
47	4039	0.70	0.54	0.02	69.92	12.11	-0.37	14.63	-0.28	3.32	-0.21
48	4039	0.58	0.36	0.05	58.38	14.11	-0.26	13.84	-0.19	13.62	-0.11
49	4039	0.87	0.36	0.12	87.08	4.73	-0.26	3.74	-0.20	4.33	-0.17
50	4039	0.74	0.52	0.02	73.71	18.49	-0.43	4.58	-0.18	3.19	-0.20
51	4039	0.66	0.61	0.07	66.03	2.53	-0.21	15.87	-0.41	15.50	-0.33
52	4039	0.57	0.39	0.15	57.24	14.01	-0.19	16.61	-0.20	11.98	-0.20
53	4039	0.58	0.56	0.07	58.03	10.32	-0.15	26.99	-0.45	4.58	-0.20
54	4039	0.58	0.39	0.12	58.11	25.65	-0.26	6.44	-0.24	9.68	-0.12
55	4039	0.69	0.39	0.02	69.18	11.29	-0.22	14.93	-0.22	4.58	-0.22
56	4039	0.88	0.41	0.07	87.69	4.31	-0.21	4.65	-0.26	3.27	-0.26
57	4039	0.77	0.50	0.15	77.30	8.69	-0.23	11.22	-0.36	2.65	-0.24
58	4039	0.92	0.38	0.12	92.08	3.19	-0.25	2.82	-0.21	1.78	-0.21
59	4039	0.51	0.38	0.07	51.10	17.75	-0.32	25.97	-0.08	5.10	-0.23
60	4039	0.85	0.44	0.07	85.37	3.05	-0.22	4.90	-0.30	6.61	-0.24
61	4039	0.76	0.46	0.07	76.43	4.98	-0.27	13.72	-0.28	4.80	-0.24
62	4039	0.53	0.34	0.05	53.21	18.69	-0.26	15.40	-0.11	12.65	-0.14
63	4039	0.59	0.39	0.12	59.00	19.31	-0.17	11.79	-0.28	9.78	-0.17
64	4039	0.40	0.38	0.17	40.38	10.37	-0.19	30.92	-0.07	18.15	-0.29
65	4039	0.52	0.27	0.05	51.92	37.24	-0.09	7.87	-0.32	2.92	-0.17
66	4039	0.61	0.36	0.02	61.35	20.50	-0.20	9.73	-0.21	8.39	-0.17
67	4039	0.58	0.36	0.05	57.79	6.07	-0.22	15.40	-0.18	20.70	-0.19
68	4039	0.64	0.43	0.12	64.25	9.68	-0.19	11.22	-0.23	14.73	-0.26

Note. Item number is not the item number in test booklet due to the nature of the dual purpose assessment and imbedded field test items. This test included multiple choice items only. The statistics presented in this table represent the early returns sample only.

Table 6.4.4
2005 Spring AIMS Classical Item Analysis
Mathematics CRT Grade 6

					Key	Distractor 1		Distractor 2		Distractor 3	
Item	N	P-Value	Adj *r* pb	% Omit	%	%	*r* pb	%	*r* pb	%	*r* pb
1	3959	0.93	0.28	0.00	92.95	1.16	-0.11	3.71	-0.18	2.17	-0.20
2	3959	0.88	0.45	0.05	87.93	1.59	-0.21	8.79	-0.38	1.64	-0.16
3	3959	0.68	0.44	0.18	68.35	17.38	-0.29	9.50	-0.25	4.60	-0.16
4	3959	0.46	0.25	0.03	46.48	6.49	-0.22	8.49	-0.32	38.52	0.01
5	3959	0.68	0.49	0.13	67.79	14.22	-0.30	10.43	-0.22	7.43	-0.26
6	3959	0.91	0.41	0.03	90.88	3.49	-0.22	3.69	-0.27	1.92	-0.24
7	3959	0.90	0.33	0.03	89.74	5.81	-0.21	2.12	-0.16	2.30	-0.22
8	3959	0.64	0.52	0.08	63.68	3.03	-0.15	31.14	-0.46	2.07	-0.15
9	3959	0.70	0.50	0.03	70.40	14.27	-0.36	2.75	-0.15	12.55	-0.27
10	3959	0.29	0.33	0.08	29.40	18.46	-0.38	12.05	-0.25	40.01	0.14
11	3959	0.76	0.34	0.03	76.48	6.97	-0.19	8.54	-0.16	7.98	-0.23
12	3959	0.79	0.50	0.05	78.50	7.50	-0.27	6.79	-0.32	7.15	-0.24
13	3959	0.76	0.45	0.05	75.93	5.23	-0.21	9.98	-0.33	8.82	-0.20
14	3959	0.66	0.49	0.10	65.93	18.72	-0.32	6.77	-0.23	8.49	-0.21
15	3959	0.82	0.49	0.05	81.97	4.09	-0.15	8.76	-0.40	5.13	-0.25
16	3959	0.68	0.24	0.05	67.85	5.10	-0.24	17.96	-0.08	9.04	-0.15
17	3959	0.81	0.54	0.15	80.93	6.44	-0.27	6.21	-0.31	6.26	-0.32
18	3959	0.59	0.49	0.08	58.83	6.44	-0.34	24.27	-0.25	10.38	-0.21
19	3959	0.65	0.48	0.08	65.50	11.90	-0.28	18.99	-0.30	3.54	-0.17
20	3959	0.57	0.42	0.13	56.71	16.70	-0.24	11.62	-0.17	14.85	-0.22
21	3959	0.81	0.50	0.08	81.11	5.86	-0.31	8.54	-0.32	4.42	-0.21
22	3959	0.94	0.34	0.00	93.99	1.11	-0.14	0.91	-0.14	3.99	-0.29
23	3959	0.86	0.40	0.03	85.73	2.85	-0.26	4.65	-0.22	6.74	-0.23
24	3959	0.65	0.54	0.05	65.04	25.81	-0.47	4.72	-0.16	4.37	-0.13
25	3959	0.71	0.35	0.00	70.88	0.86	-0.16	25.74	-0.30	2.53	-0.17
26	3959	0.81	0.28	0.00	81.08	4.24	-0.21	12.38	-0.14	2.30	-0.22
27	3959	0.73	0.47	0.08	72.67	2.88	-0.20	3.99	-0.23	20.38	-0.35
28	3959	0.73	0.34	0.08	73.10	1.49	-0.17	8.28	-0.23	17.05	-0.21
29	3959	0.57	0.38	0.05	57.01	8.44	-0.16	21.77	-0.19	12.73	-0.25
30	3959	0.75	0.49	0.00	74.99	10.68	-0.27	8.44	-0.31	5.89	-0.23
31	3959	0.79	0.38	0.00	79.26	4.85	-0.26	12.07	-0.18	3.81	-0.26
32	3959	0.70	0.45	0.03	69.61	14.57	-0.24	6.59	-0.27	9.19	-0.25
33	3959	0.81	0.45	0.15	81.41	2.07	-0.20	4.87	-0.21	11.49	-0.35
34	3959	0.72	0.48	0.03	71.94	7.30	-0.25	14.14	-0.27	6.59	-0.27
35	3959	0.74	0.40	0.00	74.44	9.07	-0.24	5.66	-0.22	10.84	-0.22
36	3959	0.52	0.37	0.05	52.31	20.79	-0.23	18.49	-0.15	8.36	-0.18
37	3959	0.73	0.50	0.05	72.62	12.91	-0.23	7.15	-0.31	7.27	-0.29
38	3959	0.80	0.44	0.10	79.77	5.71	-0.25	3.97	-0.18	10.46	-0.30
39	3959	0.57	0.32	0.05	56.76	15.53	-0.13	9.12	-0.23	18.54	-0.17
40	3959	0.79	0.49	0.05	79.49	10.96	-0.37	5.23	-0.20	4.27	-0.23

Note. Item number is not the item number in test booklet due to the nature of the dual purpose assessment and imbedded field test items. This test included multiple choice items only. The statistics presented in this table represent the early returns sample only.

(table continues)

Table 6.4.4 (continued)
2005 Spring AIMS Classical Item Analysis
Mathematics CRT Grade 6

					Key	Distractor 1		Distractor 2		Distractor 3	
Item	N	P-Value	Adj *r* pb	% Omit	%	%	*r* pb	%	*r* pb	%	*r* pb
41	3959	0.88	0.24	0.08	87.72	7.48	-0.15	2.30	-0.15	2.42	-0.16
42	3959	0.76	0.36	0.13	75.52	7.33	-0.26	4.50	-0.20	12.53	-0.16
43	3959	0.69	0.51	0.08	69.23	12.93	-0.34	15.33	-0.27	2.42	-0.24
44	3959	0.63	0.35	0.08	63.43	14.65	-0.11	10.66	-0.21	11.19	-0.25
45	3959	0.49	0.56	0.03	48.60	26.77	-0.36	16.27	-0.19	8.34	-0.22
46	3959	0.64	0.44	0.10	63.91	9.14	-0.35	21.09	-0.21	5.76	-0.16
47	3959	0.78	0.54	0.08	77.77	6.11	-0.22	6.67	-0.30	9.37	-0.36
48	3959	0.59	0.44	0.08	58.98	21.17	-0.31	11.57	-0.14	8.21	-0.20
49	3959	0.85	0.47	0.08	85.45	4.98	-0.23	6.42	-0.31	3.08	-0.27
50	3959	0.48	0.30	0.08	48.40	12.60	-0.27	8.84	-0.32	30.08	0.04
51	3959	0.70	0.41	0.15	70.04	14.88	-0.29	4.82	-0.25	10.10	-0.16
52	3959	0.81	0.41	0.18	81.33	5.53	-0.21	7.81	-0.21	5.15	-0.28
53	3959	0.71	0.36	0.10	70.62	9.35	-0.15	16.97	-0.28	2.96	-0.15
54	3959	0.69	0.36	0.05	69.13	9.72	-0.23	15.18	-0.19	5.91	-0.19
55	3959	0.65	0.47	0.10	65.34	13.94	-0.25	4.19	-0.25	16.42	-0.27
56	3959	0.87	0.31	0.08	87.04	7.91	-0.17	2.78	-0.22	2.20	-0.20
57	3959	0.76	0.55	0.13	75.65	10.26	-0.33	7.10	-0.28	6.87	-0.28
58	3959	0.81	0.57	0.10	81.01	7.43	-0.32	4.67	-0.31	6.79	-0.33
59	3959	0.60	0.47	0.15	59.71	9.60	-0.30	12.07	-0.23	18.46	-0.22
60	3959	0.69	0.42	0.08	68.88	19.32	-0.25	6.57	-0.31	5.15	-0.15
61	3959	0.70	0.47	0.13	70.09	16.24	-0.19	7.07	-0.32	6.47	-0.31
62	3959	0.48	0.50	0.15	47.89	13.51	-0.23	26.72	-0.32	11.72	-0.13
63	3959	0.74	0.55	0.13	74.31	10.58	-0.28	7.45	-0.27	7.53	-0.35
64	3959	0.51	0.45	0.15	51.12	27.86	-0.24	15.28	-0.26	5.58	-0.18
65	3959	0.70	0.44	0.13	70.12	13.72	-0.27	6.24	-0.25	9.80	-0.19
66	3959	0.76	0.38	0.13	76.41	3.86	-0.20	6.52	-0.21	13.08	-0.25
67	3959	0.84	0.47	0.08	83.51	3.38	-0.24	5.61	-0.25	7.43	-0.31
68	3959	0.56	0.42	0.05	55.92	12.88	-0.20	15.16	-0.21	15.99	-0.22

Note. Item number is not the item number in test booklet due to the nature of the dual purpose assessment and imbedded field test items. This test included multiple choice items only. The statistics presented in this table represent the early returns sample only.

Table 6.4.5
2005 Spring AIMS Classical Item Analysis
Mathematics CRT Grade 7

					Key	Distractor 1		Distractor 2		Distractor 3	
Item	N	P-Value	Adj *r* pb	% Omit	%	%	*r* pb	%	*r* pb	%	*r* pb
1	2921	0.95	0.25	0.03	94.80	0.99	-0.13	1.13	-0.16	3.05	-0.18
2	2921	0.52	0.32	0.27	51.73	17.25	-0.23	19.21	-0.24	11.54	0.01
3	2921	0.73	0.32	0.10	72.85	15.65	-0.12	4.28	-0.18	7.12	-0.29
4	2921	0.74	0.26	0.07	73.91	4.69	-0.21	5.20	-0.20	16.12	-0.11
5	2921	0.75	0.41	0.17	75.45	4.69	-0.19	17.80	-0.32	1.88	-0.17
6	2921	0.76	0.42	0.10	75.97	11.95	-0.26	7.09	-0.25	4.90	-0.19
7	2921	0.69	0.41	0.07	68.74	19.92	-0.28	6.23	-0.22	5.03	-0.18
8	2921	0.88	0.38	0.03	87.98	2.98	-0.20	6.33	-0.29	2.67	-0.16
9	2921	0.72	0.35	0.00	71.52	4.07	-0.13	12.98	-0.21	11.43	-0.24
10	2921	0.62	0.42	0.03	62.44	5.85	-0.19	23.86	-0.32	7.81	-0.14
11	2921	0.86	0.39	0.07	86.00	6.71	-0.23	5.20	-0.27	2.02	-0.20
12	2921	0.62	0.29	0.10	61.76	15.75	-0.06	11.37	-0.26	11.02	-0.16
13	2921	0.65	0.41	0.07	65.01	6.06	-0.22	7.91	-0.24	20.95	-0.23
14	2921	0.48	0.32	0.07	48.17	10.85	-0.22	26.12	-0.12	14.79	-0.17
15	2921	0.84	0.41	0.00	83.53	4.28	-0.27	6.47	-0.18	5.72	-0.27
16	2921	0.73	0.48	0.07	73.16	3.73	-0.23	15.95	-0.34	7.09	-0.22
17	2921	0.42	0.33	0.10	41.90	11.26	-0.22	32.28	-0.07	14.45	-0.23
18	2921	0.54	0.43	0.10	54.36	10.65	-0.09	24.89	-0.24	10.00	-0.33
19	2921	0.87	0.43	0.07	86.65	4.14	-0.29	3.94	-0.26	5.20	-0.20
20	2921	0.72	0.42	0.21	72.44	9.62	-0.14	7.05	-0.27	10.68	-0.29
21	2921	0.63	0.38	0.14	63.37	8.76	-0.24	13.39	-0.28	14.34	-0.10
22	2921	0.78	0.48	0.27	77.99	7.91	-0.26	7.02	-0.29	6.81	-0.26
23	2921	0.90	0.44	0.03	89.93	1.23	-0.16	1.75	-0.18	7.05	-0.38
24	2921	0.58	0.46	0.03	58.27	11.16	-0.15	13.90	-0.22	16.64	-0.32
25	2921	0.44	0.40	0.14	44.40	23.96	-0.26	27.29	-0.18	4.21	-0.14
26	2921	0.88	0.39	0.10	87.54	5.99	-0.20	2.43	-0.24	3.94	-0.27
27	2921	0.72	0.46	0.17	72.13	6.64	-0.19	12.39	-0.34	8.66	-0.21
28	2921	0.81	0.39	0.07	81.17	8.49	-0.18	4.52	-0.27	5.75	-0.23
29	2921	0.96	0.32	0.07	95.79	2.05	-0.22	1.37	-0.20	0.72	-0.15
30	2921	0.60	0.52	0.10	60.32	27.01	-0.39	9.28	-0.23	3.29	-0.16
31	2921	0.74	0.35	0.07	74.19	5.31	-0.27	7.19	-0.27	13.25	-0.11
32	2921	0.62	0.45	0.14	62.03	6.09	-0.18	14.41	-0.34	17.32	-0.18
33	2921	0.75	0.52	0.00	74.91	8.28	-0.27	6.64	-0.30	10.17	-0.29
34	2921	0.90	0.35	0.07	89.56	5.92	-0.22	3.08	-0.22	1.37	-0.20
35	2921	0.82	0.39	0.07	81.82	10.37	-0.25	5.14	-0.21	2.60	-0.24
36	2921	0.71	0.41	0.03	71.21	6.44	-0.14	13.15	-0.26	9.17	-0.28
37	2921	0.71	0.52	0.17	70.63	10.10	-0.28	13.45	-0.32	5.65	-0.24
38	2921	0.84	0.50	0.14	83.64	7.19	-0.31	5.41	-0.29	3.63	-0.24
39	2921	0.67	0.47	0.17	66.52	15.23	-0.29	7.87	-0.29	10.20	-0.17
40	2921	0.40	0.43	0.21	39.71	24.51	-0.20	20.44	-0.22	15.13	-0.14

Note. Item number is not the item number in test booklet due to the nature of the dual purpose assessment and imbedded field test items. This test included multiple choice items only. The statistics presented in this table represent the early returns sample only.

(table continues)

Table 6.4.5 (continued)
2005 Spring AIMS Classical Item Analysis
Mathematics CRT Grade 7

					Key	Distractor 1		Distractor 2		Distractor 3	
Item	N	P-Value	Adj *r* pb	% Omit	%	%	*r* pb	%	*r* pb	%	*r* pb
41	2921	0.72	0.53	0.24	71.59	11.06	-0.30	9.79	-0.28	7.33	-0.28
42	2921	0.62	0.35	0.17	62.38	20.40	-0.19	11.54	-0.19	5.51	-0.21
43	2921	0.77	0.47	0.14	76.69	9.48	-0.26	8.49	-0.31	5.20	-0.22
44	2921	0.40	0.30	0.10	39.68	7.02	-0.07	44.06	-0.22	9.14	-0.14
45	2921	0.58	0.31	0.07	58.10	13.01	-0.22	23.07	-0.16	5.75	-0.14
46	2921	0.64	0.40	0.07	64.02	15.54	-0.20	12.26	-0.28	8.11	-0.15
47	2921	0.73	0.41	0.07	72.92	10.30	-0.25	6.33	-0.29	10.37	-0.16
48	2921	0.63	0.41	0.10	62.79	8.05	-0.20	21.53	-0.28	7.53	-0.16
49	2921	0.89	0.41	0.21	89.01	3.01	-0.21	3.42	-0.25	4.35	-0.26
50	2921	0.71	0.50	0.14	71.45	12.08	-0.22	10.65	-0.32	5.68	-0.28
51	2921	0.43	0.29	0.10	42.73	24.48	-0.29	9.93	-0.15	22.77	0.02
52	2921	0.66	0.51	0.17	66.07	6.44	-0.22	23.90	-0.38	3.42	-0.23
53	2921	0.87	0.36	0.10	87.06	2.84	-0.23	6.16	-0.21	3.83	-0.20
54	2921	0.78	0.48	0.10	77.61	5.14	-0.27	6.13	-0.25	11.02	-0.29
55	2921	0.87	0.39	0.14	86.68	7.57	-0.26	3.22	-0.22	2.40	-0.20
56	2921	0.80	0.51	0.07	80.25	7.57	-0.30	5.44	-0.29	6.68	-0.27
57	2921	0.79	0.30	0.10	78.71	6.57	-0.18	12.63	-0.19	1.99	-0.19
58	2921	0.49	0.26	0.14	49.47	11.19	-0.17	20.92	-0.14	18.28	-0.09
59	2921	0.51	0.22	0.21	51.39	21.29	-0.24	15.23	-0.13	11.88	0.06
60	2921	0.76	0.41	0.14	75.80	14.65	-0.27	5.79	-0.27	3.63	-0.16
61	2921	0.62	0.46	0.14	62.17	8.35	-0.25	21.26	-0.27	8.08	-0.21
62	2921	0.60	0.30	0.21	59.57	11.13	-0.19	11.71	-0.23	17.39	-0.08
63	2921	0.59	0.49	0.21	58.61	15.78	-0.14	8.11	-0.22	17.29	-0.38
64	2921	0.68	0.47	0.17	67.79	20.68	-0.32	7.77	-0.22	3.59	-0.23
65	2921	0.80	0.49	0.17	80.28	9.83	-0.33	6.50	-0.26	3.22	-0.23
66	2921	0.85	0.37	0.21	85.28	3.49	-0.22	5.82	-0.21	5.20	-0.23
67	2921	0.74	0.51	0.24	74.29	8.90	-0.24	9.52	-0.32	7.05	-0.27
68	2921	0.48	0.29	0.14	48.24	16.95	-0.19	22.56	-0.12	12.12	-0.13

Note. Item number is not the item number in test booklet due to the nature of the dual purpose assessment and imbedded field test items. This test included multiple choice items only. The statistics presented in this table represent the early returns sample only.

Table 6.4.6
2005 Spring AIMS Classical Item Analysis
Mathematics CRT Grade 8

					Key	Distractor 1		Distractor 2		Distractor 3	
Item	N	P-Value	Adj *r* pb	% Omit	%	%	*r* pb	%	*r* pb	%	*r* pb
1	2941	0.52	0.40	0.03	52.40	5.37	-0.23	6.87	-0.18	35.33	-0.25
2	2941	0.65	0.39	0.14	65.32	4.22	-0.14	21.66	-0.23	8.67	-0.27
3	2941	0.74	0.42	0.10	73.75	13.23	-0.25	9.96	-0.29	2.96	-0.17
4	2941	0.73	0.45	0.03	72.56	9.96	-0.37	7.00	-0.26	10.44	-0.12
5	2941	0.54	0.39	0.20	54.17	16.70	-0.20	21.08	-0.25	7.85	-0.13
6	2941	0.85	0.41	0.10	85.11	5.78	-0.28	7.07	-0.23	1.94	-0.22
7	2941	0.39	0.35	0.07	39.31	20.44	-0.20	30.06	-0.18	10.13	-0.09
8	2941	0.65	0.39	0.00	65.15	6.19	-0.18	6.43	-0.22	22.24	-0.25
9	2941	0.87	0.38	0.07	86.91	5.41	-0.23	4.18	-0.20	3.43	-0.24
10	2941	0.75	0.34	0.07	75.08	2.86	-0.18	12.72	-0.21	9.28	-0.21
11	2941	0.48	0.45	0.07	48.45	11.93	-0.16	28.80	-0.26	10.74	-0.24
12	2941	0.68	0.40	0.10	67.63	6.19	-0.23	16.35	-0.20	9.72	-0.25
13	2941	0.82	0.34	0.00	82.15	4.05	-0.08	5.47	-0.24	8.33	-0.24
14	2941	0.82	0.34	0.07	82.42	8.50	-0.25	5.27	-0.20	3.74	-0.13
15	2941	0.62	0.33	0.03	61.78	19.14	-0.35	16.35	-0.03	2.69	-0.20
16	2941	0.83	0.36	0.00	83.37	1.94	-0.16	6.80	-0.22	7.89	-0.25
17	2941	0.74	0.31	0.03	74.06	7.28	-0.11	10.57	-0.25	8.06	-0.16
18	2941	0.88	0.41	0.00	87.79	5.10	-0.27	5.07	-0.25	2.04	-0.19
19	2941	0.76	0.49	0.03	75.69	4.83	-0.29	10.85	-0.39	8.60	-0.14
20	2941	0.60	0.49	0.20	60.35	12.51	-0.22	9.66	-0.28	17.27	-0.27
21	2941	0.74	0.42	0.07	73.95	10.68	-0.30	10.57	-0.24	4.73	-0.13
22	2941	0.74	0.42	0.10	74.26	4.90	-0.22	9.45	-0.29	11.29	-0.21
23	2941	0.81	0.37	0.07	80.62	1.29	-0.10	14.86	-0.31	3.16	-0.22
24	2941	0.81	0.42	0.00	80.62	4.15	-0.20	10.47	-0.32	4.76	-0.18
25	2941	0.63	0.38	0.00	63.45	4.32	-0.22	12.00	-0.17	20.23	-0.25
26	2941	0.76	0.48	0.03	75.86	10.91	-0.26	5.95	-0.26	7.24	-0.28
27	2941	0.72	0.41	0.03	72.32	8.16	-0.22	9.28	-0.25	10.20	-0.21
28	2941	0.89	0.38	0.07	89.29	3.54	-0.26	3.06	-0.26	4.05	-0.16
29	2941	0.46	0.27	0.07	46.17	4.45	-0.26	20.50	-0.09	28.80	-0.14
30	2941	0.42	0.41	0.10	42.06	39.85	-0.16	6.60	-0.22	11.39	-0.27
31	2941	0.47	0.23	0.14	46.79	32.40	-0.13	2.96	-0.18	17.72	-0.12
32	2941	0.81	0.37	0.07	81.13	11.32	-0.24	4.22	-0.21	3.26	-0.21
33	2941	0.50	0.34	0.03	49.71	23.02	-0.13	17.55	-0.23	9.69	-0.15
34	2941	0.81	0.42	0.00	81.33	4.59	-0.23	6.43	-0.27	7.65	-0.22
35	2941	0.39	0.34	0.00	39.17	49.06	-0.15	4.96	-0.24	6.80	-0.21
36	2941	0.32	0.41	0.07	31.93	42.81	-0.18	17.75	-0.21	7.45	-0.15
37	2941	0.79	0.29	0.00	78.88	5.64	-0.22	10.06	-0.08	5.41	-0.25
38	2941	0.56	0.42	0.00	56.34	17.92	-0.20	16.01	-0.20	9.72	-0.25
39	2941	0.76	0.27	0.00	76.37	3.03	-0.15	13.40	-0.14	7.21	-0.23
40	2941	0.86	0.40	0.07	85.89	2.18	-0.23	7.24	-0.28	4.62	-0.20

Note. Item number is not the item number in test booklet due to the nature of the dual purpose assessment and imbedded field test items. This test included multiple choice items only. The statistics presented in this table represent the early returns sample only.

(table continues)

Table 6.4.6 (continued)
2005 Spring AIMS Classical Item Analysis
Mathematics CRT Grade 8

					Key	Distractor 1		Distractor 2		Distractor 3	
Item	N	P-Value	Adj *r* pb	% Omit	%	%	*r* pb	%	*r* pb	%	*r* pb
41	2941	0.77	0.24	0.03	76.54	5.00	-0.19	16.15	-0.15	2.28	-0.12
42	2941	0.52	0.41	0.20	51.99	16.90	-0.40	14.38	-0.26	16.52	0.05
43	2941	0.92	0.34	0.03	91.57	1.26	-0.17	1.70	-0.21	5.44	-0.24
44	2941	0.57	0.34	0.24	57.02	9.35	-0.07	18.77	-0.25	14.62	-0.18
45	2941	0.59	0.46	0.03	58.59	4.52	-0.25	32.68	-0.35	4.18	-0.14
46	2941	0.64	0.54	0.10	63.92	9.79	-0.27	14.59	-0.40	11.59	-0.16
47	2941	0.75	0.40	0.00	74.77	9.72	-0.24	2.14	-0.19	13.36	-0.25
48	2941	0.68	0.38	0.03	68.45	5.54	-0.23	10.00	-0.23	15.98	-0.19
49	2941	0.83	0.43	0.07	83.07	8.77	-0.30	5.71	-0.24	2.38	-0.19
50	2941	0.87	0.28	0.00	87.28	8.19	-0.20	3.26	-0.18	1.26	-0.16
51	2941	0.86	0.47	0.00	86.43	3.77	-0.22	8.74	-0.39	1.05	-0.17
52	2941	0.71	0.51	0.03	71.44	10.40	-0.30	9.55	-0.32	8.57	-0.21
53	2941	0.38	0.34	0.10	38.22	34.75	-0.31	16.63	-0.12	10.30	0.03
54	2941	0.81	0.42	0.00	81.03	6.02	-0.19	7.17	-0.27	5.78	-0.26
55	2941	0.72	0.35	0.00	72.29	11.49	-0.21	9.01	-0.19	7.21	-0.20
56	2941	0.76	0.49	0.03	75.52	11.12	-0.40	6.26	-0.18	7.07	-0.21
57	2941	0.60	0.38	0.03	59.71	16.42	-0.17	20.57	-0.27	3.26	-0.16
58	2941	0.76	0.40	0.00	75.89	4.05	-0.32	16.49	-0.20	3.57	-0.24
59	2941	0.71	0.38	0.03	70.83	5.10	-0.11	11.25	-0.24	12.78	-0.26
60	2941	0.81	0.45	0.00	81.23	6.09	-0.25	7.00	-0.24	5.68	-0.28
61	2941	0.74	0.21	0.03	74.16	3.23	-0.18	19.48	-0.11	3.09	-0.17
62	2941	0.66	0.34	0.00	65.52	11.12	-0.17	15.23	-0.21	8.13	-0.18
63	2941	0.34	0.33	0.00	33.63	11.63	-0.06	30.98	-0.14	23.77	-0.21
64	2941	0.81	0.46	0.03	80.79	7.82	-0.31	7.55	-0.25	3.81	-0.21
65	2941	0.62	0.24	0.03	61.78	11.90	-0.10	14.08	-0.20	12.21	-0.10
66	2941	0.73	0.43	0.07	72.90	3.81	-0.25	11.80	-0.22	11.42	-0.27

Note. Item number is not the item number in test booklet due to the nature of the dual purpose assessment and imbedded field test items. This test included multiple choice items only. The statistics presented in this table represent the early returns sample only.

Table 6.4.7
2005 Spring AIMS Classical Item Analysis
Mathematics CRT High School

					Key	Distractor 1		Distractor 2		Distractor 3	
Item	N	P-Value	Adj *r* pb	% Omit	%	%	*r* pb	%	*r* pb	%	*r* pb
1	4095	0.69	0.39	0.34	68.55	10.48	-0.17	11.94	-0.24	8.69	-0.22
2	4095	0.83	0.44	0.05	82.76	5.35	-0.30	5.20	-0.27	6.64	-0.18
3	4095	0.79	0.32	0.05	78.90	4.27	-0.15	13.94	-0.24	2.83	-0.17
4	4095	0.91	0.25	0.05	91.18	4.18	-0.22	4.08	-0.13	0.51	-0.07
5	4095	0.92	0.34	0.10	91.55	3.05	-0.14	3.49	-0.28	1.81	-0.17
6	4095	0.69	0.48	0.15	68.60	9.55	-0.22	11.23	-0.27	10.48	-0.27
7	4095	0.78	0.37	0.15	77.83	1.68	-0.09	1.90	-0.17	18.44	-0.33
8	4095	0.97	0.14	0.00	96.58	1.56	-0.09	1.39	-0.07	0.46	-0.12
9	4095	0.52	0.37	0.12	51.62	31.09	-0.30	9.60	-0.12	7.57	-0.09
10	4095	0.73	0.41	0.22	73.46	11.14	-0.22	6.30	-0.23	8.89	-0.24
11	4095	0.42	0.37	0.20	41.90	27.30	-0.10	18.83	-0.26	11.77	-0.15
12	4095	0.56	0.49	0.05	56.41	29.87	-0.41	11.14	-0.13	2.54	-0.14
13	4095	0.51	0.32	0.12	50.55	28.62	-0.15	12.84	-0.23	7.86	-0.12
14	4095	0.84	0.37	0.07	83.76	4.76	-0.22	7.67	-0.24	3.74	-0.18
15	4095	0.62	0.40	0.07	62.22	13.06	-0.28	16.75	-0.17	7.89	-0.17
16	4095	0.87	0.44	0.20	86.74	2.05	-0.20	5.08	-0.26	5.93	-0.29
17	4095	0.76	0.32	0.02	76.41	4.88	-0.15	14.02	-0.19	4.66	-0.21
18	4095	0.51	0.32	0.27	51.01	11.18	-0.14	28.91	-0.19	8.62	-0.15
19	4095	0.65	0.44	0.10	64.69	10.89	-0.23	11.33	-0.29	12.99	-0.17
20	4095	0.50	0.45	0.17	50.23	24.86	-0.34	19.80	-0.19	4.93	-0.06
21	4095	0.70	0.45	0.07	69.87	12.26	-0.25	10.79	-0.30	7.01	-0.17
22	4095	0.65	0.51	0.07	65.01	6.23	-0.26	9.21	-0.24	19.49	-0.31
23	4095	0.66	0.41	0.07	66.15	15.24	-0.18	13.58	-0.27	4.96	-0.22
24	4095	0.48	0.30	0.24	48.45	20.00	-0.20	22.37	-0.17	8.94	-0.06
25	4095	0.92	0.33	0.07	91.58	2.44	-0.18	4.05	-0.21	1.86	-0.21
26	4095	0.85	0.43	0.17	85.32	4.66	-0.22	3.76	-0.27	6.08	-0.25
27	4095	0.60	0.52	0.05	59.98	25.35	-0.42	11.87	-0.22	2.76	-0.08
28	4095	0.80	0.44	0.00	80.05	9.82	-0.24	5.84	-0.27	4.30	-0.25
29	4095	0.71	0.48	0.05	70.60	10.87	-0.28	8.47	-0.25	10.01	-0.25
30	4095	0.56	0.37	0.07	55.73	22.76	-0.11	15.12	-0.31	6.32	-0.17
31	4095	0.72	0.31	0.10	71.67	5.76	-0.15	10.45	-0.22	12.01	-0.14
32	4095	0.65	0.35	0.07	65.01	8.86	-0.22	10.62	-0.19	15.43	-0.16
33	4095	0.91	0.33	0.02	91.43	1.93	-0.22	4.79	-0.21	1.83	-0.15
34	4095	0.84	0.45	0.07	84.44	2.74	-0.15	6.94	-0.31	5.81	-0.28
35	4095	0.67	0.30	0.15	67.35	18.10	-0.13	7.62	-0.19	6.79	-0.20
36	4095	0.62	0.35	0.00	61.81	19.24	-0.17	12.48	-0.18	6.47	-0.21
37	4095	0.66	0.27	0.10	65.67	9.35	-0.17	16.12	-0.17	8.77	-0.11
38	4095	0.57	0.37	0.05	57.07	14.85	-0.26	20.44	-0.15	7.59	-0.17
39	4095	0.62	0.44	0.05	61.83	12.33	-0.27	20.02	-0.22	5.76	-0.21
40	4095	0.78	0.48	0.12	77.73	1.86	-0.21	15.82	-0.42	4.47	-0.12
41	4095	0.54	0.37	0.00	54.14	13.14	-0.14	23.88	-0.23	8.84	-0.16
42	4095	0.56	0.45	0.12	55.75	18.32	-0.23	14.95	-0.27	10.87	-0.17
43	4095	0.40	0.25	0.34	39.56	17.09	-0.11	16.14	-0.17	26.86	-0.07

Note. Item number is not the item number in test booklet due to imbedded field test items. This test included multiple choice items only. The statistics presented in this table represent the early returns sample only.

(table continues)

Table 6.4.7 (continued)
2005 Spring AIMS Classical Item Analysis
Mathematics CRT High School

					Key	Distractor 1		Distractor 2		Distractor 3	
Item	N	P-Value	Adj *r* pb	% Omit	%	%	*r* pb	%	*r* pb	%	*r* pb
44	4095	0.47	0.29	0.32	47.37	25.20	-0.17	17.92	-0.16	9.18	-0.09
45	4095	0.89	0.37	0.00	89.21	4.44	-0.22	2.81	-0.18	3.54	-0.24
46	4095	0.58	0.33	0.05	57.97	26.69	-0.17	7.45	-0.26	7.84	-0.13
47	4095	0.70	0.26	0.07	69.79	9.11	-0.06	10.65	-0.20	10.38	-0.18
48	4095	0.86	0.37	0.00	86.20	5.08	-0.27	4.71	-0.22	4.00	-0.14
49	4095	0.78	0.51	0.12	77.80	8.74	-0.28	6.57	-0.26	6.76	-0.30
50	4095	0.71	0.35	0.10	70.79	12.89	-0.08	5.54	-0.26	10.67	-0.27
51	4095	0.62	0.40	0.15	61.76	14.09	-0.28	13.06	-0.19	10.94	-0.15
52	4095	0.30	0.31	0.12	30.23	52.70	-0.05	6.79	-0.19	10.16	-0.27
53	4095	0.72	0.49	0.12	72.45	8.38	-0.23	8.08	-0.24	10.96	-0.31
54	4095	0.71	0.37	0.10	71.26	18.71	-0.23	6.94	-0.22	3.00	-0.21
55	4095	0.45	0.58	0.27	44.59	11.23	-0.28	15.43	-0.28	28.47	-0.24
56	4095	0.68	0.46	0.12	67.94	9.89	-0.23	8.62	-0.27	13.43	-0.24
57	4095	0.54	0.38	0.20	54.29	13.63	-0.21	20.51	-0.18	11.38	-0.18
58	4095	0.85	0.36	0.12	84.91	4.35	-0.21	8.47	-0.22	2.15	-0.22
59	4095	0.68	0.43	0.24	68.30	10.72	-0.23	11.62	-0.30	9.11	-0.16
60	4095	0.91	0.39	0.15	91.06	3.64	-0.23	2.56	-0.22	2.59	-0.22
61	4095	0.72	0.56	0.17	72.06	13.70	-0.39	12.26	-0.30	1.81	-0.20
62	4095	0.68	0.44	0.17	68.28	8.35	-0.23	17.95	-0.28	5.25	-0.20
63	4095	0.60	0.32	0.17	59.85	15.36	-0.21	8.50	-0.16	16.12	-0.14
64	4095	0.82	0.45	0.17	82.05	4.79	-0.22	9.67	-0.34	3.32	-0.18
65	4095	0.62	0.41	0.17	62.42	14.68	-0.23	16.00	-0.23	6.74	-0.18
66	4095	0.45	0.36	0.27	45.18	24.20	-0.09	21.86	-0.23	8.50	-0.20
67	4095	0.29	0.22	0.20	29.23	36.36	0.00	15.24	-0.12	18.97	-0.17
68	4095	0.84	0.37	0.15	83.66	4.74	-0.23	4.25	-0.25	7.20	-0.17
69	4095	0.47	0.30	0.12	46.94	11.67	-0.19	24.13	-0.12	17.14	-0.14
70	4095	0.67	0.53	0.20	67.13	15.43	-0.42	11.87	-0.27	5.37	-0.08
71	4095	0.78	0.44	0.17	77.58	9.67	-0.22	7.13	-0.31	5.45	-0.20
72	4095	0.73	0.42	0.17	73.19	4.93	-0.21	13.38	-0.33	8.33	-0.14
73	4095	0.76	0.37	0.24	76.07	14.95	-0.19	5.59	-0.26	3.15	-0.23
74	4095	0.31	0.31	0.22	30.70	24.32	-0.10	35.14	-0.15	9.62	-0.15
75	4095	0.66	0.46	0.22	65.52	17.41	-0.25	9.82	-0.25	7.03	-0.23
76	4095	0.68	0.48	0.22	68.01	5.76	-0.25	20.44	-0.32	5.57	-0.22
77	4095	0.72	0.48	0.17	72.14	15.75	-0.30	5.96	-0.28	5.98	-0.22
78	4095	0.64	0.42	0.24	63.83	13.72	-0.15	13.46	-0.27	8.74	-0.24
79	4095	0.68	0.49	0.20	68.33	18.00	-0.28	7.37	-0.27	6.11	-0.27
80	4095	0.57	0.33	0.24	57.09	14.14	-0.24	19.80	-0.11	8.72	-0.18
81	4095	0.61	0.31	0.17	60.83	9.28	-0.16	9.96	-0.15	19.76	-0.18
82	4095	0.58	0.34	0.20	57.66	8.57	-0.19	11.70	-0.21	21.88	-0.15
83	4095	0.53	0.41	0.27	53.19	15.04	-0.18	21.88	-0.23	9.62	-0.19
84	4095	0.60	0.50	0.22	59.73	11.28	-0.23	13.65	-0.28	15.12	-0.24
85	4095	0.51	0.38	0.22	50.70	12.94	-0.28	28.86	-0.13	7.28	-0.21

Note. Item number is not the item number in test booklet due to imbedded field test items. This test included multiple choice items only. The statistics presented in this table represent the early returns sample only.

Table 6.4.8
2005 Spring AIMS Classical Item Analysis
Reading CRT Grade 3

					Key	Distractor 1		Distractor 2		Distractor 3	
Item	N	P-Value	Adj *r* pb	% Omit	%	%	*r* pb	%	*r* pb	%	*r* pb
1	3835	0.94	0.35	0.13	93.85	4.82	-0.30	1.20	-0.21	0.00	--
2	3835	0.84	0.32	0.39	84.09	4.54	-0.25	10.98	-0.25	0.00	--
3	3835	0.94	0.33	0.26	94.03	2.37	-0.25	3.34	-0.25	0.00	--
4	3835	0.81	0.42	0.37	81.10	9.41	-0.31	9.13	-0.29	0.00	--
5	3835	0.68	0.48	0.23	67.61	9.05	-0.32	12.26	-0.25	10.85	-0.22
6	3835	0.80	0.54	1.12	80.21	5.48	-0.32	8.60	-0.31	4.59	-0.28
7	3835	0.91	0.41	0.23	90.85	2.09	-0.22	4.41	-0.24	2.43	-0.28
8	3835	0.79	0.45	0.42	79.09	6.81	-0.22	7.20	-0.27	6.49	-0.27
9	3835	0.75	0.55	0.52	74.58	9.91	-0.32	7.67	-0.31	7.33	-0.28
10	3835	0.64	0.44	0.73	64.28	11.47	-0.24	6.81	-0.26	16.71	-0.23
11	3835	0.33	0.28	1.54	33.35	11.66	-0.28	29.75	0.04	23.70	-0.19
12	3835	0.59	0.14	0.26	58.62	6.15	-0.23	24.25	0.05	10.72	-0.19
13	3835	0.66	0.47	0.34	66.13	9.13	-0.26	14.92	-0.24	9.49	-0.27
14	3835	0.53	0.38	0.65	52.93	7.54	-0.20	12.46	-0.25	26.41	-0.17
15	3835	0.78	0.51	0.34	77.86	6.75	-0.39	11.26	-0.22	3.78	-0.28
16	3835	0.59	0.18	0.29	58.72	8.21	-0.28	11.60	-0.14	21.17	0.02
17	3835	0.78	0.45	0.76	78.49	5.48	-0.31	6.18	-0.26	9.10	-0.22
18	3835	0.61	0.39	0.26	60.81	21.46	-0.15	3.34	-0.31	14.13	-0.26
19	3835	0.53	0.45	0.47	53.38	17.94	-0.20	12.23	-0.35	15.98	-0.14
20	3835	0.61	0.36	0.47	60.78	11.68	-0.21	14.13	-0.18	12.93	-0.19
21	3835	0.87	0.48	0.44	87.28	7.90	-0.38	2.48	-0.22	1.90	-0.21
22	3835	0.36	0.17	0.60	35.85	10.64	-0.27	23.08	-0.04	29.83	-0.01
23	3835	0.63	0.44	0.76	63.47	20.91	-0.27	7.17	-0.32	7.69	-0.13
24	3835	0.70	0.46	0.73	70.46	7.22	-0.26	8.84	-0.32	12.75	-0.20
25	3835	0.56	0.45	0.91	56.32	12.57	-0.16	12.10	-0.38	18.10	-0.17
26	3835	0.75	0.52	0.26	75.07	9.31	-0.31	5.66	-0.29	9.70	-0.27
27	3835	0.71	0.53	0.78	71.03	5.11	-0.32	6.81	-0.26	16.27	-0.32
28	3835	0.68	0.50	0.39	67.93	11.08	-0.28	11.73	-0.27	8.87	-0.26
29	3835	0.91	0.47	0.13	90.85	2.97	-0.30	3.57	-0.27	2.48	-0.26
30	3835	0.77	0.49	0.26	77.05	7.56	-0.28	11.34	-0.29	3.78	-0.27
31	3835	0.64	0.40	0.55	64.30	14.63	-0.23	8.68	-0.33	11.84	-0.11
32	3835	0.85	0.44	0.31	85.42	3.10	-0.29	8.27	-0.26	2.89	-0.23
33	3835	0.74	0.33	0.34	74.00	6.10	-0.20	5.27	-0.18	14.29	-0.20
34	3835	0.84	0.52	0.42	84.43	5.81	-0.28	5.55	-0.35	3.78	-0.26
35	3835	0.53	0.36	1.10	52.57	12.96	-0.20	9.80	-0.33	23.57	-0.08
36	3835	0.39	0.26	0.44	39.17	12.33	-0.16	31.06	-0.13	17.00	-0.09
37	3835	0.41	0.37	0.73	41.30	15.05	-0.21	30.77	-0.15	12.15	-0.17
38	3835	0.64	0.48	0.57	63.60	21.59	-0.24	6.49	-0.28	7.74	-0.29
39	3835	0.66	0.50	0.94	65.81	21.88	-0.26	7.59	-0.36	3.78	-0.24
40	3835	0.49	0.48	1.23	49.49	6.15	-0.25	26.23	-0.22	16.90	-0.28

Note. Item number is not the item number in test booklet due to the nature of the dual purpose assessment and imbedded field test items. This test included multiple choice items only. The statistics presented in this table represent the early returns sample only.

(table continues)

Table 6.4.8 (continued)
2005 Spring AIMS Classical Item Analysis
Reading CRT Grade 3

					Key	Distractor 1		Distractor 2		Distractor 3	
Item	N	P-Value	Adj *r* pb	% Omit	%	%	*r* pb	%	*r* pb	%	*r* pb
41	3835	0.60	0.38	1.75	59.82	15.59	-0.14	15.78	-0.27	7.07	-0.21
42	3835	0.71	0.52	0.94	71.06	5.53	-0.27	11.37	-0.33	11.11	-0.26
43	3835	0.73	0.33	1.43	72.72	11.06	-0.37	1.69	-0.23	13.09	-0.04
44	3835	0.42	0.28	0.55	41.80	10.93	-0.24	8.37	-0.18	38.36	-0.08
45	3835	0.61	0.36	0.73	60.52	7.01	-0.21	12.88	-0.30	18.85	-0.10
46	3835	0.42	0.45	0.78	42.11	18.62	-0.39	22.35	-0.09	16.14	-0.14
47	3835	0.62	0.50	1.33	61.56	7.82	-0.29	18.02	-0.26	11.26	-0.24
48	3835	0.80	0.61	0.31	80.10	7.51	-0.34	5.58	-0.34	6.49	-0.34
49	3835	0.65	0.35	0.76	64.93	24.07	-0.12	6.57	-0.33	3.68	-0.28
50	3835	0.66	0.56	0.52	65.71	11.58	-0.31	8.34	-0.34	13.85	-0.25
51	3835	0.50	0.31	0.50	49.57	18.62	-0.11	15.10	-0.22	16.22	-0.14
52	3835	0.68	0.38	1.04	68.06	5.74	-0.32	12.54	-0.19	12.62	-0.16
53	3835	0.78	0.51	0.81	77.65	5.42	-0.33	12.99	-0.30	3.13	-0.26
54	3835	0.70	0.53	1.10	70.35	8.06	-0.28	7.33	-0.23	13.17	-0.34

Note. Item number is not the item number in test booklet due to the nature of the dual purpose assessment and imbedded field test items. This test included multiple choice items only. The statistics presented in this table represent the early returns sample only.

Table 6.4.9
2005 Spring AIMS Classical Item Analysis
Reading CRT Grade 4

					Key	Distractor 1		Distractor 2		Distractor 3	
Item	N	P-Value	Adj *r* pb	% Omit	%	%	*r* pb	%	*r* pb	%	*r* pb
1	3916	0.85	0.41	0.28	84.70	10.67	-0.33	1.61	-0.20	2.73	-0.17
2	3916	0.71	0.28	0.26	70.74	20.02	-0.11	4.95	-0.28	4.03	-0.20
3	3916	0.62	0.48	0.33	61.80	19.59	-0.24	4.80	-0.25	13.48	-0.30
4	3916	0.52	0.25	0.31	51.53	9.88	-0.19	32.33	-0.09	5.95	-0.18
5	3916	0.80	0.49	0.31	79.93	5.41	-0.32	8.27	-0.24	6.08	-0.28
6	3916	0.69	0.32	0.23	69.25	13.87	-0.14	5.87	-0.23	10.78	-0.20
7	3916	0.86	0.49	0.38	85.85	6.44	-0.33	4.88	-0.28	2.45	-0.23
8	3916	0.78	0.45	0.31	77.78	8.07	-0.28	9.27	-0.25	4.57	-0.24
9	3916	0.57	0.38	0.36	56.61	14.94	-0.25	8.94	-0.14	19.15	-0.20
10	3916	0.58	0.35	0.28	58.43	6.61	-0.22	13.94	-0.16	20.74	-0.20
11	3916	0.76	0.48	0.46	76.15	11.11	-0.27	4.37	-0.27	7.92	-0.28
12	3916	0.77	0.43	0.56	77.15	12.61	-0.22	5.52	-0.30	4.16	-0.25
13	3916	0.90	0.45	0.49	89.89	2.48	-0.25	3.58	-0.24	3.58	-0.29
14	3916	0.57	0.46	0.56	56.51	9.86	-0.25	17.16	-0.33	15.91	-0.13
15	3916	0.73	0.48	0.03	72.91	9.30	-0.26	12.72	-0.28	5.06	-0.25
16	3916	0.83	0.49	0.15	83.35	4.78	-0.27	5.21	-0.30	6.51	-0.27
17	3916	0.76	0.47	0.31	76.43	5.92	-0.22	11.72	-0.26	5.62	-0.32
18	3916	0.57	0.41	0.28	57.18	21.12	-0.19	9.37	-0.29	12.05	-0.17
19	3916	0.63	0.43	0.31	63.28	13.53	-0.18	7.23	-0.19	15.65	-0.31
20	3916	0.76	0.37	0.20	75.87	7.10	-0.32	13.13	-0.15	3.70	-0.21
21	3916	0.74	0.59	0.41	74.18	7.61	-0.25	9.04	-0.32	8.76	-0.40
22	3916	0.78	0.35	0.36	78.47	10.67	-0.23	7.41	-0.19	3.09	-0.20
23	3916	0.73	0.55	0.41	72.93	9.12	-0.27	6.03	-0.32	11.52	-0.32
24	3916	0.63	0.56	0.41	63.05	7.61	-0.37	18.31	-0.29	10.62	-0.24
25	3916	0.60	0.41	0.56	60.16	18.28	-0.16	4.90	-0.24	16.09	-0.29
26	3916	0.53	0.38	0.56	53.45	4.55	-0.28	7.07	-0.25	34.37	-0.18
27	3916	0.85	0.50	0.43	85.29	5.92	-0.34	5.21	-0.26	3.14	-0.26
28	3916	0.75	0.55	0.49	74.80	13.97	-0.37	6.66	-0.29	4.09	-0.25
29	3916	0.69	0.56	0.49	68.85	9.96	-0.26	8.99	-0.27	11.72	-0.36
30	3916	0.26	0.27	0.00	25.82	29.37	-0.08	39.20	-0.12	5.62	-0.16
31	3916	0.72	0.51	0.23	72.32	7.28	-0.28	11.64	-0.31	8.53	-0.25
32	3916	0.81	0.48	0.36	80.90	6.66	-0.26	8.04	-0.29	4.03	-0.27
33	3916	0.83	0.46	0.31	82.71	6.08	-0.31	7.92	-0.25	2.99	-0.25
34	3916	0.65	0.28	0.38	65.17	6.23	-0.25	2.43	-0.25	25.79	-0.12
35	3916	0.51	0.53	0.31	51.23	12.10	-0.26	14.58	-0.21	21.78	-0.29
36	3916	0.77	0.53	0.31	77.43	4.29	-0.32	10.80	-0.35	7.18	-0.23
37	3916	0.64	0.43	0.38	64.17	12.28	-0.21	6.44	-0.28	16.73	-0.23
38	3916	0.73	0.54	0.38	72.98	5.98	-0.29	8.12	-0.29	12.54	-0.31
39	3916	0.57	0.52	0.33	56.77	9.04	-0.28	11.39	-0.31	22.47	-0.23
40	3916	0.67	0.49	0.33	66.70	13.46	-0.28	8.07	-0.24	11.44	-0.27

Note. Item number is not the item number in test booklet due to the nature of the dual purpose assessment and imbedded field test items. This test included multiple choice items only. The statistics presented in this table represent the early returns sample only.

(table continues)

Table 6.4.9 (continued)
2005 Spring AIMS Classical Item Analysis
Reading CRT Grade 4

					Key	Distractor 1		Distractor 2		Distractor 3	
Item	N	P-Value	Adj *r* pb	% Omit	%	%	*r* pb	%	*r* pb	%	*r* pb
41	3916	0.64	0.52	0.36	64.17	6.56	-0.32	11.90	-0.28	17.01	-0.25
42	3916	0.52	0.32	0.56	51.69	9.81	-0.22	30.11	-0.12	7.84	-0.22
43	3916	0.78	0.48	0.41	78.29	5.59	-0.27	7.58	-0.28	8.12	-0.27
44	3916	0.73	0.53	0.56	72.83	9.30	-0.26	10.09	-0.30	7.23	-0.32
45	3916	0.74	0.58	0.46	74.11	6.87	-0.32	11.13	-0.32	7.43	-0.32
46	3916	0.72	0.53	0.36	71.86	5.98	-0.29	16.91	-0.34	4.90	-0.26
47	3916	0.53	0.50	0.46	52.76	12.28	-0.30	11.41	-0.27	23.08	-0.19
48	3916	0.38	0.23	0.43	38.41	17.88	-0.15	20.20	-0.08	23.08	-0.10
49	3916	0.71	0.42	0.38	70.74	10.85	-0.23	11.01	-0.26	7.02	-0.22
50	3916	0.86	0.46	0.46	86.08	5.13	-0.27	3.91	-0.25	4.42	-0.27
51	3916	0.81	0.37	0.51	81.28	5.13	-0.29	8.91	-0.12	4.16	-0.27
52	3916	0.86	0.53	0.31	86.29	4.95	-0.30	5.54	-0.34	2.91	-0.28
53	3916	0.85	0.56	0.33	84.60	5.29	-0.33	5.57	-0.32	4.21	-0.29
54	3916	0.75	0.51	0.41	74.57	7.23	-0.34	13.87	-0.26	3.93	-0.28

Note. Item number is not the item number in test booklet due to the nature of the dual purpose assessment and imbedded field test items. This test included multiple choice items only. The statistics presented in this table represent the early returns sample only.

Table 6.4.10
2005 Spring AIMS Classical Item Analysis
Reading CRT Grade 5

					Key	Distractor 1		Distractor 2		Distractor 3	
Item	N	P-Value	Adj *r* pb	% Omit	%	%	*r* pb	%	*r* pb	%	*r* pb
1	4000	0.78	0.41	0.03	77.58	5.85	-0.29	12.63	-0.23	3.93	-0.22
2	4000	0.93	0.32	0.13	92.53	2.55	-0.18	1.55	-0.16	3.25	-0.23
3	4000	0.79	0.44	0.08	79.00	4.23	-0.26	8.58	-0.23	8.13	-0.27
4	4000	0.56	0.15	0.15	56.43	13.28	-0.24	9.05	-0.19	21.10	0.09
5	4000	0.86	0.29	0.10	86.30	5.70	-0.15	4.18	-0.11	3.73	-0.26
6	4000	0.73	0.40	0.08	73.25	15.23	-0.25	4.08	-0.22	7.38	-0.22
7	4000	0.60	0.35	0.10	59.95	14.08	-0.24	4.60	-0.28	21.28	-0.12
8	4000	0.68	0.42	0.08	67.88	7.85	-0.24	8.13	-0.25	16.08	-0.21
9	4000	0.85	0.44	0.08	84.98	4.15	-0.25	5.90	-0.25	4.90	-0.27
10	4000	0.76	0.46	0.25	75.50	7.35	-0.20	11.30	-0.31	5.60	-0.25
11	4000	0.69	0.34	0.33	69.20	3.98	-0.23	21.18	-0.19	5.33	-0.23
12	4000	0.63	0.50	0.28	62.55	18.88	-0.22	9.35	-0.31	8.95	-0.28
13	4000	0.68	0.53	0.33	68.08	12.18	-0.27	8.95	-0.27	10.48	-0.30
14	4000	0.59	0.33	0.33	59.30	15.50	-0.18	11.23	-0.22	13.65	-0.13
15	4000	0.53	0.41	0.38	52.55	25.00	-0.13	10.48	-0.28	11.60	-0.25
16	4000	0.59	0.25	0.45	58.70	5.68	-0.30	17.25	-0.10	17.93	-0.10
17	4000	0.60	0.46	0.48	60.33	10.95	-0.25	16.00	-0.21	12.25	-0.26
18	4000	0.70	0.42	0.05	69.95	19.58	-0.31	3.83	-0.19	6.60	-0.20
19	4000	0.63	0.45	0.10	63.43	2.15	-0.20	26.88	-0.31	7.45	-0.25
20	4000	0.82	0.50	0.30	81.63	10.18	-0.42	3.73	-0.17	4.18	-0.22
21	4000	0.52	0.18	0.10	52.25	8.45	-0.16	9.70	-0.16	29.50	-0.04
22	4000	0.55	0.34	0.28	54.83	14.35	-0.17	9.63	-0.22	20.93	-0.15
23	4000	0.86	0.38	0.15	86.35	7.35	-0.23	3.25	-0.23	2.90	-0.22
24	4000	0.66	0.34	0.10	65.80	8.15	-0.18	16.25	-0.19	9.70	-0.21
25	4000	0.64	0.46	0.15	63.63	6.23	-0.25	6.40	-0.25	23.60	-0.27
26	4000	0.63	0.35	0.13	63.18	5.25	-0.26	25.33	-0.15	6.13	-0.27
27	4000	0.65	0.39	0.15	64.90	13.53	-0.26	14.68	-0.16	6.75	-0.23
28	4000	0.71	0.59	0.23	70.78	6.00	-0.30	18.60	-0.41	4.40	-0.25
29	4000	0.60	0.24	0.13	59.80	10.33	-0.10	22.83	-0.11	6.93	-0.25
30	4000	0.60	0.46	0.20	59.68	18.35	-0.19	7.43	-0.29	14.35	-0.26
31	4000	0.40	0.31	0.23	39.60	16.30	-0.21	19.93	-0.15	23.95	-0.08
32	4000	0.70	0.48	0.05	69.50	5.53	-0.15	12.20	-0.41	12.73	-0.21
33	4000	0.60	0.31	0.10	59.98	16.75	-0.26	13.88	-0.08	9.30	-0.15
34	4000	0.61	0.25	0.18	61.10	7.75	-0.13	11.18	-0.15	19.80	-0.15
35	4000	0.58	0.31	0.10	58.03	11.33	-0.15	10.05	-0.28	20.50	-0.10
36	4000	0.85	0.41	0.18	85.38	6.78	-0.23	3.50	-0.28	4.18	-0.22
37	4000	0.51	0.33	0.08	50.70	14.30	-0.21	10.70	-0.26	24.23	-0.08
38	4000	0.79	0.49	0.10	79.13	10.20	-0.26	4.78	-0.29	5.80	-0.30
39	4000	0.62	0.44	0.25	62.13	11.70	-0.25	16.00	-0.27	9.93	-0.17
40	4000	0.76	0.53	0.13	76.48	5.70	-0.25	11.53	-0.36	6.18	-0.27

Note. Item number is not the item number in test booklet due to the nature of the dual purpose assessment and imbedded field test items. This test included multiple choice items only. The statistics presented in this table represent the early returns sample only.

(table continues)

Table 6.4.10 (continued)
2005 Spring AIMS Classical Item Analysis
Reading CRT Grade 5

					Key	Distractor 1		Distractor 2		Distractor 3	
Item	N	P-Value	Adj *r* pb	% Omit	%	%	*r* pb	%	*r* pb	%	*r* pb
41	4000	0.78	0.56	0.10	77.53	5.60	-0.34	8.75	-0.34	8.03	-0.26
42	4000	0.66	0.50	0.25	66.15	17.95	-0.28	6.40	-0.23	9.25	-0.31
43	4000	0.71	0.43	0.10	70.55	16.28	-0.34	3.85	-0.25	9.23	-0.13
44	4000	0.69	0.48	0.13	69.45	9.80	-0.25	8.78	-0.28	11.85	-0.26
45	4000	0.74	0.44	0.15	73.75	5.93	-0.30	11.83	-0.20	8.35	-0.26
46	4000	0.71	0.46	0.25	70.90	7.03	-0.29	12.73	-0.23	9.10	-0.25
47	4000	0.84	0.51	0.23	84.28	4.55	-0.32	7.48	-0.31	3.48	-0.25
48	4000	0.70	0.57	0.35	69.93	6.33	-0.29	9.15	-0.34	14.25	-0.30
49	4000	0.80	0.54	0.15	79.83	7.05	-0.34	8.40	-0.30	4.58	-0.27
50	4000	0.75	0.53	0.20	74.85	5.10	-0.27	8.98	-0.34	10.88	-0.27
51	4000	0.64	0.49	0.23	64.45	12.93	-0.31	10.08	-0.23	12.33	-0.23
52	4000	0.69	0.58	0.25	69.48	10.80	-0.33	8.20	-0.30	11.28	-0.30
53	4000	0.60	0.40	0.38	59.68	11.15	-0.33	8.50	-0.29	20.30	-0.07
54	4000	0.51	0.46	0.55	51.08	10.63	-0.28	27.45	-0.18	10.30	-0.26

Note. Item number is not the item number in test booklet due to the nature of the dual purpose assessment and imbedded field test items. This test included multiple choice items only. The statistics presented in this table represent the early returns sample only.

Table 6.4.11
2005 Spring AIMS Classical Item Analysis
Reading CRT Grade 6

					Key	Distractor 1		Distractor 2		Distractor 3	
Item	N	P-Value	Adj *r* pb	% Omit	%	%	*r* pb	%	*r* pb	%	*r* pb
1	3939	0.70	0.43	0.03	70.22	8.25	-0.23	6.75	-0.28	14.75	-0.22
2	3939	0.93	0.39	0.03	92.76	2.28	-0.22	2.89	-0.25	2.03	-0.21
3	3939	0.81	0.52	0.03	81.21	6.22	-0.22	8.73	-0.42	3.81	-0.23
4	3939	0.86	0.53	0.03	86.34	2.87	-0.27	4.34	-0.29	6.42	-0.35
5	3939	0.72	0.40	0.03	71.87	5.38	-0.20	19.93	-0.27	2.79	-0.23
6	3939	0.90	0.32	0.10	89.59	2.84	-0.20	3.30	-0.24	4.16	-0.15
7	3939	0.73	0.45	0.13	72.86	5.86	-0.22	17.16	-0.28	3.99	-0.28
8	3939	0.84	0.39	0.03	84.49	7.69	-0.31	6.52	-0.21	1.27	-0.16
9	3939	0.88	0.30	0.08	88.19	2.84	-0.19	5.86	-0.15	3.02	-0.22
10	3939	0.80	0.29	0.03	79.54	1.95	-0.20	3.35	-0.15	15.13	-0.21
11	3939	0.92	0.35	0.15	92.46	2.69	-0.18	2.49	-0.22	2.21	-0.22
12	3939	0.87	0.46	0.05	87.33	3.33	-0.23	4.54	-0.27	4.75	-0.29
13	3939	0.67	0.40	0.13	66.97	17.16	-0.23	8.30	-0.30	7.44	-0.14
14	3939	0.86	0.52	0.10	86.19	3.81	-0.30	5.31	-0.30	4.60	-0.30
15	3939	0.78	0.55	0.18	78.22	11.07	-0.32	6.22	-0.29	4.32	-0.33
16	3939	0.76	0.59	0.15	76.01	5.79	-0.31	7.72	-0.36	10.33	-0.31
17	3939	0.65	0.29	0.08	64.91	20.74	-0.07	5.31	-0.24	8.96	-0.27
18	3939	0.79	0.42	0.15	78.73	5.86	-0.23	9.37	-0.25	5.89	-0.24
19	3939	0.88	0.43	0.03	87.53	2.92	-0.26	7.26	-0.26	2.26	-0.26
20	3939	0.83	0.44	0.05	82.99	7.77	-0.24	7.34	-0.31	1.85	-0.20
21	3939	0.67	0.52	0.10	67.15	13.15	-0.32	14.19	-0.30	5.41	-0.20
22	3939	0.61	0.33	0.05	61.41	10.54	-0.21	10.99	-0.23	17.01	-0.12
23	3939	0.51	0.44	0.23	50.72	28.13	-0.16	10.64	-0.29	10.28	-0.26
24	3939	0.56	0.41	0.10	56.13	11.27	-0.26	7.11	-0.27	25.39	-0.17
25	3939	0.55	0.40	0.08	55.19	9.14	-0.31	15.77	-0.16	19.83	-0.17
26	3939	0.56	0.37	0.15	56.23	6.02	-0.24	11.83	-0.16	25.77	-0.22
27	3939	0.65	0.50	0.15	65.45	12.54	-0.39	14.19	-0.20	7.67	-0.20
28	3939	0.54	0.35	0.13	53.69	29.63	-0.11	10.41	-0.24	6.14	-0.30
29	3939	0.68	0.51	0.08	67.50	5.99	-0.26	14.62	-0.28	11.81	-0.28
30	3939	0.52	0.36	0.10	51.82	26.50	-0.26	18.48	-0.12	3.10	-0.20
31	3939	0.57	0.33	0.10	56.82	15.69	0.00	15.08	-0.16	12.31	-0.39
32	3939	0.78	0.47	0.08	78.40	8.43	-0.29	7.46	-0.22	5.64	-0.29
33	3939	0.89	0.51	0.00	88.93	2.39	-0.25	5.43	-0.36	3.25	-0.26
34	3939	0.70	0.46	0.33	70.45	9.70	-0.21	9.88	-0.24	9.65	-0.31
35	3939	0.68	0.48	0.00	68.24	7.24	-0.26	14.65	-0.23	9.88	-0.31
36	3939	0.71	0.28	0.10	71.21	5.41	-0.20	8.12	-0.30	15.16	-0.05
37	3939	0.55	0.28	0.15	55.09	10.66	-0.30	20.74	-0.12	13.35	-0.06
38	3939	0.61	0.43	0.00	61.13	16.32	-0.20	12.29	-0.28	10.26	-0.21
39	3939	0.39	0.40	0.08	38.82	29.78	-0.24	14.57	-0.19	16.76	-0.09
40	3939	0.69	0.53	0.00	68.62	6.68	-0.28	17.77	-0.31	6.93	-0.29

Note. Item number is not the item number in test booklet due to the nature of the dual purpose assessment and imbedded field test items. This test included multiple choice items only. The statistics presented in this table represent the early returns sample only.

(table continues)

Table 6.4.11 (continued)
2005 Spring AIMS Classical Item Analysis
Reading CRT Grade 6

					Key	Distractor 1		Distractor 2		Distractor 3	
Item	N	P-Value	Adj *r* pb	% Omit	%	%	*r* pb	%	*r* pb	%	*r* pb
41	3939	0.68	0.45	0.00	67.56	8.00	-0.26	15.11	-0.23	9.34	-0.26
42	3939	0.68	0.40	0.03	68.39	12.52	-0.21	8.94	-0.23	10.13	-0.23
43	3939	0.56	0.48	0.05	55.98	19.62	-0.16	6.78	-0.32	17.57	-0.29
44	3939	0.47	0.31	0.10	46.92	7.46	-0.30	16.70	-0.20	28.81	-0.05
45	3939	0.48	0.33	0.05	47.73	15.82	-0.19	14.19	-0.22	22.21	-0.09
46	3939	0.47	0.34	0.18	47.42	14.24	-0.18	9.27	-0.19	28.89	-0.15
47	3939	0.75	0.46	0.08	75.32	10.08	-0.27	8.28	-0.28	6.25	-0.23
48	3939	0.76	0.53	0.15	76.09	4.24	-0.26	11.22	-0.36	8.30	-0.26
49	3939	0.71	0.38	0.20	70.88	4.77	-0.23	19.83	-0.22	4.32	-0.26
50	3939	0.70	0.54	0.10	70.35	12.36	-0.32	8.73	-0.33	8.45	-0.23
51	3939	0.44	0.29	0.08	43.54	15.46	-0.19	21.38	-0.21	19.55	-0.03
52	3939	0.62	0.40	0.10	61.84	16.40	-0.18	8.40	-0.31	13.25	-0.17
53	3939	0.74	0.62	0.18	74.13	8.15	-0.31	8.43	-0.32	9.11	-0.38
54	3939	0.49	0.28	0.10	48.59	27.37	-0.13	19.40	-0.12	4.54	-0.27

Note. Item number is not the item number in test booklet due to the nature of the dual purpose assessment and imbedded field test items. This test included multiple choice items only. The statistics presented in this table represent the early returns sample only.

Table 6.4.12
2005 Spring AIMS Classical Item Analysis
Reading CRT Grade 7

					Key	Distractor 1		Distractor 2		Distractor 3	
Item	N	P-Value	Adj *r* pb	% Omit	%	%	*r* pb	%	*r* pb	%	*r* pb
1	2935	0.91	0.30	0.07	91.45	2.59	-0.14	2.39	-0.17	3.51	-0.22
2	2935	0.63	0.34	0.10	62.52	29.98	-0.20	4.91	-0.29	2.49	-0.19
3	2935	0.83	0.47	0.07	83.07	11.99	-0.35	2.04	-0.23	2.83	-0.24
4	2935	0.71	0.47	0.10	71.01	5.86	-0.31	7.53	-0.30	15.50	-0.21
5	2935	0.76	0.41	0.07	76.05	4.60	-0.22	13.73	-0.30	5.55	-0.17
6	2935	0.85	0.26	0.14	84.80	9.51	-0.15	1.53	-0.22	4.02	-0.17
7	2935	0.67	0.44	0.07	66.75	6.58	-0.23	7.19	-0.18	19.42	-0.31
8	2935	0.85	0.45	0.17	84.97	3.88	-0.31	3.68	-0.23	7.29	-0.26
9	2935	0.64	0.41	0.14	63.75	20.20	-0.20	8.55	-0.31	7.36	-0.18
10	2935	0.76	0.44	0.10	75.60	6.98	-0.34	2.59	-0.26	14.72	-0.21
11	2935	0.77	0.45	0.10	76.76	10.66	-0.26	4.97	-0.31	7.50	-0.21
12	2935	0.75	0.48	0.17	75.26	13.70	-0.26	7.94	-0.33	2.93	-0.24
13	2935	0.86	0.43	0.20	85.52	3.03	-0.22	5.35	-0.25	5.89	-0.28
14	2935	0.77	0.39	0.10	77.31	5.52	-0.25	7.02	-0.25	10.05	-0.20
15	2935	0.85	0.35	0.14	84.63	6.27	-0.26	6.71	-0.20	2.25	-0.16
16	2935	0.53	0.37	0.14	53.46	3.78	-0.20	6.95	-0.28	35.67	-0.20
17	2935	0.56	0.30	0.72	55.78	14.28	-0.16	3.20	-0.24	26.03	-0.16
18	2935	0.78	0.26	0.41	78.33	14.24	-0.15	3.10	-0.18	3.92	-0.20
19	2935	0.56	0.39	0.48	55.50	20.00	-0.14	6.00	-0.26	18.02	-0.24
20	2935	0.73	0.26	0.51	72.71	17.96	-0.07	4.05	-0.23	4.77	-0.28
21	2935	0.70	0.49	0.72	69.98	6.13	-0.27	15.81	-0.31	7.36	-0.22
22	2935	0.71	0.44	0.68	71.28	16.05	-0.17	7.16	-0.32	4.84	-0.32
23	2935	0.56	0.25	0.61	55.78	6.85	-0.25	25.62	-0.10	11.14	-0.12
24	2935	0.66	0.52	0.14	66.06	22.76	-0.35	4.19	-0.24	6.85	-0.26
25	2935	0.51	0.25	0.14	50.90	25.52	-0.07	17.31	-0.19	6.13	-0.18
26	2935	0.77	0.36	0.24	77.07	7.33	-0.19	2.76	-0.23	12.61	-0.23
27	2935	0.76	0.46	0.17	75.50	10.39	-0.24	5.21	-0.25	8.72	-0.29
28	2935	0.50	0.34	0.41	49.61	29.17	-0.14	7.33	-0.26	13.49	-0.19
29	2935	0.65	0.49	0.14	65.04	19.80	-0.24	9.44	-0.33	5.59	-0.26
30	2935	0.61	0.47	0.31	61.29	9.98	-0.28	5.86	-0.30	22.56	-0.23
31	2935	0.69	0.57	0.51	69.34	17.92	-0.37	7.02	-0.27	5.21	-0.28
32	2935	0.72	0.49	0.41	72.06	12.06	-0.20	8.52	-0.34	6.95	-0.29
33	2935	0.72	0.51	0.41	72.40	8.52	-0.26	9.13	-0.30	9.54	-0.28
34	2935	0.77	0.52	0.55	76.80	9.03	-0.29	5.45	-0.28	8.18	-0.31
35	2935	0.65	0.51	0.41	65.14	8.76	-0.33	17.41	-0.24	8.28	-0.27
36	2935	0.32	0.27	0.41	32.40	15.95	-0.30	15.91	-0.14	35.33	0.03
37	2935	0.51	0.22	0.31	51.24	14.86	-0.02	11.62	-0.30	21.98	-0.06
38	2935	0.78	0.41	0.17	78.47	4.57	-0.29	13.66	-0.23	3.13	-0.23

Note. Item number is not the item number in test booklet due to the nature of the dual purpose assessment and imbedded field test items. This test included multiple choice items only. The statistics presented in this table represent the early returns sample only.

(table continues)

Table 6.4.12 (continued)
2005 Spring AIMS Classical Item Analysis
Reading CRT Grade 7

					Key	Distractor 1		Distractor 2		Distractor 3	
Item	N	P-Value	Adj *r* pb	% Omit	%	%	*r* pb	%	*r* pb	%	*r* pb
39	2935	0.73	0.40	0.10	72.81	7.29	-0.17	9.85	-0.25	9.95	-0.24
40	2935	0.67	0.35	0.14	66.78	24.05	-0.16	5.18	-0.30	3.85	-0.26
41	2935	0.61	0.38	0.10	61.29	13.63	-0.19	8.45	-0.26	16.52	-0.19
42	2935	0.75	0.46	0.10	74.99	12.74	-0.31	8.04	-0.24	4.12	-0.21
43	2935	0.70	0.30	0.07	69.71	4.53	-0.25	19.35	-0.16	6.34	-0.18
44	2935	0.45	0.16	0.14	44.53	19.76	-0.08	17.75	-0.18	17.82	0.00
45	2935	0.75	0.44	0.07	74.92	4.19	-0.22	10.80	-0.27	10.02	-0.26
46	2935	0.67	0.37	0.10	67.09	11.45	-0.17	12.50	-0.23	8.86	-0.22
47	2935	0.61	0.45	0.20	61.36	9.44	-0.21	5.28	-0.29	23.71	-0.26
48	2935	0.78	0.53	0.14	78.43	9.20	-0.29	7.05	-0.32	5.18	-0.29
49	2935	0.45	0.34	0.34	45.38	22.04	-0.24	19.80	-0.14	12.44	-0.12
50	2935	0.67	0.46	0.27	67.29	10.87	-0.25	14.48	-0.20	7.09	-0.33
51	2935	0.71	0.46	0.31	71.07	6.03	-0.27	10.63	-0.27	11.96	-0.23
52	2935	0.73	0.48	0.37	73.02	11.45	-0.32	9.13	-0.30	6.03	-0.15
53	2935	0.74	0.45	0.24	74.31	4.80	-0.32	10.66	-0.27	9.98	-0.20
54	2935	0.58	0.42	0.37	58.13	10.29	-0.29	11.24	-0.15	19.97	-0.22

Note. Item number is not the item number in test booklet due to the nature of the dual purpose assessment and imbedded field test items. This test included multiple choice items only. The statistics presented in this table represent the early returns sample only.

Table 6.4.13
2005 Spring AIMS Classical Item Analysis
Reading CRT Grade 8

					Key	Distractor 1		Distractor 2		Distractor 3	
Item	N	P-Value	Adj *r* pb	% Omit	%	%	*r* pb	%	*r* pb	%	*r* pb
1	2972	0.89	0.25	0.03	89.03	0.98	-0.13	4.14	-0.09	5.82	-0.24
2	2972	0.62	0.26	0.03	61.91	4.88	-0.27	29.14	-0.12	4.04	-0.17
3	2972	0.81	0.43	0.07	80.62	12.82	-0.34	2.99	-0.18	3.50	-0.20
4	2972	0.52	0.23	0.03	52.25	6.93	-0.01	17.26	-0.26	23.52	-0.08
5	2972	0.84	0.34	0.00	84.25	3.90	-0.24	9.32	-0.20	2.52	-0.19
6	2972	0.91	0.34	0.07	91.35	4.27	-0.28	2.29	-0.19	2.02	-0.14
7	2972	0.83	0.28	0.03	83.48	8.08	-0.16	6.66	-0.20	1.75	-0.18
8	2972	0.54	0.17	0.03	54.07	15.17	-0.04	9.52	-0.26	21.20	-0.04
9	2972	0.70	0.31	0.00	70.36	19.62	-0.14	6.09	-0.24	3.94	-0.25
10	2972	0.75	0.43	0.07	74.80	7.87	-0.25	7.23	-0.24	10.03	-0.24
11	2972	0.69	0.42	0.10	69.48	12.52	-0.13	8.01	-0.31	9.89	-0.28
12	2972	0.60	0.41	0.07	59.66	33.38	-0.31	3.33	-0.25	3.57	-0.16
13	2972	0.59	0.38	0.03	58.92	16.15	-0.20	14.97	-0.19	9.93	-0.23
14	2972	0.84	0.46	0.10	83.71	4.78	-0.28	7.97	-0.29	3.43	-0.22
15	2972	0.69	0.42	0.00	69.45	23.82	-0.29	4.54	-0.30	2.19	-0.19
16	2972	0.89	0.41	0.00	89.10	2.36	-0.21	5.65	-0.26	2.89	-0.27
17	2972	0.36	0.21	0.07	36.00	13.59	-0.07	7.47	-0.26	42.87	-0.06
18	2972	0.43	0.28	0.10	42.63	28.70	-0.08	15.31	-0.19	13.26	-0.16
19	2972	0.87	0.36	0.13	87.21	5.28	-0.23	4.34	-0.25	3.03	-0.16
20	2972	0.56	0.29	0.03	55.72	9.12	-0.18	5.75	-0.25	29.37	-0.12
21	2972	0.71	0.33	0.17	71.20	8.24	-0.17	16.45	-0.22	3.94	-0.18
22	2972	0.77	0.37	0.00	77.22	4.68	-0.18	8.55	-0.23	9.56	-0.24
23	2972	0.50	0.36	0.03	49.80	7.03	-0.24	25.87	-0.16	17.26	-0.18
24	2972	0.81	0.41	0.00	81.33	4.81	-0.32	6.06	-0.26	7.81	-0.17
25	2972	0.80	0.38	0.03	80.25	2.42	-0.21	8.14	-0.24	9.15	-0.24
26	2972	0.66	0.35	0.03	66.39	6.56	-0.25	17.77	-0.19	9.25	-0.17
27	2972	0.74	0.52	0.10	74.36	8.31	-0.26	10.33	-0.33	6.90	-0.28
28	2972	0.73	0.41	0.00	73.18	9.52	-0.20	4.54	-0.22	12.75	-0.28
29	2972	0.54	0.43	0.13	53.63	9.89	-0.25	17.97	-0.24	18.37	-0.18
30	2972	0.46	0.35	0.20	45.73	7.47	-0.26	35.50	-0.22	11.10	-0.08
31	2972	0.66	0.38	0.10	65.75	14.06	-0.20	11.31	-0.18	8.78	-0.26
32	2972	0.43	0.23	0.13	42.80	27.36	-0.03	18.78	-0.15	10.94	-0.22
33	2972	0.63	0.43	0.03	63.32	12.11	-0.10	10.77	-0.30	13.76	-0.29
34	2972	0.72	0.21	0.00	71.60	6.16	-0.22	17.29	-0.04	4.95	-0.23
35	2972	0.62	0.40	0.10	62.48	19.75	-0.13	6.80	-0.26	10.87	-0.31
36	2972	0.70	0.38	0.07	70.46	4.48	-0.22	20.93	-0.24	4.07	-0.25
37	2972	0.46	0.28	0.10	45.86	35.36	-0.07	10.46	-0.29	8.21	-0.14
38	2972	0.66	0.32	0.17	66.15	15.04	-0.21	14.17	-0.20	4.48	-0.12
39	2972	0.70	0.32	0.07	70.49	19.35	-0.18	4.88	-0.21	5.22	-0.23
40	2972	0.77	0.44	0.00	76.65	8.48	-0.24	6.19	-0.23	8.68	-0.28

Note. Item number is not the item number in test booklet due to the nature of the dual purpose assessment and imbedded field test items. This test included multiple choice items only. The statistics presented in this table represent the early returns sample only.

(table continues)

Table 6.4.13 (continued)
2005 Spring AIMS Classical Item Analysis
Reading CRT Grade 8

					Key	Distractor 1		Distractor 2		Distractor 3	
Item	N	P-Value	Adj *r* pb	% Omit	%	%	*r* pb	%	*r* pb	%	*r* pb
41	2972	0.52	0.41	0.20	52.09	9.69	-0.22	29.27	-0.17	8.75	-0.31
42	2972	0.84	0.40	0.07	83.75	4.64	-0.21	6.80	-0.24	4.74	-0.26
43	2972	0.41	0.27	0.10	41.45	14.03	-0.08	26.65	-0.15	17.77	-0.16
44	2972	0.63	0.38	0.30	63.43	10.60	-0.21	13.43	-0.27	12.25	-0.14
45	2972	0.56	0.25	0.20	56.49	4.61	-0.25	6.76	-0.21	31.93	-0.09
46	2972	0.68	0.45	0.20	67.83	11.57	-0.26	9.02	-0.30	11.37	-0.18
47	2972	0.68	0.48	0.13	67.87	9.89	-0.24	12.92	-0.27	9.19	-0.27
48	2972	0.59	0.44	0.17	59.22	8.18	-0.26	9.52	-0.30	22.91	-0.18
49	2972	0.79	0.46	0.07	79.04	4.95	-0.26	8.82	-0.26	7.13	-0.27
50	2972	0.65	0.46	0.17	64.74	15.55	-0.27	11.64	-0.23	7.91	-0.24
51	2972	0.71	0.54	0.27	71.47	6.36	-0.28	9.45	-0.27	12.45	-0.33
52	2972	0.74	0.46	0.13	73.55	6.59	-0.26	13.93	-0.28	5.79	-0.25
53	2972	0.70	0.51	0.13	69.72	10.40	-0.29	8.68	-0.35	11.07	-0.21
54	2972	0.71	0.43	0.24	71.06	8.48	-0.23	7.84	-0.26	12.38	-0.23

Note. Item number is not the item number in test booklet due to the nature of the dual purpose assessment and imbedded field test items. This test included multiple choice items only. The statistics presented in this table represent the early returns sample only.

Table 6.4.14
2005 Spring AIMS Classical Item Analysis
Reading CRT High School

					Key	Distractor 1		Distractor 2		Distractor 3	
Item	N	P-Value	Adj *r* pb	% Omit	%	%	*r* pb	%	*r* pb	%	*r* pb
1	68302	0.69	0.43	0.12	68.78	12.14	-0.24	9.03	-0.26	9.94	-0.22
2	68302	0.67	0.35	0.10	66.84	14.33	-0.29	13.28	-0.09	5.45	-0.21
3	68302	0.82	0.34	0.06	82.13	9.27	-0.28	1.78	-0.18	6.77	-0.15
4	68302	0.73	0.40	0.08	72.53	4.75	-0.34	3.58	-0.19	19.07	-0.22
5	68302	0.64	0.31	0.13	64.21	17.28	-0.15	10.71	-0.20	7.67	-0.19
6	68302	0.69	0.24	0.10	69.20	27.12	-0.19	2.41	-0.18	1.18	-0.17
7	68302	0.59	0.49	0.08	59.14	2.57	-0.17	8.05	-0.25	30.16	-0.35
8	68302	0.73	0.33	0.17	72.94	15.91	-0.19	6.91	-0.19	4.07	-0.24
9	68302	0.57	0.31	0.13	57.34	18.43	-0.15	3.01	-0.19	21.09	-0.20
10	68302	0.75	0.27	0.08	74.84	2.62	-0.21	21.04	-0.22	1.42	-0.11
11	68302	0.76	0.39	0.13	75.93	7.71	-0.20	3.79	-0.20	12.44	-0.27
12	68302	0.88	0.40	0.08	87.79	3.90	-0.26	2.57	-0.18	5.67	-0.26
13	68302	0.87	0.36	0.10	86.83	6.67	-0.26	1.30	-0.19	5.10	-0.20
14	68302	0.80	0.38	0.09	79.51	12.59	-0.28	3.22	-0.27	4.60	-0.12
15	68302	0.43	0.35	0.12	43.19	8.74	-0.14	6.03	-0.23	41.91	-0.20
16	68302	0.74	0.42	0.10	74.17	11.79	-0.27	7.47	-0.24	6.48	-0.19
17	68302	0.60	0.33	0.12	60.17	24.88	-0.18	5.08	-0.20	9.76	-0.20
18	68302	0.57	0.28	0.10	56.90	28.89	-0.16	2.31	-0.16	11.80	-0.20
19	68302	0.78	0.46	0.15	78.43	7.89	-0.25	8.67	-0.30	4.85	-0.24
20	68302	0.62	0.34	0.13	62.39	9.56	-0.19	14.52	-0.12	13.40	-0.25
21	68302	0.44	0.33	0.16	43.91	11.47	-0.21	28.35	-0.01	16.13	-0.30
22	68302	0.82	0.48	0.13	82.35	6.73	-0.22	6.57	-0.32	4.22	-0.29
23	68302	0.66	0.44	0.14	66.35	8.75	-0.29	18.46	-0.22	6.29	-0.24
24	68302	0.62	0.24	0.17	62.27	5.83	-0.23	25.72	-0.10	6.01	-0.17
25	68302	0.85	0.44	0.12	84.98	7.91	-0.34	3.77	-0.22	3.22	-0.19
26	68302	0.86	0.44	0.14	86.22	4.90	-0.27	4.10	-0.26	4.63	-0.24
27	68302	0.60	0.35	0.16	60.30	11.47	-0.25	23.10	-0.14	4.97	-0.25
28	68302	0.76	0.46	0.14	75.69	9.72	-0.25	9.89	-0.30	4.55	-0.23
29	68302	0.73	0.45	0.18	72.75	6.19	-0.27	13.92	-0.26	6.95	-0.24
30	68302	0.72	0.52	0.19	72.08	15.78	-0.48	7.25	-0.21	4.71	-0.08
31	68302	0.72	0.40	0.16	72.00	13.15	-0.29	4.57	-0.32	10.12	-0.10
32	68302	0.63	0.37	0.17	62.52	5.77	-0.32	5.64	-0.33	25.90	-0.11
33	68302	0.67	0.47	0.19	66.59	13.67	-0.34	15.90	-0.18	3.64	-0.28
34	68302	0.65	0.45	0.18	64.96	21.42	-0.30	10.79	-0.24	2.65	-0.23
35	68302	0.56	0.43	0.22	56.44	16.58	-0.21	10.28	-0.24	16.48	-0.23
36	68302	0.68	0.45	0.20	67.97	5.67	-0.24	14.37	-0.27	11.79	-0.24
37	68302	0.74	0.43	0.21	73.66	6.88	-0.29	3.57	-0.28	15.68	-0.22
38	68302	0.56	0.48	0.22	55.94	9.17	-0.20	17.53	-0.26	17.14	-0.26
39	68302	0.73	0.25	0.24	72.96	2.97	-0.26	21.46	-0.14	2.38	-0.18
40	68302	0.55	0.38	0.25	55.23	19.63	-0.13	13.10	-0.20	11.79	-0.28

Note. Item number is not the item number in test booklet due to imbedded field test items. This test included multiple choice items only. The statistics presented in this table represent the calibration sample only.

(table continues)

Table 6.4.14 (continued)
2005 Spring AIMS Classical Item Analysis
Reading CRT High School

					Key	Distractor 1		Distractor 2		Distractor 3	
Item	N	P-Value	Adj *r* pb	% Omit	%	%	*r* pb	%	*r* pb	%	*r* pb
41	68302	0.66	0.47	0.23	65.99	9.80	-0.24	18.31	-0.29	5.67	-0.24
42	68302	0.69	0.49	0.31	69.31	10.50	-0.25	5.50	-0.30	14.38	-0.27
43	68302	0.73	0.44	0.30	72.90	6.75	-0.28	14.47	-0.24	5.58	-0.25
44	68302	0.42	0.26	0.28	41.85	43.23	-0.02	5.08	-0.31	9.56	-0.24
45	68302	0.82	0.52	0.25	81.90	5.53	-0.29	9.28	-0.34	3.04	-0.24
46	68302	0.65	0.45	0.29	64.99	4.23	-0.28	11.07	-0.31	19.42	-0.19
47	68302	0.71	0.53	0.29	70.53	10.41	-0.29	10.62	-0.32	8.14	-0.26
48	68302	0.81	0.52	0.27	81.47	5.31	-0.32	8.78	-0.35	4.17	-0.22
49	68302	0.80	0.55	0.27	79.75	10.05	-0.35	5.56	-0.31	4.37	-0.27
50	68302	0.66	0.50	0.29	65.52	19.75	-0.24	7.18	-0.36	7.26	-0.26
51	68302	0.53	0.25	0.28	52.84	25.30	-0.12	7.09	-0.29	14.50	-0.06
52	68302	0.64	0.44	0.27	63.52	21.60	-0.16	6.92	-0.34	7.70	-0.29
53	68302	0.43	0.38	0.30	42.89	13.96	-0.23	36.94	-0.15	5.91	-0.22
54	68302	0.80	0.46	0.32	80.16	4.81	-0.28	6.25	-0.29	8.46	-0.23

Note. Item number is not the item number in test booklet due to imbedded field test items. This test included multiple choice items only. The statistics presented in this table represent the calibration sample only.

Table 6.4.15
2005 Spring AIMS Classical Item Analysis
Writing CRT Grade 3

Trait	N	P-Value	Adj *r*	% Omit	% at 0	% at 1	% at 2	% at 3	% at 4	% at 5	% at 6
1	3864	0.55	0.80	0.00	2.72	3.88	12.81	35.02	35.27	8.77	1.53
2	3864	0.57	0.87	0.00	2.72	4.09	10.20	30.28	38.35	12.29	2.07
3	3864	0.54	0.88	0.00	2.72	4.94	15.42	33.49	32.74	8.98	1.71
4	3864	0.55	0.79	0.00	2.72	2.85	11.46	43.79	28.11	8.26	2.82
5	3864	0.52	0.87	0.00	2.72	7.25	16.72	32.30	32.56	7.30	1.16
6	3864	0.55	0.86	0.00	2.72	4.63	11.83	33.59	37.24	8.39	1.60

Note. This test included a single promt item scored on the analytic six-trait rubric. The statistics presented in this table represent the early returns sample only. Writing responses marked condition code A (blank) were treated as omit. Responses marked condition codes B (illegible),C (non-English), and D (off-topic) were treated as 0.

Table 6.4.16
2005 Spring AIMS Classical Item Analysis
Writing CRT Grade 4

Trait	N	P-Value	Adj *r*	% Omit	% at 0	% at 1	% at 2	% at 3	% at 4	% at 5	% at 6
1	3946	0.51	0.83	0.00	2.74	5.02	18.09	37.81	28.54	7.15	0.66
2	3946	0.52	0.87	0.00	2.74	5.07	19.34	32.34	30.31	8.36	1.85
3	3946	0.54	0.86	0.00	2.74	5.07	16.40	31.04	33.38	9.93	1.44
4	3946	0.53	0.82	0.00	2.74	3.65	14.62	40.07	30.97	6.66	1.29
5	3946	0.53	0.87	0.00	2.74	5.47	16.14	33.48	33.50	7.63	1.04
6	3946	0.52	0.86	0.00	2.74	5.58	19.34	32.08	30.56	7.83	1.88

Note. This test included a single promt item scored on the analytic six-trait rubric. The statistics presented in this table represent the early returns sample only. Writing responses marked condition code A (blank) were treated as omit. Responses marked condition codes B (illegible),C (non-English), and D (off-topic) were treated as 0.

Table 6.4.17
2005 Spring AIMS Classical Item Analysis
Writing CRT Grade 5

Trait	N	P-Value	Adj *r*	% Omit	% at 0	% at 1	% at 2	% at 3	% at 4	% at 5	% at 6
1	4045	0.57	0.76	0.00	1.43	2.77	11.92	33.20	36.93	11.55	2.20
2	4045	0.59	0.83	0.00	1.43	2.82	9.69	27.32	42.72	14.41	1.61
3	4045	0.55	0.84	0.00	1.43	2.89	14.02	39.33	33.99	7.52	0.82
4	4045	0.55	0.75	0.00	1.43	3.02	14.14	38.91	33.92	7.69	0.89
5	4045	0.53	0.84	0.00	1.43	3.44	17.18	38.71	32.41	6.13	0.69
6	4045	0.58	0.82	0.00	1.43	2.82	10.78	29.10	42.45	12.09	1.33

Note. This test included a single promt item scored on the analytic six-trait rubric. The statistics presented in this table represent the early returns sample only. Writing responses marked condition code A (blank) were treated as omit. Responses marked condition codes B (illegible),C (non-English), and D (off-topic) were treated as 0.

Table 6.4.18
2005 Spring AIMS Classical Item Analysis
Writing CRT Grade 6

Trait	N	P-Value	Adj *r*	% Omit	% at 0	% at 1	% at 2	% at 3	% at 4	% at 5	% at 6
1	3980	0.53	0.70	0.00	0.78	2.96	18.64	40.08	31.01	5.73	0.80
2	3980	0.55	0.79	0.00	0.78	2.24	14.37	37.36	37.16	7.54	0.55
3	3980	0.55	0.82	0.00	0.78	2.76	15.63	39.65	32.64	7.59	0.95
4	3980	0.55	0.74	0.00	0.78	2.29	13.72	40.93	36.36	5.70	0.23
5	3980	0.54	0.82	0.00	0.78	2.91	15.65	40.75	31.78	7.06	1.06
6	3980	0.57	0.79	0.00	0.78	2.36	11.11	36.03	41.28	7.96	0.48

Note. This test included a single promt item scored on the analytic six-trait rubric. The statistics presented in this table represent the early returns sample only. Writing responses marked condition code A (blank) were treated as omit. Responses marked condition codes B (illegible),C (non-English), and D (off-topic) were treated as 0.

Table 6.4.19
2005 Spring AIMS Classical Item Analysis
Writing CRT Grade 7

Trait	N	P-Value	Adj *r*	% Omit	% at 0	% at 1	% at 2	% at 3	% at 4	% at 5	% at 6
1	2964	0.54	0.70	0.00	0.51	3.10	19.80	36.94	29.28	7.15	3.21
2	2964	0.57	0.79	0.00	0.51	1.18	13.19	36.47	39.24	8.57	0.84
3	2964	0.56	0.83	0.00	0.51	1.92	13.43	39.98	32.89	9.55	1.72
4	2964	0.53	0.74	0.00	0.51	1.65	16.63	50.74	24.90	4.45	1.11
5	2964	0.55	0.83	0.00	0.51	2.29	15.59	42.91	29.96	7.15	1.59
6	2964	0.56	0.77	0.00	0.51	1.62	12.45	39.84	39.20	5.87	0.51

Note. This test included a single promt item scored on the analytic six-trait rubric. The statistics presented in this table represent the early returns sample only. Writing responses marked condition code A (blank) were treated as omit. Responses marked condition codes B (illegible),C (non-English), and D (off-topic) were treated as 0.

Table 6.4.20
2005 Spring AIMS Classical Item Analysis
Writing CRT Grade 8

Trait	N	P-Value	Adj *r*	% Omit	% at 0	% at 1	% at 2	% at 3	% at 4	% at 5	% at 6
1	2985	0.63	0.74	0.00	0.67	1.01	7.30	29.28	39.83	17.55	4.36
2	2985	0.63	0.80	0.00	0.67	0.97	3.79	26.87	50.08	14.30	3.32
3	2985	0.61	0.82	0.00	0.67	1.47	5.76	30.08	47.17	12.63	2.21
4	2985	0.63	0.74	0.00	0.67	0.90	4.62	32.26	40.23	15.14	6.16
5	2985	0.61	0.81	0.00	0.67	1.84	7.24	30.39	46.16	11.16	2.55
6	2985	0.62	0.79	0.00	0.67	0.77	4.72	31.49	49.25	11.12	1.98

Note. This test included a single promt item scored on the analytic six-trait rubric. The statistics presented in this table represent the early returns sample only. Writing responses marked condition code A (blank) were treated as omit. Responses marked condition codes B (illegible),C (non-English), and D (off-topic) were treated as 0.

Table 6.4.21
2005 Spring AIMS Classical Item Analysis
Writing CRT High School Prompt A

Trait	Rater	N	P-Value	Adj *r*	% Omit	% at 0	% at 1	% at 2	% at 3	% at 4	% at 5	% at 6
1	1	64113	0.60	0.77	0.00	0.37	1.30	7.19	34.94	43.12	11.92	1.16
2	1	64113	0.62	0.81	0.00	0.37	1.46	6.54	24.17	51.59	13.92	1.96
3	1	64113	0.63	0.82	0.00	0.37	1.35	5.11	26.79	49.65	15.34	1.38
4	1	64113	0.60	0.76	0.00	0.37	1.18	5.78	31.63	50.65	9.59	0.80
5	1	64113	0.61	0.82	0.00	0.37	1.76	6.64	29.94	47.86	12.38	1.06
6	1	64113	0.62	0.80	0.00	0.37	1.71	6.74	26.07	50.44	13.01	1.67
1	2	64113	0.60	0.77	0.00	0.37	1.30	7.09	35.14	43.00	11.93	1.17
2	2	64113	0.62	0.81	0.00	0.37	1.50	6.39	24.15	51.74	13.92	1.92
3	2	64113	0.63	0.82	0.00	0.37	1.33	5.15	26.75	49.66	15.27	1.47
4	2	64113	0.60	0.76	0.00	0.37	1.10	5.81	31.96	50.28	9.76	0.73
5	2	64113	0.61	0.82	0.00	0.37	1.68	6.56	29.99	48.01	12.32	1.08
6	2	64113	0.62	0.80	0.00	0.37	1.74	6.60	25.96	50.78	12.94	1.61

Note. This test included a single promt item scored on the analytic six-trait rubric. Each trait was scored by two raters. The statistics presented in this table represent the calibration sample only. Writing responses marked condition code A (blank) were treated as omit. Responses marked condition codes B (illegible),C (non-English), and D (off-topic) were treated as 0.

Table 6.4.22
2005 Spring AIMS Classical Item Analysis
Writing CRT High School Prompt T

Trait	Rater	N	P-Value	Adj *r*	% Omit	% at 0	% at 1	% at 2	% at 3	% at 4	% at 5	% at 6
1	1	1631	0.53	0.85	0.00	1.47	5.70	17.47	37.28	28.02	8.34	1.72
2	1	1631	0.55	0.87	0.00	1.47	4.05	16.06	30.66	39.79	7.30	0.67
3	1	1631	0.55	0.88	0.00	1.47	3.25	12.20	38.93	35.99	7.48	0.67
4	1	1631	0.55	0.85	0.00	1.47	2.82	12.45	39.42	34.83	8.09	0.92
5	1	1631	0.54	0.87	0.00	1.47	3.43	13.43	40.71	34.09	5.89	0.98
6	1	1631	0.55	0.87	0.00	1.47	3.37	14.47	32.92	41.08	6.07	0.61
1	2	1631	0.53	0.85	0.00	1.47	5.64	17.78	36.48	28.57	8.09	1.96
2	2	1631	0.55	0.88	0.00	1.47	4.17	14.84	32.25	39.12	7.42	0.74
3	2	1631	0.55	0.89	0.00	1.47	3.43	11.96	40.10	34.89	7.48	0.67
4	2	1631	0.55	0.85	0.00	1.47	2.39	13.55	40.22	34.52	6.99	0.86
5	2	1631	0.54	0.87	0.00	1.47	3.74	12.81	41.94	33.05	6.38	0.61
6	2	1631	0.55	0.87	0.00	1.47	4.35	13.06	34.52	39.18	6.62	0.80

Note. This test included a single promt item scored on the analytic six-trait rubric. Each trait was scored by two raters. The statistics presented in this table represent the calibration sample only. Writing responses marked condition code A (blank) were treated as omit. Responses marked condition codes B (illegible),C (non-English), and D (off-topic) were treated as 0.

Table 6.4.23
2005 Spring AIMS Classical Item Analysis
Mathematics NRT Grade 3

					Key	Distractor 1		Distractor 2		Distractor 3	
Item	N	P-Value	Adj *r* pb	% Omit	%	%	*r* pb	%	*r* pb	%	*r* pb
1	3868	0.98	0.17	0.21	98.40	0.39	-0.12	0.41	-0.12	0.59	-0.11
2	3868	0.73	0.34	0.52	72.62	8.97	-0.28	10.68	-0.21	7.21	-0.17
3	3868	0.42	0.24	0.62	42.14	25.21	-0.13	19.13	-0.13	12.90	-0.19
4	3868	0.54	0.30	0.65	53.96	5.92	-0.18	31.54	-0.23	7.94	-0.19
5	3868	0.80	0.37	1.06	79.65	1.11	-0.18	13.19	-0.23	4.99	-0.37
6	3868	0.82	0.25	0.83	82.14	1.40	-0.10	13.11	-0.25	2.53	-0.18
7	3868	0.94	0.26	0.52	93.92	2.40	-0.21	1.94	-0.18	1.22	-0.12
8	3868	0.75	0.47	1.29	74.79	10.01	-0.36	9.69	-0.29	4.21	-0.20
9	3868	0.64	0.42	0.57	63.65	2.30	-0.11	6.72	-0.15	26.76	-0.43
10	3868	0.80	0.54	0.49	79.52	6.62	-0.27	7.55	-0.36	5.82	-0.34
11	3868	0.85	0.42	0.34	84.77	11.19	-0.39	2.71	-0.22	0.98	-0.15
12	3868	0.82	0.45	0.26	82.32	4.76	-0.23	6.44	-0.28	6.23	-0.32
13	3868	0.90	0.37	0.90	90.46	2.30	-0.23	3.83	-0.24	2.51	-0.24
14	3868	0.94	0.36	0.78	94.00	1.27	-0.18	1.60	-0.25	2.35	-0.25
15	3868	0.69	0.27	0.36	69.18	8.48	-0.28	11.79	-0.14	10.19	-0.14
16	3868	0.58	0.31	0.62	57.86	13.31	-0.15	15.18	-0.24	13.03	-0.19
17	3868	0.82	0.29	0.41	82.29	9.62	-0.22	4.89	-0.20	2.79	-0.19
18	3868	0.65	0.37	0.62	65.31	16.70	-0.21	7.96	-0.20	9.41	-0.29
19	3868	0.83	0.34	0.54	82.96	5.97	-0.20	2.59	-0.22	7.94	-0.27
20	3868	0.63	0.41	0.59	63.42	12.64	-0.21	10.06	-0.24	13.29	-0.29
21	3868	0.48	0.37	0.85	47.83	24.95	-0.22	12.15	-0.28	14.22	-0.14
22	3868	0.56	0.38	0.78	56.23	24.61	-0.27	8.63	-0.23	9.75	-0.19
23	3868	0.86	0.44	1.47	86.48	3.59	-0.29	5.07	-0.28	3.39	-0.26
24	3868	0.88	0.34	0.13	87.56	5.53	-0.34	1.42	-0.18	5.35	-0.15
25	3868	0.88	0.39	0.88	88.08	1.99	-0.24	5.09	-0.24	3.96	-0.29

Note. Item number is not the item number in test booklet due to the nature of the dual purpose assessment and imbedded field test items. This test included multiple choice items only. The statistics presented in this table represent the early returns sample only.

Table 6.4.24
2005 Spring AIMS Classical Item Analysis
Mathematics NRT Grade 4

					Key	Distractor 1		Distractor 2		Distractor 3	
Item	N	P-Value	Adj *r* pb	% Omit	%	%	*r* pb	%	*r* pb	%	*r* pb
1	3953	0.85	0.38	0.20	84.77	8.45	-0.27	4.17	-0.25	2.40	-0.23
2	3953	0.88	0.31	0.13	87.50	0.91	-0.16	3.09	-0.25	8.37	-0.23
3	3953	0.82	0.18	0.23	81.63	1.34	-0.16	15.20	-0.16	1.59	-0.18
4	3953	0.86	0.43	0.25	86.39	5.62	-0.25	3.69	-0.30	4.05	-0.28
5	3953	0.59	0.31	0.25	58.69	3.57	-0.23	8.83	-0.22	28.66	-0.20
6	3953	0.86	0.28	0.03	85.53	4.71	-0.19	6.83	-0.22	2.91	-0.16
7	3953	0.59	0.49	0.15	58.82	14.82	-0.14	15.30	-0.39	10.90	-0.28
8	3953	0.72	0.50	0.25	71.97	19.50	-0.41	3.90	-0.29	4.38	-0.19
9	3953	0.80	0.44	0.20	79.59	3.14	-0.22	10.85	-0.29	6.22	-0.31
10	3953	0.87	0.28	0.18	87.33	3.82	-0.19	5.89	-0.23	2.78	-0.15
11	3953	0.94	0.34	0.28	93.52	1.85	-0.24	2.93	-0.22	1.42	-0.21
12	3953	0.85	0.45	0.18	85.00	5.03	-0.31	4.45	-0.28	5.34	-0.25
13	3953	0.88	0.41	0.15	88.11	2.78	-0.24	3.87	-0.26	5.08	-0.28
14	3953	0.59	0.30	0.18	59.32	7.11	-0.27	4.96	-0.24	28.43	-0.16
15	3953	0.73	0.40	0.25	72.65	16.95	-0.26	4.81	-0.27	5.34	-0.25
16	3953	0.67	0.46	0.30	66.76	20.97	-0.32	6.43	-0.28	5.54	-0.24
17	3953	0.59	0.38	0.25	58.77	16.37	-0.25	11.41	-0.18	13.21	-0.24
18	3953	0.46	0.40	0.18	45.59	29.12	-0.16	14.22	-0.28	10.90	-0.23
19	3953	0.68	0.37	0.48	67.72	7.24	-0.31	9.74	-0.25	14.82	-0.16
20	3953	0.88	0.32	0.25	88.34	4.71	-0.25	3.92	-0.21	2.78	-0.17
21	3953	0.64	0.44	0.23	63.62	4.43	-0.16	7.16	-0.25	24.56	-0.35
22	3953	0.79	0.41	0.30	79.46	7.06	-0.29	5.39	-0.27	7.79	-0.22
23	3953	0.45	0.25	0.38	45.18	13.21	-0.18	15.84	-0.15	25.40	-0.14
24	3953	0.62	0.39	0.30	61.95	20.77	-0.22	8.60	-0.25	8.37	-0.25
25	3953	0.68	0.39	0.18	67.67	14.32	-0.33	13.56	-0.20	4.28	-0.18

Note. Item number is not the item number in test booklet due to the nature of the dual purpose assessment and imbedded field test items. This test included multiple choice items only. The statistics presented in this table represent the early returns sample only.

Table 6.4.25
2005 Spring AIMS Classical Item Analysis
Mathematics NRT Grade 5

					Key	Distractor 1		Distractor 2		Distractor 3	
Item	N	P-Value	Adj *r* pb	% Omit	%	%	*r* pb	%	*r* pb	%	*r* pb
1	4039	0.69	0.32	0.12	68.63	2.62	-0.20	13.22	-0.25	15.40	-0.19
2	4039	0.55	0.31	0.10	55.46	5.42	-0.15	19.41	-0.15	19.61	-0.26
3	4039	0.49	0.33	0.35	49.39	18.62	-0.24	18.77	-0.21	12.87	-0.10
4	4039	0.80	0.33	0.32	79.77	9.14	-0.21	6.98	-0.21	3.79	-0.25
5	4039	0.46	0.39	0.47	46.27	24.04	-0.13	16.49	-0.25	12.73	-0.27
6	4039	0.92	0.32	0.30	92.23	2.85	-0.27	2.03	-0.18	2.60	-0.16
7	4039	0.79	0.45	0.40	79.20	8.12	-0.31	5.60	-0.26	6.68	-0.25
8	4039	0.87	0.40	0.35	87.15	5.20	-0.27	4.75	-0.26	2.55	-0.21
9	4039	0.83	0.49	0.05	83.26	9.21	-0.40	3.71	-0.24	3.76	-0.23
10	4039	0.57	0.44	0.07	57.37	12.60	-0.13	22.80	-0.41	7.16	-0.16
11	4039	0.90	0.17	0.00	90.44	2.97	-0.12	4.48	-0.13	2.10	-0.14
12	4039	0.67	0.40	0.15	67.17	8.20	-0.27	7.65	-0.25	16.84	-0.22
13	4039	0.72	0.46	0.17	71.87	6.78	-0.24	11.27	-0.30	9.90	-0.28
14	4039	0.67	0.53	0.02	67.02	13.57	-0.43	11.19	-0.25	8.20	-0.18
15	4039	0.68	0.46	0.02	68.16	2.92	-0.21	4.09	-0.25	24.81	-0.38
16	4039	0.62	0.46	0.07	61.80	22.85	-0.28	7.68	-0.27	7.60	-0.26
17	4039	0.82	0.43	0.00	81.63	8.62	-0.31	5.84	-0.29	3.91	-0.19
18	4039	0.79	0.28	0.05	78.53	2.70	-0.15	13.07	-0.24	5.64	-0.18
19	4039	0.87	0.34	0.12	87.08	4.73	-0.27	3.74	-0.21	4.33	-0.19
20	4039	0.69	0.37	0.02	69.18	11.29	-0.24	14.93	-0.23	4.58	-0.22
21	4039	0.85	0.39	0.07	85.37	3.05	-0.21	4.90	-0.29	6.61	-0.25
22	4039	0.53	0.32	0.05	53.21	18.69	-0.27	15.40	-0.13	12.65	-0.16
23	4039	0.58	0.33	0.05	57.79	6.07	-0.22	15.40	-0.18	20.70	-0.21
24	4039	0.51	0.46	0.12	51.50	4.06	-0.26	39.59	-0.33	4.73	-0.27
25	4039	0.64	0.42	0.12	64.25	9.68	-0.19	11.22	-0.25	14.73	-0.29

Note. Item number is not the item number in test booklet due to the nature of the dual purpose assessment and imbedded field test items. This test included multiple choice items only. The statistics presented in this table represent the early returns sample only.

Table 6.4.26
2005 Spring AIMS Classical Item Analysis
Mathematics NRT Grade 6

					Key	Distractor 1		Distractor 2		Distractor 3	
Item	N	P-Value	Adj *r* pb	% Omit	%	%	*r* pb	%	*r* pb	%	*r* pb
1	3959	0.80	0.48	0.10	79.67	11.19	-0.31	7.10	-0.35	1.94	-0.19
2	3959	0.63	0.39	0.05	63.30	9.02	-0.19	17.58	-0.20	10.05	-0.30
3	3959	0.70	0.48	0.03	70.40	14.27	-0.38	2.75	-0.14	12.55	-0.28
4	3959	0.79	0.49	0.05	78.50	7.50	-0.29	6.79	-0.33	7.15	-0.25
5	3959	0.76	0.43	0.05	75.93	5.23	-0.22	9.98	-0.34	8.82	-0.22
6	3959	0.57	0.35	0.18	56.73	18.24	-0.29	19.73	-0.12	5.13	-0.23
7	3959	0.40	0.34	0.13	40.19	14.37	-0.05	18.89	-0.19	26.42	-0.25
8	3959	0.78	0.43	0.20	77.60	8.64	-0.21	4.85	-0.22	8.71	-0.34
9	3959	0.81	0.49	0.08	81.11	5.86	-0.32	8.54	-0.33	4.42	-0.22
10	3959	0.94	0.31	0.00	93.99	1.11	-0.13	0.91	-0.15	3.99	-0.28
11	3959	0.75	0.46	0.00	74.99	10.68	-0.26	8.44	-0.32	5.89	-0.23
12	3959	0.79	0.36	0.00	79.26	4.85	-0.27	12.07	-0.21	3.81	-0.26
13	3959	0.68	0.43	0.03	68.07	4.14	-0.19	12.71	-0.35	15.05	-0.22
14	3959	0.81	0.45	0.15	81.41	2.07	-0.21	4.87	-0.23	11.49	-0.37
15	3959	0.72	0.47	0.03	71.94	7.30	-0.26	14.14	-0.28	6.59	-0.28
16	3959	0.64	0.32	0.00	63.96	10.68	-0.25	10.91	-0.15	14.45	-0.19
17	3959	0.73	0.56	0.03	73.48	13.59	-0.34	3.74	-0.26	9.17	-0.37
18	3959	0.58	0.36	0.03	57.74	5.13	-0.27	8.06	-0.32	29.05	-0.16
19	3959	0.73	0.49	0.05	72.62	12.91	-0.24	7.15	-0.33	7.27	-0.31
20	3959	0.59	0.41	0.08	58.98	21.17	-0.33	11.57	-0.15	8.21	-0.20
21	3959	0.70	0.39	0.15	70.04	14.88	-0.30	4.82	-0.25	10.10	-0.16
22	3959	0.61	0.37	0.13	60.65	23.19	-0.24	10.00	-0.31	6.04	-0.11
23	3959	0.76	0.52	0.13	75.65	10.26	-0.35	7.10	-0.28	6.87	-0.28
24	3959	0.74	0.53	0.13	74.31	10.58	-0.29	7.45	-0.28	7.53	-0.35
25	3959	0.56	0.40	0.05	55.92	12.88	-0.21	15.16	-0.24	15.99	-0.23

Note. Item number is not the item number in test booklet due to the nature of the dual purpose assessment and imbedded field test items. This test included multiple choice items only. The statistics presented in this table represent the early returns sample only.

Table 6.4.27
2005 Spring AIMS Classical Item Analysis
Mathematics NRT Grade 7

					Key	Distractor 1		Distractor 2		Distractor 3	
Item	N	P-Value	Adj *r* pb	% Omit	%	%	*r* pb	%	*r* pb	%	*r* pb
1	2921	0.44	0.39	0.10	43.68	14.48	-0.23	23.66	-0.05	18.08	-0.34
2	2921	0.63	0.35	0.03	62.89	11.43	-0.10	11.16	-0.29	14.48	-0.23
3	2921	0.72	0.35	0.00	71.52	4.07	-0.14	12.98	-0.23	11.43	-0.27
4	2921	0.62	0.42	0.03	62.44	5.85	-0.19	23.86	-0.36	7.81	-0.15
5	2921	0.61	0.33	0.07	61.01	16.78	-0.15	9.62	-0.30	12.53	-0.17
6	2921	0.84	0.34	0.00	83.53	4.28	-0.24	6.47	-0.18	5.72	-0.24
7	2921	0.42	0.35	0.10	41.90	11.26	-0.21	32.28	-0.13	14.45	-0.25
8	2921	0.54	0.44	0.10	54.36	10.65	-0.09	24.89	-0.30	10.00	-0.34
9	2921	0.80	0.30	0.03	80.11	10.03	-0.21	5.03	-0.19	4.79	-0.20
10	2921	0.42	0.43	0.10	42.35	10.20	-0.08	23.01	-0.32	24.34	-0.20
11	2921	0.60	0.52	0.10	60.32	27.01	-0.44	9.28	-0.21	3.29	-0.16
12	2921	0.82	0.36	0.07	81.82	10.37	-0.27	5.14	-0.20	2.60	-0.23
13	2921	0.71	0.41	0.03	71.21	6.44	-0.16	13.15	-0.26	9.17	-0.31
14	2921	0.71	0.49	0.17	70.63	10.10	-0.29	13.45	-0.33	5.65	-0.22
15	2921	0.84	0.41	0.14	83.64	7.19	-0.29	5.41	-0.25	3.63	-0.22
16	2921	0.67	0.41	0.17	66.52	15.23	-0.29	7.87	-0.26	10.20	-0.17
17	2921	0.40	0.43	0.21	39.71	24.51	-0.25	20.44	-0.22	15.13	-0.14
18	2921	0.40	0.31	0.10	39.68	7.02	-0.07	44.06	-0.27	9.14	-0.14
19	2921	0.58	0.32	0.07	58.10	13.01	-0.23	23.07	-0.21	5.75	-0.13
20	2921	0.41	0.36	0.14	41.36	41.73	-0.37	7.77	-0.06	9.00	-0.05
21	2921	0.69	0.45	0.14	68.54	12.32	-0.30	9.86	-0.27	9.14	-0.21
22	2921	0.89	0.35	0.21	89.01	3.01	-0.20	3.42	-0.22	4.35	-0.25
23	2921	0.38	0.36	0.17	38.14	10.10	-0.09	19.72	-0.05	31.87	-0.36
24	2921	0.55	0.47	0.07	55.46	18.38	-0.25	17.67	-0.24	8.42	-0.29
25	2921	0.48	0.43	0.17	47.93	14.41	-0.21	24.03	-0.27	13.45	-0.18

Note. Item number is not the item number in test booklet due to the nature of the dual purpose assessment and imbedded field test items. This test included multiple choice items only. The statistics presented in this table represent the early returns sample only.

Table 6.4.28
2005 Spring AIMS Classical Item Analysis
Mathematics NRT Grade 8

					Key	Distractor 1		Distractor 2		Distractor 3	
Item	N	P-Value	Adj *r* pb	% Omit	%	%	*r* pb	%	*r* pb	%	*r* pb
1	2941	0.75	0.33	0.07	75.08	2.86	-0.18	12.72	-0.24	9.28	-0.23
2	2941	0.48	0.44	0.07	48.45	11.93	-0.18	28.80	-0.27	10.74	-0.26
3	2941	0.82	0.32	0.00	82.15	4.05	-0.09	5.47	-0.25	8.33	-0.27
4	2941	0.75	0.35	0.07	74.70	6.66	-0.22	9.11	-0.22	9.45	-0.23
5	2941	0.59	0.50	0.17	58.86	15.78	-0.37	12.27	-0.29	12.92	-0.15
6	2941	0.78	0.34	0.07	77.63	4.59	-0.22	8.33	-0.25	9.38	-0.20
7	2941	0.81	0.34	0.07	80.62	1.29	-0.09	14.86	-0.32	3.16	-0.22
8	2941	0.81	0.40	0.00	80.62	4.15	-0.23	10.47	-0.32	4.76	-0.19
9	2941	0.57	0.26	0.17	57.02	24.14	-0.12	4.76	-0.19	13.91	-0.24
10	2941	0.89	0.34	0.07	89.29	3.54	-0.25	3.06	-0.24	4.05	-0.16
11	2941	0.67	0.46	0.10	67.19	7.96	-0.30	16.08	-0.26	8.67	-0.26
12	2941	0.81	0.34	0.07	81.13	11.32	-0.26	4.22	-0.21	3.26	-0.20
13	2941	0.57	0.26	0.10	56.58	8.33	-0.04	8.70	-0.06	26.28	-0.33
14	2941	0.75	0.32	0.03	74.67	7.72	-0.31	14.28	-0.16	3.30	-0.19
15	2941	0.39	0.31	0.00	39.17	49.06	-0.20	4.96	-0.23	6.80	-0.19
16	2941	0.79	0.26	0.00	78.88	5.64	-0.21	10.06	-0.10	5.41	-0.25
17	2941	0.87	0.31	0.03	86.57	7.48	-0.22	3.88	-0.24	2.04	-0.17
18	2941	0.52	0.42	0.07	52.23	20.81	-0.24	21.46	-0.25	5.44	-0.23
19	2941	0.52	0.40	0.20	51.99	16.90	-0.39	14.38	-0.28	16.52	0.01
20	2941	0.59	0.43	0.03	58.59	4.52	-0.23	32.68	-0.38	4.18	-0.14
21	2941	0.52	0.32	0.00	51.51	13.53	-0.21	23.50	-0.18	11.46	-0.18
22	2941	0.38	0.32	0.10	38.22	34.75	-0.34	16.63	-0.12	10.30	0.03
23	2941	0.57	0.41	0.00	56.85	4.86	-0.22	13.94	-0.21	24.35	-0.29
24	2941	0.60	0.24	0.07	59.98	12.27	-0.10	12.34	-0.18	15.33	-0.20
25	2941	0.34	0.32	0.00	33.63	11.63	-0.07	30.98	-0.16	23.77	-0.23

Note. Item number is not the item number in test booklet due to the nature of the dual purpose assessment and imbedded field test items. This test included multiple choice items only. The statistics presented in this table represent the early returns sample only.

Table 6.4.29
2005 Spring AIMS Classical Item Analysis
Reading NRT Grade 3

					Key	Distractor 1		Distractor 2		Distractor 3	
Item	N	P-Value	Adj *r* pb	% Omit	%	%	*r* pb	%	*r* pb	%	*r* pb
1	3835	0.94	0.33	0.13	93.85	4.82	-0.31	1.20	-0.20	0.00	--
2	3835	0.75	0.40	0.42	74.52	4.69	-0.27	20.37	-0.37	0.00	--
3	3835	0.84	0.30	0.39	84.09	4.54	-0.25	10.98	-0.26	0.00	--
4	3835	0.94	0.31	0.26	94.03	2.37	-0.25	3.34	-0.24	0.00	--
5	3835	0.81	0.39	0.37	81.10	9.41	-0.32	9.13	-0.29	0.00	--
6	3835	0.71	0.40	0.94	71.24	10.46	-0.30	17.37	-0.32	0.00	--
7	3835	0.55	0.29	2.14	55.10	15.78	-0.31	26.99	-0.17	0.00	--
8	3835	0.64	0.29	0.50	63.57	4.75	-0.25	23.10	-0.18	8.08	-0.18
9	3835	0.43	0.38	0.57	42.95	30.01	-0.24	13.92	-0.20	12.54	-0.16
10	3835	0.33	0.28	1.54	33.35	11.66	-0.26	29.75	0.00	23.70	-0.21
11	3835	0.51	0.26	0.65	51.08	17.63	-0.16	10.59	-0.29	20.05	-0.07
12	3835	0.67	0.32	1.36	67.46	7.17	-0.33	7.61	-0.11	16.40	-0.19
13	3835	0.60	0.48	7.09	60.39	11.58	-0.29	11.37	-0.37	9.57	-0.15
14	3835	0.75	0.50	0.26	75.07	9.31	-0.32	5.66	-0.28	9.70	-0.28
15	3835	0.63	0.49	0.63	63.16	10.07	-0.27	9.52	-0.30	16.64	-0.27
16	3835	0.81	0.30	1.43	81.04	7.69	-0.19	4.72	-0.17	5.11	-0.24
17	3835	0.48	0.27	0.70	48.27	27.72	-0.02	12.49	-0.35	10.82	-0.18
18	3835	0.71	0.50	0.78	71.03	5.11	-0.28	6.81	-0.26	16.27	-0.35
19	3835	0.68	0.47	0.39	67.93	11.08	-0.28	11.73	-0.28	8.87	-0.26
20	3835	0.45	0.27	0.81	44.67	17.24	-0.19	24.41	-0.06	12.88	-0.25
21	3835	0.47	0.33	1.67	47.41	22.53	-0.20	10.25	-0.21	18.15	-0.16
22	3835	0.49	0.48	1.23	49.49	6.15	-0.23	26.23	-0.25	16.90	-0.30
23	3835	0.60	0.38	1.75	59.82	15.59	-0.17	15.78	-0.29	7.07	-0.22
24	3835	0.71	0.48	0.94	71.06	5.53	-0.25	11.37	-0.33	11.11	-0.27
25	3835	0.73	0.31	1.43	72.72	11.06	-0.36	1.69	-0.21	13.09	-0.09

Note. Item number is not the item number in test booklet due to the nature of the dual purpose assessment and imbedded field test items. This test included multiple choice items only. The statistics presented in this table represent the early returns sample only.

Table 6.4.30
2005 Spring AIMS Classical Item Analysis
Reading NRT Grade 4

					Key	Distractor 1		Distractor 2		Distractor 3	
Item	N	P-Value	Adj *r* pb	% Omit	%	%	*r* pb	%	*r* pb	%	*r* pb
1	3916	0.85	0.39	0.03	84.53	6.10	-0.23	5.41	-0.25	3.93	-0.25
2	3916	0.82	0.40	0.20	82.05	8.71	-0.24	6.08	-0.31	2.96	-0.19
3	3916	0.85	0.42	0.28	84.70	10.67	-0.37	1.61	-0.22	2.73	-0.17
4	3916	0.67	0.36	0.23	66.91	15.12	-0.24	7.10	-0.18	10.65	-0.23
5	3916	0.94	0.34	0.20	94.46	1.43	-0.19	2.68	-0.25	1.23	-0.21
6	3916	0.76	0.48	0.46	76.15	11.11	-0.29	4.37	-0.28	7.92	-0.30
7	3916	0.77	0.43	0.56	77.15	12.61	-0.25	5.52	-0.31	4.16	-0.26
8	3916	0.90	0.45	0.49	89.89	2.48	-0.27	3.58	-0.26	3.58	-0.30
9	3916	0.57	0.44	0.56	56.51	9.86	-0.24	17.16	-0.34	15.91	-0.14
10	3916	0.79	0.43	0.41	79.34	8.76	-0.25	4.60	-0.24	6.89	-0.30
11	3916	0.73	0.46	0.03	72.91	9.30	-0.27	12.72	-0.30	5.06	-0.26
12	3916	0.83	0.49	0.15	83.35	4.78	-0.29	5.21	-0.31	6.51	-0.29
13	3916	0.76	0.48	0.31	76.43	5.92	-0.24	11.72	-0.29	5.62	-0.33
14	3916	0.57	0.39	0.28	57.18	21.12	-0.20	9.37	-0.31	12.05	-0.18
15	3916	0.63	0.41	0.31	63.28	13.53	-0.20	7.23	-0.20	15.65	-0.32
16	3916	0.76	0.36	0.20	75.87	7.10	-0.33	13.13	-0.17	3.70	-0.22
17	3916	0.74	0.58	0.41	74.18	7.61	-0.24	9.04	-0.34	8.76	-0.40
18	3916	0.78	0.34	0.36	78.47	10.67	-0.25	7.41	-0.22	3.09	-0.20
19	3916	0.52	0.20	0.56	51.69	12.92	-0.21	21.68	-0.05	13.15	-0.15
20	3916	0.73	0.54	0.41	72.93	9.12	-0.28	6.03	-0.34	11.52	-0.32
21	3916	0.40	0.26	0.49	39.71	19.66	-0.11	13.36	-0.17	26.79	-0.15
22	3916	0.70	0.48	0.43	69.92	10.09	-0.30	9.32	-0.28	10.24	-0.26
23	3916	0.63	0.54	0.41	63.05	7.61	-0.38	18.31	-0.29	10.62	-0.24
24	3916	0.64	0.49	0.51	64.40	6.69	-0.23	21.02	-0.34	7.38	-0.27
25	3916	0.62	0.47	0.41	61.80	24.41	-0.32	7.02	-0.23	6.36	-0.27

Note. Item number is not the item number in test booklet due to the nature of the dual purpose assessment and imbedded field test items. This test included multiple choice items only. The statistics presented in this table represent the early returns sample only.

Table 6.4.31
2005 Spring AIMS Classical Item Analysis
Reading NRT Grade 5

					Key	Distractor 1		Distractor 2		Distractor 3	
Item	N	P-Value	Adj *r* pb	% Omit	%	%	*r* pb	%	*r* pb	%	*r* pb
1	4000	0.60	0.40	0.10	60.38	8.28	-0.18	8.80	-0.15	22.45	-0.34
2	4000	0.86	0.29	0.10	86.30	5.70	-0.18	4.18	-0.14	3.73	-0.27
3	4000	0.55	0.32	0.20	55.13	18.35	-0.35	7.93	-0.05	18.40	-0.14
4	4000	0.81	0.42	0.13	80.65	3.55	-0.29	10.53	-0.27	5.15	-0.26
5	4000	0.73	0.37	0.08	73.25	15.23	-0.26	4.08	-0.23	7.38	-0.23
6	4000	0.75	0.37	0.23	75.15	11.48	-0.24	8.65	-0.22	4.50	-0.26
7	4000	0.60	0.35	0.10	59.95	14.08	-0.26	4.60	-0.27	21.28	-0.16
8	4000	0.68	0.42	0.08	67.88	7.85	-0.26	8.13	-0.25	16.08	-0.25
9	4000	0.85	0.43	0.08	84.98	4.15	-0.26	5.90	-0.26	4.90	-0.27
10	4000	0.70	0.41	0.05	69.95	19.58	-0.33	3.83	-0.21	6.60	-0.22
11	4000	0.63	0.45	0.10	63.43	2.15	-0.20	26.88	-0.34	7.45	-0.27
12	4000	0.86	0.39	0.13	85.90	1.58	-0.20	5.70	-0.28	6.70	-0.26
13	4000	0.76	0.28	0.20	76.33	2.65	-0.17	3.70	-0.25	17.13	-0.20
14	4000	0.82	0.47	0.30	81.63	10.18	-0.42	3.73	-0.17	4.18	-0.23
15	4000	0.52	0.19	0.10	52.25	8.45	-0.17	9.70	-0.18	29.50	-0.09
16	4000	0.78	0.44	0.20	77.68	4.33	-0.26	8.95	-0.26	8.85	-0.30
17	4000	0.85	0.47	0.23	84.55	7.50	-0.34	4.48	-0.28	3.25	-0.23
18	4000	0.71	0.53	0.23	70.78	6.00	-0.28	18.60	-0.40	4.40	-0.24
19	4000	0.60	0.24	0.13	59.80	10.33	-0.11	22.83	-0.16	6.93	-0.25
20	4000	0.60	0.46	0.20	59.68	18.35	-0.23	7.43	-0.30	14.35	-0.27
21	4000	0.41	0.34	0.35	41.08	20.63	-0.18	23.50	-0.16	14.45	-0.21
22	4000	0.40	0.29	0.23	39.60	16.30	-0.21	19.93	-0.16	23.95	-0.10
23	4000	0.70	0.47	0.05	69.50	5.53	-0.16	12.20	-0.40	12.73	-0.24
24	4000	0.60	0.31	0.10	59.98	16.75	-0.28	13.88	-0.12	9.30	-0.16
25	4000	0.35	0.17	0.10	35.35	27.68	-0.03	21.08	-0.10	15.80	-0.19

Note. Item number is not the item number in test booklet due to the nature of the dual purpose assessment and imbedded field test items. This test included multiple choice items only. The statistics presented in this table represent the early returns sample only.

Table 6.4.32
2005 Spring AIMS Classical Item Analysis
Reading NRT Grade 6

					Key	Distractor 1		Distractor 2		Distractor 3	
Item	N	P-Value	Adj *r* pb	% Omit	%	%	*r* pb	%	*r* pb	%	*r* pb
1	3939	0.70	0.42	0.03	70.22	8.25	-0.24	6.75	-0.29	14.75	-0.24
2	3939	0.83	0.35	0.03	82.86	11.81	-0.26	2.08	-0.20	3.22	-0.27
3	3939	0.93	0.38	0.03	92.76	2.28	-0.23	2.89	-0.27	2.03	-0.22
4	3939	0.67	0.38	0.23	67.35	11.04	-0.22	12.92	-0.22	8.45	-0.27
5	3939	0.77	0.37	0.00	76.80	8.33	-0.28	6.04	-0.18	8.83	-0.24
6	3939	0.73	0.44	0.13	72.86	5.86	-0.23	17.16	-0.31	3.99	-0.30
7	3939	0.84	0.39	0.03	84.49	7.69	-0.34	6.52	-0.23	1.27	-0.15
8	3939	0.88	0.28	0.08	88.19	2.84	-0.20	5.86	-0.16	3.02	-0.22
9	3939	0.57	0.34	0.05	56.64	22.67	-0.25	5.92	-0.26	14.72	-0.13
10	3939	0.80	0.29	0.03	79.54	1.95	-0.22	3.35	-0.16	15.13	-0.25
11	3939	0.61	0.39	0.05	60.52	8.20	-0.23	19.47	-0.25	11.75	-0.22
12	3939	0.92	0.34	0.15	92.46	2.69	-0.20	2.49	-0.24	2.21	-0.22
13	3939	0.87	0.45	0.05	87.33	3.33	-0.25	4.54	-0.28	4.75	-0.30
14	3939	0.85	0.45	0.05	84.54	8.96	-0.40	1.60	-0.21	4.85	-0.21
15	3939	0.64	0.34	0.05	63.59	14.24	-0.16	12.31	-0.22	9.80	-0.26
16	3939	0.65	0.28	0.08	64.91	20.74	-0.10	5.31	-0.24	8.96	-0.29
17	3939	0.79	0.41	0.15	78.73	5.86	-0.24	9.37	-0.27	5.89	-0.25
18	3939	0.65	0.47	0.15	65.45	12.54	-0.40	14.19	-0.21	7.67	-0.20
19	3939	0.54	0.33	0.13	53.69	29.63	-0.14	10.41	-0.24	6.14	-0.30
20	3939	0.68	0.48	0.08	67.50	5.99	-0.27	14.62	-0.30	11.81	-0.28
21	3939	0.50	0.35	0.08	49.86	36.05	-0.18	8.66	-0.27	5.36	-0.23
22	3939	0.60	0.39	0.10	59.91	11.40	-0.23	13.76	-0.29	14.83	-0.16
23	3939	0.46	0.25	0.28	46.48	9.11	-0.20	18.63	-0.16	25.49	-0.13
24	3939	0.70	0.50	0.10	70.35	12.36	-0.32	8.73	-0.32	8.45	-0.23
25	3939	0.44	0.26	0.08	43.54	15.46	-0.20	21.38	-0.20	19.55	-0.05

Note. Item number is not the item number in test booklet due to the nature of the dual purpose assessment and imbedded field test items. This test included multiple choice items only. The statistics presented in this table represent the early returns sample only.

Table 6.4.33
2005 Spring AIMS Classical Item Analysis
Reading NRT Grade 7

					Key	Distractor 1		Distractor 2		Distractor 3	
Item	N	P-Value	Adj *r* pb	% Omit	%	%	*r* pb	%	*r* pb	%	*r* pb
1	2935	0.91	0.26	0.07	91.45	2.59	-0.13	2.39	-0.17	3.51	-0.21
2	2935	0.63	0.32	0.10	62.52	29.98	-0.24	4.91	-0.27	2.49	-0.17
3	2935	0.83	0.43	0.07	83.07	11.99	-0.35	2.04	-0.21	2.83	-0.22
4	2935	0.71	0.44	0.10	71.01	5.86	-0.29	7.53	-0.29	15.50	-0.22
5	2935	0.72	0.49	0.65	72.16	5.04	-0.24	9.30	-0.37	12.84	-0.25
6	2935	0.67	0.48	0.78	67.39	7.87	-0.29	19.08	-0.30	4.87	-0.27
7	2935	0.70	0.48	0.72	69.98	6.13	-0.26	15.81	-0.34	7.36	-0.24
8	2935	0.71	0.42	0.68	71.28	16.05	-0.20	7.16	-0.32	4.84	-0.29
9	2935	0.65	0.39	0.68	64.70	12.16	-0.24	5.52	-0.28	16.93	-0.21
10	2935	0.56	0.26	0.61	55.78	6.85	-0.24	25.62	-0.14	11.14	-0.14
11	2935	0.50	0.36	0.41	49.61	29.17	-0.16	7.33	-0.28	13.49	-0.21
12	2935	0.33	0.24	0.10	33.36	7.33	-0.27	37.82	-0.03	21.40	-0.16
13	2935	0.69	0.56	0.17	69.34	12.54	-0.34	7.80	-0.28	10.15	-0.32
14	2935	0.65	0.51	0.14	65.04	19.80	-0.28	9.44	-0.33	5.59	-0.26
15	2935	0.63	0.50	0.24	63.44	11.79	-0.35	12.44	-0.23	12.10	-0.25
16	2935	0.61	0.49	0.31	61.29	9.98	-0.29	5.86	-0.29	22.56	-0.27
17	2935	0.65	0.50	0.41	65.14	8.76	-0.33	17.41	-0.26	8.28	-0.28
18	2935	0.51	0.38	0.48	51.07	20.85	-0.14	15.06	-0.25	12.54	-0.24
19	2935	0.51	0.43	0.48	50.56	15.60	-0.25	16.29	-0.24	17.07	-0.19
20	2935	0.32	0.30	0.41	32.40	15.95	-0.30	15.91	-0.15	35.33	-0.02
21	2935	0.61	0.44	0.48	60.72	10.26	-0.26	13.66	-0.21	14.89	-0.26
22	2935	0.73	0.44	0.37	73.02	11.45	-0.32	9.13	-0.30	6.03	-0.14
23	2935	0.74	0.45	0.24	74.31	4.80	-0.29	10.66	-0.29	9.98	-0.23
24	2935	0.65	0.46	0.41	65.45	10.53	-0.25	8.25	-0.29	15.37	-0.26
25	2935	0.58	0.42	0.37	58.13	10.29	-0.28	11.24	-0.18	19.97	-0.25

Note. Item number is not the item number in test booklet due to the nature of the dual purpose assessment and imbedded field test items. This test included multiple choice items only. The statistics presented in this table represent the early returns sample only.

Table 6.4.34
2005 Spring AIMS Classical Item Analysis
Reading NRT Grade 8

					Key	Distractor 1		Distractor 2		Distractor 3	
Item	N	P-Value	Adj *r* pb	% Omit	%	%	*r* pb	%	*r* pb	%	*r* pb
1	2972	0.89	0.26	0.03	89.03	0.98	-0.15	4.14	-0.10	5.82	-0.28
2	2972	0.96	0.28	0.00	95.52	2.62	-0.22	0.67	-0.12	1.18	-0.18
3	2972	0.89	0.34	0.03	88.93	2.86	-0.25	6.02	-0.22	2.15	-0.22
4	2972	0.89	0.28	0.00	89.33	5.45	-0.18	0.84	-0.14	4.37	-0.26
5	2972	0.93	0.25	0.00	92.87	0.24	-0.10	3.40	-0.23	3.50	-0.17
6	2972	0.62	0.23	0.03	61.91	4.88	-0.25	29.14	-0.16	4.04	-0.17
7	2972	0.69	0.40	0.10	69.48	12.52	-0.16	8.01	-0.31	9.89	-0.28
8	2972	0.60	0.40	0.07	59.66	33.38	-0.33	3.33	-0.27	3.57	-0.19
9	2972	0.59	0.38	0.03	58.92	16.15	-0.22	14.97	-0.22	9.93	-0.25
10	2972	0.68	0.45	0.17	67.66	11.94	-0.29	14.64	-0.30	5.59	-0.20
11	2972	0.84	0.42	0.10	83.71	4.78	-0.28	7.97	-0.28	3.43	-0.24
12	2972	0.61	0.26	0.13	60.67	4.98	-0.30	11.98	-0.23	22.24	-0.08
13	2972	0.70	0.37	0.00	69.68	7.91	-0.15	7.87	-0.17	14.54	-0.34
14	2972	0.89	0.43	0.00	88.86	2.73	-0.27	2.69	-0.27	5.72	-0.28
15	2972	0.74	0.52	0.10	74.36	8.31	-0.27	10.33	-0.33	6.90	-0.31
16	2972	0.73	0.40	0.00	73.18	9.52	-0.22	4.54	-0.25	12.75	-0.29
17	2972	0.52	0.38	0.20	52.09	9.69	-0.20	29.27	-0.19	8.75	-0.32
18	2972	0.84	0.39	0.07	83.75	4.64	-0.23	6.80	-0.26	4.74	-0.26
19	2972	0.63	0.36	0.07	63.36	11.04	-0.34	4.71	-0.29	20.83	-0.12
20	2972	0.84	0.49	0.10	83.85	5.92	-0.29	5.18	-0.34	4.95	-0.27
21	2972	0.41	0.26	0.10	41.45	14.03	-0.08	26.65	-0.17	17.77	-0.18
22	2972	0.63	0.37	0.30	63.43	10.60	-0.23	13.43	-0.28	12.25	-0.17
23	2972	0.56	0.23	0.20	56.49	4.61	-0.25	6.76	-0.23	31.93	-0.11
24	2972	0.68	0.42	0.20	67.83	11.57	-0.26	9.02	-0.31	11.37	-0.19
25	2972	0.68	0.45	0.13	67.87	9.89	-0.25	12.92	-0.28	9.19	-0.27

Note. Item number is not the item number in test booklet due to the nature of the dual purpose assessment and imbedded field test items. This test included multiple choice items only. The statistics presented in this table represent the early returns sample only.

Table 6.4.35
2005 Spring AIMS Classical Item Analysis
Language NRT Grade 3

					Key	Distractor 1		Distractor 2		Distractor 3	
Item	N	P-Value	Adj *r* pb	% Omit	%	%	*r* pb	%	*r* pb	%	*r* pb
1	3811	0.82	0.41	0.29	82.50	14.62	-0.40	2.60	-0.26	0.00	--
2	3811	0.94	0.35	0.50	93.70	2.47	-0.27	3.33	-0.29	0.00	--
3	3811	0.66	0.27	0.34	65.94	25.72	-0.22	8.00	-0.30	0.00	--
4	3811	0.94	0.29	0.31	93.75	4.22	-0.25	1.71	-0.24	0.00	--
5	3811	0.46	0.26	0.60	45.53	33.95	-0.24	19.92	-0.19	0.00	--
6	3811	0.31	0.28	0.21	30.75	28.10	0.01	23.67	-0.24	17.27	-0.22
7	3811	0.48	0.37	0.94	48.10	27.37	-0.17	9.84	-0.29	13.75	-0.22
8	3811	0.75	0.43	1.26	75.33	6.43	-0.26	13.22	-0.32	3.75	-0.24
9	3811	0.76	0.51	0.45	75.89	8.32	-0.31	11.23	-0.35	4.12	-0.26
10	3811	0.44	0.18	1.73	44.08	10.05	-0.25	12.31	-0.18	31.83	-0.03
11	3811	0.72	0.45	0.73	72.24	13.17	-0.36	3.31	-0.24	10.55	-0.24
12	3811	0.42	0.35	1.02	41.80	15.22	-0.12	20.23	-0.17	21.73	-0.27
13	3811	0.81	0.49	1.50	80.74	9.03	-0.37	4.41	-0.25	4.33	-0.27
14	3811	0.42	0.22	2.13	42.14	22.02	-0.02	11.73	-0.32	21.99	-0.13
15	3811	0.59	0.34	0.97	58.99	13.91	-0.21	15.77	-0.19	10.36	-0.25
16	3811	0.82	0.45	0.42	81.58	7.82	-0.34	3.57	-0.27	6.61	-0.24
17	3811	0.82	0.48	0.60	81.53	11.15	-0.38	3.70	-0.27	3.02	-0.26
18	3811	0.54	0.37	0.79	54.42	20.10	-0.31	16.40	-0.15	8.29	-0.21
19	3811	0.45	0.26	2.26	45.47	11.55	-0.18	8.53	-0.28	32.20	-0.11
20	3811	0.68	0.44	2.68	68.28	7.79	-0.30	9.26	-0.30	11.99	-0.23

Note. Item number is not the item number in test booklet due to the nature of the dual purpose assessment and imbedded field test items. This test included multiple choice items only. The statistics presented in this table represent the early returns sample only.

Table 6.4.36
2005 Spring AIMS Classical Item Analysis
Language NRT Grade 4

					Key	Distractor 1		Distractor 2		Distractor 3	
Item	N	P-Value	Adj *r* pb	% Omit	%	%	*r* pb	%	*r* pb	%	*r* pb
1	3880	0.83	0.34	0.36	83.07	8.99	-0.28	3.84	-0.23	3.74	-0.17
2	3880	0.68	0.42	0.34	68.27	12.60	-0.29	6.11	-0.26	12.68	-0.25
3	3880	0.57	0.38	0.23	56.88	9.97	-0.27	21.19	-0.24	11.73	-0.20
4	3880	0.57	0.30	0.28	57.06	26.55	-0.25	9.72	-0.18	6.39	-0.17
5	3880	0.53	0.31	0.28	52.53	13.14	-0.14	11.75	-0.24	22.29	-0.21
6	3880	0.36	0.28	0.49	36.11	14.23	-0.23	34.20	-0.13	14.97	-0.13
7	3880	0.78	0.45	0.23	78.32	8.79	-0.26	5.03	-0.28	7.63	-0.30
8	3880	0.68	0.42	0.39	67.81	8.69	-0.24	7.04	-0.28	16.08	-0.27
9	3880	0.65	0.43	0.34	64.66	6.55	-0.29	6.65	-0.31	21.80	-0.24
10	3880	0.71	0.44	0.41	70.57	7.76	-0.28	7.32	-0.31	13.94	-0.24
11	3880	0.48	0.34	0.34	48.45	29.46	-0.14	7.84	-0.23	13.92	-0.28
12	3880	0.47	0.17	0.28	46.68	3.61	-0.24	3.30	-0.22	46.13	-0.12
13	3880	0.89	0.34	0.34	88.61	1.86	-0.18	4.12	-0.22	5.08	-0.27
14	3880	0.71	0.31	0.28	71.11	19.66	-0.21	4.66	-0.25	4.28	-0.24
15	3880	0.80	0.41	0.34	79.92	7.45	-0.26	6.65	-0.23	5.64	-0.30
16	3880	0.81	0.40	0.39	80.93	7.47	-0.30	4.25	-0.20	6.96	-0.26
17	3880	0.91	0.33	0.31	91.49	1.86	-0.23	3.66	-0.24	2.68	-0.20
18	3880	0.76	0.30	0.31	75.88	3.81	-0.18	5.54	-0.21	14.46	-0.25
19	3880	0.58	0.36	0.44	58.09	6.26	-0.29	6.47	-0.29	28.74	-0.20
20	3880	0.51	0.27	0.28	51.11	6.70	-0.30	26.65	-0.12	15.26	-0.17

Note. Item number is not the item number in test booklet due to the nature of the dual purpose assessment and imbedded field test items. This test included multiple choice items only. The statistics presented in this table represent the early returns sample only.

Table 6.4.37
2005 Spring AIMS Classical Item Analysis
Language NRT Grade 5

					Key	Distractor 1		Distractor 2		Distractor 3	
Item	N	P-Value	Adj *r* pb	% Omit	%	%	*r* pb	%	*r* pb	%	*r* pb
1	3971	0.58	0.38	0.13	57.89	12.49	-0.20	18.96	-0.21	10.53	-0.27
2	3971	0.63	0.48	0.08	62.63	22.44	-0.36	8.99	-0.27	5.87	-0.18
3	3971	0.52	0.40	0.10	51.60	21.41	-0.21	13.40	-0.20	13.50	-0.28
4	3971	0.68	0.37	0.13	68.09	22.61	-0.33	7.48	-0.21	1.69	-0.17
5	3971	0.74	0.41	0.13	73.78	4.13	-0.22	3.90	-0.23	18.06	-0.33
6	3971	0.62	0.39	0.13	62.15	14.91	-0.27	11.86	-0.18	10.95	-0.25
7	3971	0.91	0.33	0.10	90.63	1.56	-0.16	3.27	-0.22	4.43	-0.26
8	3971	0.72	0.47	0.15	72.10	6.93	-0.22	6.82	-0.30	14.00	-0.33
9	3971	0.67	0.45	0.10	66.53	7.48	-0.26	15.64	-0.25	10.25	-0.29
10	3971	0.55	0.49	0.23	55.40	16.67	-0.32	9.85	-0.24	17.85	-0.25
11	3971	0.58	0.43	0.23	57.69	10.88	-0.27	20.37	-0.25	10.83	-0.23
12	3971	0.61	0.40	0.20	61.47	9.70	-0.26	19.29	-0.24	9.34	-0.22
13	3971	0.62	0.38	0.35	61.97	4.10	-0.22	13.42	-0.22	20.15	-0.27
14	3971	0.57	0.40	0.08	57.09	10.45	-0.12	15.61	-0.27	16.77	-0.30
15	3971	0.64	0.41	0.15	64.44	7.73	-0.27	18.76	-0.22	8.91	-0.27
16	3971	0.70	0.42	0.10	70.16	9.67	-0.25	6.02	-0.26	14.05	-0.26
17	3971	0.32	0.28	0.15	32.38	19.24	-0.15	25.59	-0.11	22.64	-0.15
18	3971	0.62	0.36	0.15	61.52	7.28	-0.23	18.64	-0.19	12.42	-0.27
19	3971	0.73	0.50	0.25	72.78	7.33	-0.28	9.92	-0.29	9.72	-0.31
20	3971	0.55	0.40	0.40	54.72	12.72	-0.23	17.93	-0.23	14.23	-0.23

Note. Item number is not the item number in test booklet due to the nature of the dual purpose assessment and imbedded field test items. This test included multiple choice items only. The statistics presented in this table represent the early returns sample only.

Table 6.4.38
2005 Spring AIMS Classical Item Analysis
Language NRT Grade 6

					Key	Distractor 1		Distractor 2		Distractor 3	
Item	N	P-Value	Adj *r* pb	% Omit	%	%	*r* pb	%	*r* pb	%	*r* pb
1	3908	0.62	0.46	0.08	61.90	5.55	-0.22	21.67	-0.32	10.80	-0.27
2	3908	0.58	0.50	0.36	58.34	15.07	-0.29	18.09	-0.26	8.14	-0.31
3	3908	0.55	0.30	0.26	55.37	31.14	-0.15	8.88	-0.31	4.35	-0.22
4	3908	0.59	0.36	0.20	58.93	16.97	-0.21	18.35	-0.21	5.55	-0.28
5	3908	0.57	0.31	0.23	57.45	11.62	-0.21	9.67	-0.23	21.03	-0.16
6	3908	0.50	0.36	0.10	49.72	19.93	-0.10	8.44	-0.27	21.80	-0.26
7	3908	0.82	0.48	0.08	81.91	5.76	-0.28	4.22	-0.30	8.03	-0.31
8	3908	0.60	0.32	0.10	59.70	27.66	-0.20	6.91	-0.24	5.63	-0.24
9	3908	0.69	0.42	0.10	68.81	8.42	-0.25	6.99	-0.29	15.69	-0.25
10	3908	0.57	0.26	0.10	56.55	28.58	-0.12	3.28	-0.26	11.49	-0.24
11	3908	0.70	0.49	0.18	69.70	11.44	-0.26	8.78	-0.28	9.90	-0.32
12	3908	0.67	0.49	0.13	66.71	16.91	-0.32	7.29	-0.28	8.96	-0.26
13	3908	0.74	0.33	0.05	73.80	4.91	-0.22	15.92	-0.24	5.32	-0.21
14	3908	0.72	0.51	0.03	72.06	6.93	-0.31	7.55	-0.28	13.43	-0.31
15	3908	0.45	0.33	0.10	44.83	24.77	-0.13	17.43	-0.18	12.87	-0.26
16	3908	0.88	0.45	0.00	88.00	4.32	-0.31	4.81	-0.29	2.87	-0.22
17	3908	0.68	0.49	0.03	68.32	16.17	-0.35	7.73	-0.22	7.75	-0.28
18	3908	0.79	0.51	0.00	79.04	8.32	-0.32	6.47	-0.29	6.17	-0.31
19	3908	0.79	0.55	0.03	78.56	8.19	-0.32	5.53	-0.32	7.70	-0.32
20	3908	0.59	0.42	0.00	59.03	6.83	-0.22	9.06	-0.31	25.08	-0.24

Note. Item number is not the item number in test booklet due to the nature of the dual purpose assessment and imbedded field test items. This test included multiple choice items only. The statistics presented in this table represent the early returns sample only.

Table 6.4.39
2005 Spring AIMS Classical Item Analysis
Language NRT Grade 7

					Key	Distractor 1		Distractor 2		Distractor 3	
Item	N	P-Value	Adj *r* pb	% Omit	%	%	*r* pb	%	*r* pb	%	*r* pb
1	2924	0.79	0.39	0.03	78.83	3.80	-0.22	3.45	-0.21	13.89	-0.33
2	2924	0.62	0.22	0.03	62.14	25.79	-0.20	2.87	-0.17	9.17	-0.14
3	2924	0.78	0.35	0.10	78.42	7.87	-0.16	2.70	-0.20	10.91	-0.33
4	2924	0.42	0.29	0.17	41.79	11.01	-0.23	10.47	-0.26	36.56	-0.09
5	2924	0.61	0.35	0.17	60.74	14.36	-0.12	7.69	-0.31	17.03	-0.26
6	2924	0.62	0.41	0.03	61.73	21.75	-0.34	13.51	-0.24	2.98	-0.14
7	2924	0.53	0.34	0.07	52.77	25.14	-0.25	12.59	-0.16	9.44	-0.21
8	2924	0.83	0.37	0.00	83.14	2.60	-0.24	7.25	-0.27	7.01	-0.22
9	2924	0.75	0.46	0.10	75.21	5.78	-0.30	8.55	-0.21	10.36	-0.33
10	2924	0.69	0.40	0.10	68.57	5.03	-0.25	13.61	-0.26	12.69	-0.26
11	2924	0.79	0.40	0.10	78.73	2.56	-0.20	9.58	-0.30	9.03	-0.26
12	2924	0.82	0.43	0.10	82.28	7.93	-0.31	4.14	-0.20	5.54	-0.30
13	2924	0.78	0.38	0.07	77.84	5.37	-0.29	3.66	-0.20	13.06	-0.26
14	2924	0.50	0.29	0.10	50.10	39.02	-0.19	5.92	-0.22	4.86	-0.26
15	2924	0.65	0.37	0.07	64.53	8.11	-0.28	19.97	-0.21	7.32	-0.25
16	2924	0.77	0.49	0.41	77.19	4.51	-0.29	6.84	-0.31	11.05	-0.31
17	2924	0.70	0.53	0.55	70.38	10.64	-0.31	8.07	-0.36	10.36	-0.27
18	2924	0.72	0.54	0.48	72.33	6.12	-0.29	10.16	-0.36	10.91	-0.30
19	2924	0.51	0.33	0.34	50.55	6.67	-0.30	34.51	-0.16	7.93	-0.24
20	2924	0.79	0.44	0.41	79.21	7.80	-0.29	6.29	-0.29	6.29	-0.24

Note. Item number is not the item number in test booklet due to the nature of the dual purpose assessment and imbedded field test items. This test included multiple choice items only. The statistics presented in this table represent the early returns sample only.

Table 6.4.40
2005 Spring AIMS Classical Item Analysis
Language NRT Grade 8

					Key	Distractor 1		Distractor 2		Distractor 3	
Item	N	P-Value	Adj *r* pb	% Omit	%	%	*r* pb	%	*r* pb	%	*r* pb
1	2959	0.68	0.44	0.30	68.27	12.50	-0.27	10.88	-0.33	8.04	-0.21
2	2959	0.92	0.34	0.27	91.86	1.79	-0.20	2.64	-0.23	3.45	-0.24
3	2959	0.38	0.27	0.24	37.51	3.28	-0.21	29.33	-0.13	29.64	-0.20
4	2959	0.72	0.46	0.27	72.02	11.49	-0.29	8.58	-0.34	7.64	-0.21
5	2959	0.35	0.32	0.27	34.64	16.90	-0.17	22.41	-0.24	25.79	-0.08
6	2959	0.53	0.33	0.30	52.96	17.88	-0.23	17.81	-0.16	11.05	-0.22
7	2959	0.53	0.35	0.03	52.89	7.74	-0.21	18.18	-0.18	21.16	-0.25
8	2959	0.40	0.27	0.00	39.68	16.32	-0.15	31.50	-0.14	12.50	-0.21
9	2959	0.39	0.24	0.10	38.93	14.57	-0.18	19.40	-0.09	27.00	-0.16
10	2959	0.89	0.39	0.27	89.32	3.31	-0.22	3.51	-0.27	3.58	-0.26
11	2959	0.55	0.39	0.20	55.15	13.21	-0.19	9.19	-0.25	22.24	-0.27
12	2959	0.63	0.42	0.30	63.10	8.75	-0.28	10.17	-0.31	17.67	-0.21
13	2959	0.82	0.44	0.00	81.99	4.60	-0.24	3.04	-0.23	10.38	-0.35
14	2959	0.84	0.39	0.00	83.54	9.40	-0.34	5.31	-0.24	1.76	-0.16
15	2959	0.67	0.38	0.03	66.71	14.73	-0.20	10.38	-0.30	8.14	-0.23
16	2959	0.90	0.36	0.03	90.47	3.31	-0.25	3.95	-0.24	2.23	-0.22
17	2959	0.71	0.44	0.17	70.77	9.33	-0.21	5.20	-0.26	14.53	-0.34
18	2959	0.82	0.31	0.10	81.89	10.61	-0.19	3.92	-0.27	3.48	-0.22
19	2959	0.70	0.40	0.07	70.40	12.47	-0.24	5.34	-0.21	11.73	-0.30
20	2959	0.71	0.45	0.14	70.94	7.30	-0.29	10.44	-0.26	11.19	-0.28

Note. Item number is not the item number in test booklet due to the nature of the dual purpose assessment and imbedded field test items. This test included multiple choice items only. The statistics presented in this table represent the early returns sample only.

Part 7: Calibration and Scaling

Part 7 of the technical report describes calibration and scaling procedures and results for the 2005 Spring AIMS assessments. High school reading and writing tests were calibrated and scaled with population data. All other grade levels and content areas were calibrated and scaled with early returns samples as described in Part 6.1 of this technical report. Part 7 of this report addresses the following AERA/APA/NCME standards: 1.13, 2.1, 2.2, 2.14, 4.1, 4.2, 4.3, 6.4, 6.5, and 13.6.

7.1 Calibration Methods

Item Response Theory (IRT) models were used in the calibration of all assessment items for all portions of the AIMS tests, including criterion-referenced (CRT) multiple choice, CRT constructed response, and norm-referenced (NRT) multiple choice. All tests were calibrated separately by grade, content area, and type of test.

7.1.1 Calibration Models

All items reporting to the mathematics and reading criterion-referenced tests were multiple choice and calibrated with the Rasch model. The Rasch model (Rasch, 1960; Wright, 1977) is an IRT model in which item difficulty and student ability are estimated on the same scale. The Rasch model defines a selected-response item in terms of one parameter: item difficulty. In the Rasch model, the probability that a student with scale score θ responds correctly to item i is

$$P_i(\theta) = \frac{\exp[(\theta - b_i)]}{1 + \exp[(\theta - b_i)]},$$

where b_i is the item difficulty.

Responses to the criterion-referenced single-prompt writing assessments were scored using a 6-trait analytic rubric with a maximum score of six for each trait. The Andrich rating scale model (Andrich, 1978) was used to calibrate the traits. A generalization of the Rasch model to allow for polytomous items, this model estimates a difficulty parameter for each of the "steps" between score points, often referred to as "step difficulties." The Andrich Rating Scale model assumes that all items have the same category structure. In the model, the probability that a student with scale score θ responds to item i in the x category is (Linacre, 2005a)

$$P_{ix}(\theta) = \frac{\exp[x(\theta - b_i) - \sum_{k=0}^{x} F_k]}{\sum_{j=0}^{m} \exp[j(\theta - b_i) - \sum_{k=0}^{j} F_k]},$$

where b_i is the item difficulty, x is the response category, m is the total number of response categories, and F_k is the step difficulty parameter.

The Andrich Rating Scale model was chosen over the Masters Partial Credit model (Masters, 1982), another generalization of the Rasch model in which the category structure is not restricted to

being the same across items, because little difference was seen empirically between the two models and data were sparse in the extreme score points for several writing traits. In addition, to further remedy the problem of sparse data in extreme score points at the high school level, each rating on each trait was treated as a separate item during calibration, for a total of 12 items. Finally, evaluation of score point frequency distributions for the various scenarios revealed that recoding condition codes to zero and including them in calibration would cause problems, as the probability of obtaining zero would be higher than scoring one or two because the frequency of the zeros were typically higher than the frequencies at score points 1 or 2. (See Appendix C for an executive summary of "Calibrating a One-Prompt Writing Test: An Investigation of Rasch Calibration Model Behavior", the CTB/McGraw-Hill study conducted to determine which model to use and the impact of treating each rating as an independent item for calibration of single-prompt writing tests. Copies of the full paper are available upon request from CTB/McGraw-Hill at 1-800-630-9145 or ArizonaHelpDesk@ctb.com.)

All items reporting to norm-referenced tests were multiple choice. Items reporting to norm-referenced tests were calibrated with the three-parameter logistic (3PL) model (Lord & Novick, 1968; Lord, 1980). The 3PL model defines a selected-response item in terms of three item parameters: item difficulty or location, item discrimination, and the pseudo-guessing parameter. In the 3PL model, the probability that a student with scale score θ responds correctly to item i is

$$P_i(\theta) = c_i + \frac{1 - c_i}{1 + \exp[-1.7a_i(\theta - b_i)]},$$

where a_i is the item discrimination, b_i is the item difficulty, and c_i is the probability of a correct response by a low-scoring examinee. Norm-referenced items were calibrated during national standardization of TerraNova and parameters used for scoring the AIMS NRT were those obtained during this standardization.

7.1.2 Calibration Software

Parameter estimation for items using the Rasch model and the Andrich rating scale model was implemented using Winsteps 3.52 (Linacre, 2005b). Winsteps uses joint maximum likelihood estimation (JMLE) as described by Wright and Masters (1982). To estimate the standard error of measurement at the extreme scores, calcSEM_Rasch.sas (Choi, 2005) was used.

Parameter estimation using the 3PL model was implemented using CTB's PARDUX software (Burket, 1991). PARDUX can estimate parameters simultaneously for dichotomous and polytomous items using marginal maximum likelihood procedures implemented with the EM algorithm (Bock & Aitkin, 1981; Thissen, 1982). PARSCALE, MULTILOG, and BIGSTEPS are among the most widely known and used IRT programs. Extensive simulation studies and comparisons between PARDUX and MULTILOG (Thissen, 1990), a program widely used for research purposes, have shown that PARDUX provides precise estimates of the item and ability parameters, and it performs more efficiently than MULTILOG (Fitzpatrick, 1991). Simulation studies have also compared PARDUX with PARSCALE (Muraki & Bock, 1991), and with BIGSTEPS (Wright & Linacre, 1992). Fitzpatrick and Julian (1996) found that PARDUX provided precise item and ability parameter estimates, and performed more efficiently than the other programs. Extensive studies involving simulated data have also shown that the IRT vertical scaling procedures as implemented in PARDUX produce accurate results (Yen & Burket, 1997).

7.1.3 Equating High School Writing Prompts A and T

Two writing prompts were administered as part of the high school writing test: Prompt A and Prompt T. Prompt T served as the make-up prompt and was administered to a small number of students on the make-up test date. Scores from the two prompts were equated and placed on the AIMS high school writing scale using the following method.

First, reading items and writing trait scores from both Prompt A and Prompt T were calibrated together using Winsteps and placed on the AIMS high school reading logit scale using the parameters from an independent calibration of the reading test as anchors. Second, logit parameter estimates for the Writing traits were saved. Third, the logit mean and standard deviation were calculated for all students (Prompt A and Prompt T). One set of transformation constants was obtained to place the students on the desired AIMS high school writing scale score scale. Fourth, separate data sets containing only writing trait scores were created for Prompt A and Prompt T. The prompts were calibrated independently using the parameters obtained in the concurrent calibration as anchors. Finally, the transformation constants were then applied to the parameters from the independent calibration and scoring tables were generated.

7.2 Scaling Methods

Each of the AIMS CRT high school tests was placed on a separate scale that ranged from 500 to 900 with an approximate mean of 700. The standard deviations were 40, 50, and 25 for mathematics, reading, and writing, respectively. The AIMS high school assessments were not placed on the Grades 3-8 vertical scale.

AIMS CRT tests in Grades 3-8 were placed on a vertical scale through the use of external anchors comprised of TerraNova NRT items for which item parameters had been obtained during national standardization. The desired AIMS scales for Grades 3-8 ranged from 200 to 800.

7.2.1 Scaling with NRT Anchors

In order to place the AIMS CRT tests on a vertical scale, the TerraNova NRT items on each test were used as anchors. The NRT reading items served as anchors for the CRT reading test, the NRT mathematics items served as anchors for the CRT mathematics test, and the NRT language items served as anchors for the CRT writing test.

First, all the items that comprised the AIMS CRT for each grade level and content were calibrated in Pardux using the 3 PLM and placed on the TerraNova scale using the TerraNova NRT standardization item parameters as anchor estimates. Equating was conducted using the Stocking and Lord procedure, in which test characteristic curves of an anchor test and the focal test are matched (Stocking & Lord, 1983). Next, the mean and standard deviation of the Arizona students' scores on the CRT were calculated on the TerraNova scale for each grade level. Scales scores from the additional points in the distribution (e.g., quartiles) were also calculated and plotted to aid in the examination of articulation across grades. In addition, the AIMS CRT means were compared with the TerraNova national standardization sample means for reference. See Figures 7.2.1.1 through 7.2.1.3 for plots of the Arizona NRT means, Arizona CRT means, National NRT means, and the smoothed means of the Arizona CRT means fitted to a second degree polynomial. All means in these figures are on the TerraNova vertical scale for each content area.

The articulation of means and standard deviation across grades within each content area was examined by CTB Research, the ADE, and the National Assessment Advisory Committee to the Arizona Department of Education (NAAAC). The smoothed means of AIMS CRT on the TerraNova

scale fitted to a second degree polynomial was determined to be the most reasonable approach to articulating the vertical scale for the AIMS CRT.

Finally, transformation constants were calculated to transform the Grade 3 test mean and standard deviation on the TerraNova scale to a mean of 450 with a standard deviation appropriate to the content area. The same transformation constants were then applied to the means and standard deviations for all other grade levels in order to place the AIMS CRT on the desired scale of 200-800 for each content area. This method maintained the relationships between the smoothed means on the TerraNova scale while allowing the AZ CRT to use a scale unique to Arizona.

Figure 7.2.1.1
Reading Means on the TerraNova Vertical Scale

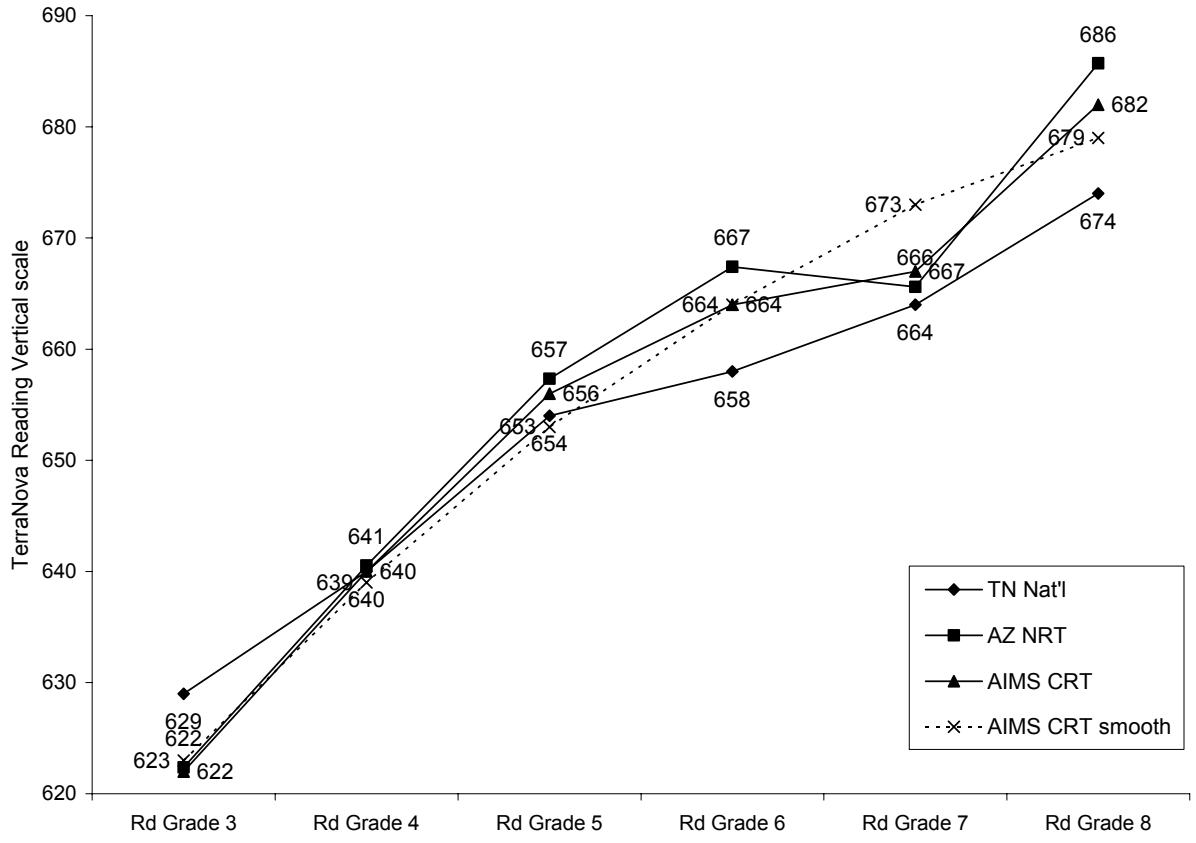


Figure 7.2.1.2
Writing Means on the TerraNova Vertical Scale

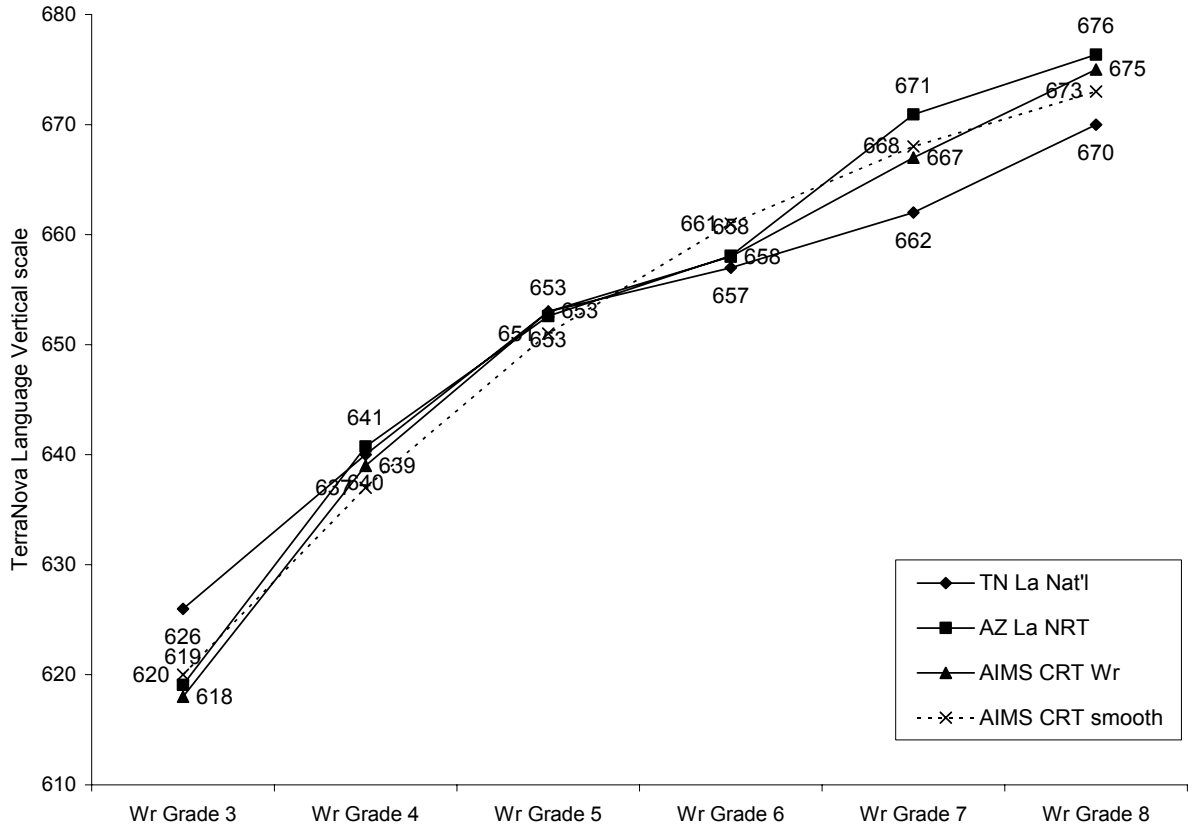
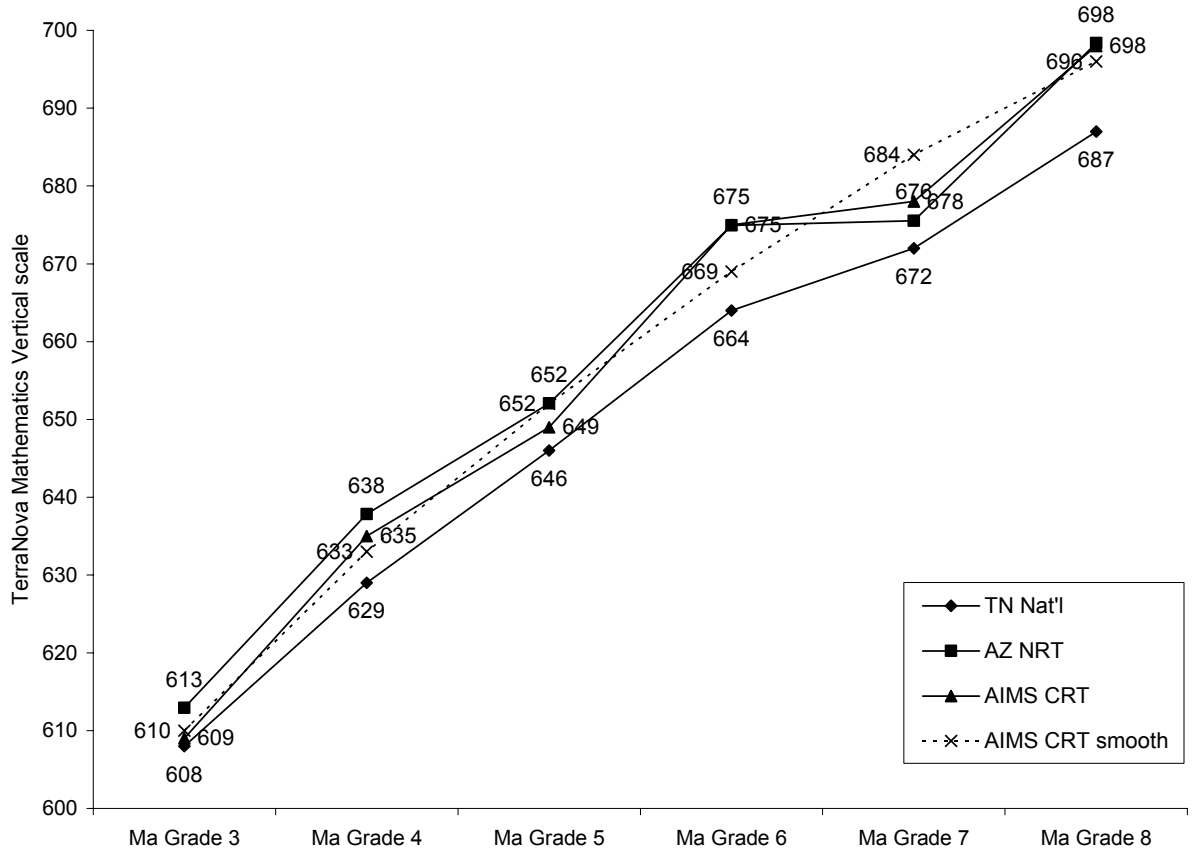


Figure 7.2.1.3
Mathematics Means on the TerraNova Vertical Scale



After transforming scores to the newly established AIMS CRT vertical scale, scale score means, standard deviations, and score distributions were examined to ensure acceptable articulation between grades. In each of the content areas some overlap was observed in the upper grades such that scores at the extreme ends of the scale did not articulate. For example, the Grade 6 Writing scale score at the 99th percentile was higher than the Grade 7 Writing scale score at the 99th percentile. This overlap was due to the different standard deviations across the grades as well as the close proximity of the means for Grades 6, 7, and 8. In order to correct for the few cases of overlap, standard deviations were slightly adjusted to be more similar across grades. In addition, the Grade 8 observed CRT mean was used instead of the Grade 8 smoothed mean to allow for more room between Grades 7 and 8. Without a data point beyond Grade 8, it is difficult to estimate a smoothed mean for this grade. For this reason the observed mean was used. These minor adjustments removed the score overlap in all but one instance, where the same scale score at the extreme low end was shared by Grades 6 and 7 in writing.

The AIMS DPA vertical scales were set to have a lower bound of 200 at Grade 3 and an upper bound of 800 at Grade 8 for all three content areas. Each grade also needed a lowest obtainable scale score (LOSS) and a highest obtainable scale score (HOSS). The LOSS and HOSS were set using the following criteria in approximate order of importance.

The HOSS must be greater than the scale score associated with one less than the maximum raw score. The HOSS must increase monotonically across the grade levels within the vertical scale. The HOSS should be high enough to prevent a ceiling effect for the current year and foreseeable future. The HOSS should be low enough so that the SEM associated with the HOSS does not exceed approximately ten times the minimum SEM. The HOSS should increase smoothly over the grades within the vertical scale. The scale score gap between the HOSS and the scale score associate with 1 minus the raw score maximum should be similar to the scale score gap between the scales scores associated with the raw score maximum minus one and the raw score maximum minus two.

The LOSS must increase monotonically across the grade levels within the vertical scale. The LOSS should be low enough to prevent floor effects. The LOSS should be high enough so that the SEM associated with the LOSS is less than approximately ten times the minimum SEM. The LOSS should increase smoothly over the grade levels.

Particular attention was paid to setting the HOSS of each grade and content area. Given that this is the first year of the vertical scale, ample room was given at the top of each grade level to allow for growth. The HOSS, therefore, we set as high as possible while still adhering to the criteria listed above.

Final LOSS and HOSS for each grade and content area can be found in Table 3.3.1.

7.2.2 Long-term Plan for Identifying/Correcting Drift

Because 2005 was the first year in establishing a scale for the AIMS tests under this testing program, scale drift was not a concern for the 2005 AIMS administration. In order to identify and correct for drift in later administrations, an anchor set of items from the 2005 administration has been reserved for use in future years. The anchor set is representative of the AIMS CRT tests in content and statistical properties. The anchor set may be re-administered and item parameters compared to those obtained in the 2005 administration to examine and correct for any scale drift.

7.3 Calibration Results

7.3.1 IRT Item Statistics

Item statistics resulting from calibration of the AIMS CRT tests are presented in tables 7.3.1.1 through 7.3.1.22. All items for all content area and grade level tests converged during calibration using typical procedures for Winsteps software. Standard error of estimates for the Rasch difficulty measures were within reason. Fit of the items to the model was monitored using mean-square (MNSQ) infit and MNSQ outfit statistics, which indicate the degree of accuracy and predictability with which the data fit the model (Linacre, 2002). Infit is sensitive to misfit on items at the ability level of the person, whereas outfit is sensitive to misfit on items with difficulty far from the ability of the person (Linacre, 2002). Typically, values less than 0.6 and greater than 1.4 for MNSQ infit indicate misfit, and values greater than 1.4 for MNSQ outfit indicate misfit (Wright & Linacre, 1994). Misfit according to MNSQ infit was identified for only one item out of all content area and grade level tests, a seventh grade writing item. Misfit according to MNSQ outfit was identified for items on 11 of the 22 CRT tests with between one and five identified items per test, with the most items identified in the Grade 4 math test. None of the misfit was so extreme as to warrant corrective action during operational analysis.

Table 7.3.1.1
2005 Spring AIMS IRT Item Statistics
Mathematics Grade 3

Item	Rasch Difficulty	SE	MNSQ Infit	MNSQ Outfit	Item	Rasch Difficulty	SE	MNSQ Infit	MNSQ Outfit
1	-1.12	0.05	0.99	1.21	37	0.91	0.04	0.86	0.81
2	-0.43	0.04	0.91	0.84	38	-0.20	0.04	0.99	0.96
3	0.44	0.04	0.91	0.87	39	1.56	0.04	1.30	1.47
4	-1.17	0.05	0.89	0.72	40	1.72	0.04	1.11	1.29
5	-0.34	0.04	0.89	0.75	41	1.36	0.04	0.97	0.98
6	-3.46	0.13	0.96	0.66	42	-1.03	0.05	0.83	0.63
7	0.04	0.04	1.05	1.16	43	-0.37	0.04	1.05	1.14
8	0.13	0.04	0.84	0.73	44	-0.93	0.05	1.05	1.47
9	-0.40	0.04	0.87	0.73	45	-1.21	0.05	0.93	0.83
10	0.72	0.04	1.23	1.28	46	-0.74	0.05	0.86	0.68
11	-0.35	0.04	0.95	0.90	47	1.14	0.04	1.11	1.18
12	-0.43	0.04	1.01	0.98	48	0.54	0.04	0.99	0.98
13	1.33	0.04	1.08	1.14	49	0.95	0.04	0.93	0.90
14	-0.63	0.05	1.10	1.27	50	1.21	0.04	0.95	0.95
15	-2.00	0.07	0.97	0.84	51	0.12	0.04	1.04	1.05
16	-0.10	0.04	0.89	0.78	52	0.83	0.04	1.20	1.23
17	0.56	0.04	0.97	0.92	53	-0.87	0.05	1.14	1.43
18	0.63	0.04	0.81	0.76	54	0.59	0.04	1.00	0.98
19	-0.42	0.04	0.82	0.64	55	-1.51	0.06	0.84	0.54
20	0.39	0.04	1.21	1.34	56	0.42	0.04	0.97	0.98
21	0.56	0.04	0.96	0.90	57	-0.78	0.05	1.00	1.00
22	-0.16	0.04	0.89	0.83	58	1.11	0.04	1.07	1.09
23	-0.11	0.04	1.16	1.40	59	-0.86	0.05	0.97	1.01
24	-2.02	0.07	0.88	0.58	60	-0.33	0.04	0.97	0.95
25	-0.85	0.05	1.06	1.34	61	0.68	0.04	0.91	0.86
26	0.25	0.04	1.15	1.29	62	0.43	0.04	0.88	0.78
27	0.88	0.04	1.13	1.19	63	-1.18	0.05	0.93	0.83
28	-0.64	0.05	1.04	1.26	64	-0.20	0.04	0.94	0.89
29	1.89	0.04	1.12	1.21	65	1.93	0.04	1.04	1.20
30	-0.69	0.05	0.98	0.94	66	1.95	0.04	1.03	1.11
31	0.58	0.04	0.97	0.93	67	-1.93	0.07	0.92	0.67
32	-0.95	0.05	0.89	0.91	68	-0.25	0.04	0.84	0.71
33	-1.85	0.07	0.96	0.97	69	1.68	0.04	1.10	1.18
34	1.23	0.04	1.05	1.08	70	0.85	0.04	0.93	0.90
35	-0.36	0.04	1.01	0.96	71	0.60	0.04	0.89	0.81
36	-0.71	0.05	0.95	0.88	72	1.35	0.04	1.28	1.41

Table 7.3.1.2
2005 Spring AIMS IRT Item Statistics
Mathematics Grade 4

Item	Rasch Difficulty	SE	MNSQ Infit	MNSQ Outfit	Item	Rasch Difficulty	SE	MNSQ Infit	MNSQ Outfit
1	-1.27	0.06	0.96	0.94	36	-1.87	0.07	0.91	0.78
2	0.23	0.04	0.89	0.81	37	-0.82	0.05	0.89	0.76
3	-1.22	0.05	1.08	1.59	38	0.26	0.04	1.02	1.01
4	-0.35	0.04	0.92	0.80	39	-1.13	0.05	0.90	0.73
5	0.19	0.04	1.11	1.23	40	0.85	0.04	1.13	1.15
6	0.67	0.04	1.08	1.13	41	0.65	0.04	1.04	1.06
7	-1.05	0.05	1.07	1.27	42	-0.47	0.04	1.00	1.13
8	0.76	0.04	1.07	1.04	43	1.69	0.04	1.17	1.31
9	-1.24	0.05	0.91	0.81	44	0.23	0.04	0.98	0.93
10	-0.80	0.05	0.94	0.91	45	0.86	0.04	0.91	0.86
11	0.70	0.04	1.02	0.98	46	-0.01	0.04	0.97	0.93
12	-1.06	0.05	0.99	0.97	47	-0.34	0.04	0.93	0.82
13	0.38	0.04	0.91	0.83	48	0.70	0.04	0.87	0.81
14	-0.56	0.05	0.93	0.87	49	-0.29	0.04	1.23	1.43
15	-0.71	0.05	0.91	0.80	50	0.45	0.04	1.19	1.31
16	0.49	0.04	1.08	1.08	51	-0.04	0.04	1.02	1.14
17	-0.60	0.05	0.79	0.61	52	-0.10	0.04	0.79	0.65
18	1.34	0.04	1.12	1.20	53	-0.73	0.05	0.91	0.78
19	-0.53	0.04	1.15	1.45	54	1.57	0.04	1.13	1.22
20	-0.95	0.05	0.87	0.79	55	-0.98	0.05	0.91	0.75
21	0.92	0.04	1.05	1.06	56	0.16	0.04	0.90	0.82
22	0.89	0.04	1.12	1.18	57	0.07	0.04	0.84	0.71
23	0.08	0.04	0.84	0.72	58	0.73	0.04	1.05	1.07
24	2.14	0.04	0.99	1.13	59	1.38	0.04	1.20	1.27
25	-1.57	0.06	1.01	1.21	60	-1.15	0.05	0.97	0.82
26	-0.87	0.05	1.04	1.11	61	1.16	0.04	0.91	0.89
27	0.37	0.04	1.27	1.52	62	-0.36	0.04	1.01	1.02
28	0.06	0.04	0.90	0.78	63	0.96	0.04	1.01	1.00
29	0.88	0.04	0.87	0.86	64	2.03	0.04	1.15	1.34
30	-0.87	0.05	0.88	0.74	65	0.95	0.04	0.95	0.95
31	0.19	0.04	1.16	1.27	66	0.32	0.04	0.88	0.77
32	0.13	0.04	0.95	0.91	67	-0.78	0.05	0.94	0.86
33	0.14	0.04	0.86	0.79	68	0.33	0.04	1.04	1.01
34	-0.37	0.04	0.94	0.89	69	-1.31	0.06	0.95	0.81
35	-1.04	0.05	1.04	1.35	70	-0.45	0.04	1.10	1.31

Table 7.3.1.3
2005 Spring AIMS IRT Item Statistics
Mathematics Grade 5

Item	Rasch Difficulty	SE	MNSQ Infit	MNSQ Outfit	Item	Rasch Difficulty	SE	MNSQ Infit	MNSQ Outfit
1	0.22	0.04	1.18	1.41	35	0.92	0.04	1.12	1.13
2	-0.09	0.04	1.23	1.55	36	-1.21	0.05	0.87	0.65
3	0.92	0.04	1.26	1.37	37	-0.61	0.04	0.86	0.81
4	-1.05	0.05	0.94	0.94	38	0.06	0.04	0.95	0.83
5	0.04	0.04	0.87	0.72	39	0.43	0.04	0.88	0.85
6	-1.12	0.05	0.89	0.72	40	0.35	0.04	0.88	0.81
7	2.26	0.04	1.11	1.32	41	-0.56	0.04	0.95	0.85
8	-1.17	0.05	1.07	1.17	42	0.65	0.04	0.98	0.94
9	0.35	0.04	0.99	0.95	43	-1.23	0.05	1.07	1.18
10	0.26	0.04	1.10	1.18	44	-0.15	0.04	0.91	0.81
11	-0.86	0.05	1.11	1.27	45	-0.19	0.04	0.97	0.90
12	-0.48	0.04	1.03	1.11	46	0.34	0.04	0.82	0.73
13	-0.36	0.04	0.99	1.08	47	0.18	0.04	0.88	0.80
14	0.59	0.04	1.04	1.04	48	0.83	0.04	1.10	1.14
15	0.18	0.04	0.98	0.93	49	-1.11	0.05	0.97	0.93
16	0.63	0.04	0.87	0.81	50	-0.06	0.04	0.89	0.84
17	-1.47	0.06	0.92	0.81	51	0.41	0.04	0.80	0.70
18	-0.23	0.04	1.13	1.31	52	0.89	0.04	1.08	1.11
19	-2.06	0.07	0.90	0.57	53	0.85	0.04	0.86	0.79
20	0.31	0.04	1.14	1.18	54	0.85	0.04	1.07	1.08
21	-0.76	0.05	0.84	0.63	55	0.23	0.04	1.05	0.98
22	-0.12	0.04	1.05	1.01	56	-1.18	0.05	0.91	0.82
23	-0.48	0.04	1.06	1.12	57	-0.30	0.04	0.90	0.79
24	0.46	0.04	0.85	0.76	58	-1.73	0.06	0.89	0.71
25	0.89	0.04	0.97	0.93	59	1.22	0.04	1.07	1.11
26	-0.63	0.04	0.89	0.78	60	-0.94	0.05	0.91	0.82
27	-0.75	0.05	0.93	0.92	61	-0.24	0.04	0.94	0.95
28	-0.50	0.04	0.84	0.67	62	1.11	0.04	1.13	1.23
29	-1.50	0.06	1.08	1.62	63	0.80	0.04	1.07	1.09
30	0.34	0.04	1.02	1.00	64	1.79	0.04	1.04	1.14
31	1.02	0.04	1.14	1.19	65	1.18	0.04	1.22	1.30
32	2.04	0.04	1.11	1.29	66	0.67	0.04	1.10	1.13
33	-1.45	0.06	0.92	0.77	67	0.86	0.04	1.10	1.11
34	-1.07	0.05	0.87	0.72	68	0.51	0.04	1.01	1.04

Table 7.3.1.4
2005 Spring AIMS IRT Item Statistics
Mathematics Grade 6

Item	Rasch Difficulty	SE	MNSQ Infit	MNSQ Outfit	Item	Rasch Difficulty	SE	MNSQ Infit	MNSQ Outfit
1	-1.92	0.07	0.99	1.19	35	-0.13	0.04	1.03	1.08
2	-1.25	0.05	0.88	0.66	36	1.14	0.04	1.10	1.14
3	0.25	0.04	1.02	0.99	37	-0.02	0.04	0.93	0.92
4	1.46	0.04	1.27	1.44	38	-0.51	0.04	0.96	0.93
5	0.28	0.04	0.95	0.90	39	0.90	0.04	1.18	1.27
6	-1.60	0.06	0.88	0.69	40	-0.49	0.04	0.90	0.83
7	-1.46	0.06	0.98	1.05	41	-1.22	0.05	1.09	1.39
8	0.52	0.04	0.93	0.88	42	-0.21	0.04	1.08	1.25
9	0.12	0.04	0.93	0.83	43	0.20	0.04	0.93	0.88
10	2.44	0.04	1.07	1.27	44	0.54	0.04	1.15	1.22
11	-0.27	0.04	1.09	1.14	45	1.34	0.04	0.85	0.83
12	-0.42	0.04	0.90	0.78	46	0.51	0.04	1.03	1.05
13	-0.24	0.04	0.97	0.99	47	-0.37	0.04	0.86	0.71
14	0.39	0.04	0.96	0.90	48	0.78	0.04	1.04	1.02
15	-0.69	0.05	0.88	0.81	49	-0.99	0.05	0.88	0.74
16	0.28	0.04	1.26	1.47	50	1.36	0.04	1.21	1.30
17	-0.60	0.04	0.84	0.68	51	0.15	0.04	1.04	1.06
18	0.79	0.04	0.97	0.93	52	-0.64	0.05	0.98	0.99
19	0.42	0.04	0.97	0.89	53	0.11	0.04	1.10	1.08
20	0.91	0.04	1.05	1.05	54	0.20	0.04	1.11	1.14
21	-0.62	0.04	0.88	0.72	55	0.43	0.04	0.98	0.99
22	-2.10	0.07	0.91	0.85	56	-1.15	0.05	1.03	1.18
23	-1.02	0.05	0.95	0.89	57	-0.22	0.04	0.87	0.68
24	0.44	0.04	0.90	0.87	58	-0.61	0.04	0.81	0.59
25	0.09	0.04	1.12	1.13	59	0.74	0.04	0.98	0.96
26	-0.62	0.04	1.11	1.53	60	0.22	0.04	1.04	1.15
27	-0.02	0.04	0.97	0.94	61	0.14	0.04	0.97	0.94
28	-0.05	0.04	1.11	1.23	62	1.38	0.04	0.92	0.94
29	0.89	0.04	1.10	1.14	63	-0.13	0.04	0.86	0.76
30	-0.17	0.04	0.93	0.84	64	1.21	0.04	1.00	1.03
31	-0.47	0.04	1.02	1.25	65	0.14	0.04	1.01	0.94
32	0.17	0.04	0.99	1.03	66	-0.27	0.04	1.04	1.09
33	-0.64	0.05	0.93	0.85	67	-0.82	0.05	0.90	0.74
34	0.03	0.04	0.96	0.93	68	0.95	0.04	1.04	1.09

Table 7.3.1.5
2005 Spring AIMS IRT Item Statistics
Mathematics Grade 7

Item	Rasch Difficulty	SE	MNSQ Infit	MNSQ Outfit	Item	Rasch Difficulty	SE	MNSQ Infit	MNSQ Outfit
1	-2.27	0.09	0.97	0.78	35	-0.70	0.05	0.97	0.89
2	1.10	0.04	1.14	1.17	36	0.03	0.05	1.00	0.96
3	-0.07	0.05	1.10	1.12	37	0.07	0.05	0.89	0.76
4	-0.14	0.05	1.15	1.35	38	-0.85	0.05	0.86	0.63
5	-0.24	0.05	0.98	0.95	39	0.31	0.04	0.95	0.90
6	-0.27	0.05	0.98	0.87	40	1.74	0.04	0.98	1.03
7	0.18	0.04	1.01	0.96	41	0.01	0.05	0.87	0.76
8	-1.26	0.06	0.93	0.89	42	0.54	0.04	1.09	1.11
9	0.01	0.05	1.07	1.08	43	-0.32	0.05	0.91	0.82
10	0.53	0.04	1.02	1.06	44	1.74	0.04	1.16	1.27
11	-1.06	0.06	0.93	0.87	45	0.77	0.04	1.15	1.20
12	0.57	0.04	1.18	1.40	46	0.45	0.04	1.04	1.03
13	0.39	0.04	1.02	0.97	47	-0.07	0.05	0.99	0.97
14	1.29	0.04	1.14	1.20	48	0.51	0.04	1.03	1.07
15	-0.84	0.05	0.93	0.98	49	-1.38	0.06	0.90	0.75
16	-0.09	0.05	0.92	0.88	50	0.02	0.05	0.91	0.81
17	1.62	0.04	1.10	1.19	51	1.58	0.04	1.13	1.29
18	0.96	0.04	1.02	1.01	52	0.33	0.04	0.90	0.82
19	-1.12	0.06	0.89	0.82	53	-1.16	0.06	0.96	0.95
20	-0.04	0.05	0.98	1.11	54	-0.38	0.05	0.90	0.82
21	0.48	0.04	1.06	1.04	55	-1.13	0.06	0.93	0.86
22	-0.41	0.05	0.91	0.78	56	-0.57	0.05	0.86	0.67
23	-1.49	0.07	0.85	0.65	57	-0.46	0.05	1.07	1.16
24	0.76	0.04	0.97	0.94	58	1.22	0.04	1.23	1.35
25	1.49	0.04	1.00	1.07	59	1.12	0.04	1.27	1.34
26	-1.21	0.06	0.92	0.86	60	-0.26	0.05	0.98	0.97
27	-0.03	0.05	0.95	0.84	61	0.55	0.04	0.97	0.96
28	-0.65	0.05	0.96	1.07	62	0.69	0.04	1.15	1.20
29	-2.50	0.09	0.89	0.55	63	0.74	0.04	0.94	0.89
30	0.65	0.04	0.89	0.81	64	0.23	0.04	0.95	0.92
31	-0.15	0.05	1.06	1.10	65	-0.58	0.05	0.88	0.80
32	0.56	0.04	0.98	0.92	66	-0.99	0.06	0.96	1.11
33	-0.20	0.05	0.87	0.72	67	-0.16	0.05	0.89	0.77
34	-1.44	0.06	0.94	0.93	68	1.28	0.04	1.17	1.23

Table 7.3.1.6
2005 Spring AIMS IRT Item Statistics
Mathematics Grade 8

Item	Rasch Difficulty	SE	MNSQ Infit	MNSQ Outfit	Item	Rasch Difficulty	SE	MNSQ Infit	MNSQ Outfit
1	0.95	0.04	1.02	1.00	34	-0.74	0.05	0.93	0.88
2	0.28	0.04	1.02	0.95	35	1.64	0.04	1.08	1.16
3	-0.22	0.05	0.96	0.89	36	2.04	0.04	0.95	1.00
4	-0.14	0.05	0.94	0.86	37	-0.56	0.05	1.05	1.41
5	0.86	0.04	1.03	1.04	38	0.75	0.04	1.00	1.00
6	-1.05	0.06	0.91	0.78	39	-0.38	0.05	1.09	1.38
7	1.63	0.04	1.03	1.13	40	-1.12	0.06	0.92	0.84
8	0.28	0.04	1.02	0.96	41	-0.40	0.05	1.13	1.40
9	-1.22	0.06	0.94	0.78	42	0.97	0.04	1.01	1.03
10	-0.30	0.05	1.03	1.09	43	-1.77	0.07	0.92	0.74
11	1.15	0.04	0.94	0.94	44	0.71	0.04	1.09	1.09
12	0.15	0.04	1.01	0.98	45	0.63	0.04	0.95	0.90
13	-0.80	0.05	1.01	1.01	46	0.35	0.04	0.86	0.81
14	-0.82	0.05	1.00	1.02	47	-0.28	0.05	0.98	1.08
15	0.47	0.04	1.09	1.13	48	0.10	0.04	1.02	0.99
16	-0.90	0.05	0.98	0.83	49	-0.88	0.05	0.92	0.74
17	-0.23	0.05	1.07	1.33	50	-1.26	0.06	1.01	1.17
18	-1.31	0.06	0.90	0.71	51	-1.18	0.06	0.86	0.61
19	-0.34	0.05	0.88	0.79	52	-0.07	0.05	0.88	0.76
20	0.54	0.04	0.91	0.85	53	1.69	0.04	1.06	1.14
21	-0.23	0.05	0.96	1.01	54	-0.71	0.05	0.93	0.83
22	-0.25	0.05	0.95	1.00	55	-0.13	0.05	1.04	1.01
23	-0.68	0.05	0.98	0.94	56	-0.33	0.05	0.88	0.80
24	-0.68	0.05	0.93	0.85	57	0.57	0.04	1.05	1.03
25	0.38	0.04	1.03	1.02	58	-0.35	0.05	0.98	1.02
26	-0.35	0.05	0.90	0.76	59	-0.04	0.04	1.01	1.06
27	-0.13	0.05	0.98	0.92	60	-0.73	0.05	0.90	0.76
28	-1.48	0.06	0.91	0.74	61	-0.24	0.05	1.18	1.36
29	1.27	0.04	1.16	1.25	62	0.26	0.04	1.07	1.09
30	1.48	0.04	0.99	1.03	63	1.94	0.04	1.07	1.16
31	1.24	0.04	1.22	1.29	64	-0.70	0.05	0.90	0.77
32	-0.72	0.05	0.98	0.95	65	0.47	0.04	1.19	1.35
33	1.09	0.04	1.08	1.12	66	-0.16	0.05	0.95	0.92

Table 7.3.1.7
2005 Spring AIMS IRT Item Statistics
Mathematics High School

Item	Rasch Difficulty	SE	MNSQ Infit	MNSQ Outfit	Item	Rasch Difficulty	SE	MNSQ Infit	MNSQ Outfit
1	-0.02	0.04	1.01	1.03	44	1.09	0.04	1.14	1.21
2	-0.96	0.04	0.90	0.83	45	-1.57	0.05	0.92	0.79
3	-0.67	0.04	1.03	1.06	46	0.55	0.04	1.10	1.13
4	-1.82	0.06	1.00	1.06	47	-0.09	0.04	1.14	1.48
5	-1.87	0.06	0.92	0.87	48	-1.26	0.05	0.94	0.86
6	-0.02	0.04	0.92	0.84	49	-0.59	0.04	0.85	0.71
7	-0.59	0.04	0.99	0.98	50	-0.15	0.04	1.05	1.09
8	-2.88	0.09	0.99	1.38	51	0.35	0.04	1.02	0.98
9	0.87	0.04	1.05	1.07	52	2.02	0.04	1.08	1.23
10	-0.31	0.04	0.97	0.91	53	-0.25	0.04	0.89	0.89
11	1.37	0.04	1.04	1.10	54	-0.18	0.04	1.02	1.03
12	0.63	0.04	0.93	0.91	55	1.23	0.04	0.82	0.78
13	0.93	0.04	1.12	1.16	56	0.02	0.04	0.94	0.88
14	-1.04	0.05	0.94	0.96	57	0.74	0.04	1.05	1.06
15	0.33	0.04	1.02	1.05	58	-1.14	0.05	0.94	0.93
16	-1.31	0.05	0.87	0.73	59	0.00	0.04	0.97	0.91
17	-0.50	0.04	1.05	1.10	60	-1.80	0.06	0.88	0.64
18	0.90	0.04	1.11	1.15	61	-0.22	0.04	0.83	0.73
19	0.20	0.04	0.97	0.91	62	0.00	0.04	0.96	0.95
20	0.94	0.04	0.97	0.97	63	0.45	0.04	1.11	1.19
21	-0.09	0.04	0.95	0.87	64	-0.90	0.04	0.89	0.83
22	0.18	0.04	0.90	0.89	65	0.32	0.04	1.01	1.01
23	0.12	0.04	0.99	0.98	66	1.20	0.04	1.05	1.10
24	1.03	0.04	1.13	1.18	67	2.08	0.04	1.17	1.49
25	-1.87	0.06	0.92	0.79	68	-1.03	0.05	0.94	1.04
26	-1.18	0.05	0.89	0.73	69	1.11	0.04	1.14	1.19
27	0.45	0.04	0.89	0.87	70	0.06	0.04	0.87	0.84
28	-0.75	0.04	0.92	0.79	71	-0.58	0.04	0.92	0.89
29	-0.14	0.04	0.91	0.82	72	-0.29	0.04	0.96	1.03
30	0.66	0.04	1.05	1.05	73	-0.47	0.04	0.99	1.01
31	-0.20	0.04	1.08	1.18	74	1.99	0.04	1.04	1.27
32	0.18	0.04	1.06	1.04	75	0.15	0.04	0.95	0.85
33	-1.85	0.06	0.93	0.78	76	0.01	0.04	0.92	0.85
34	-1.10	0.05	0.89	0.67	77	-0.23	0.04	0.91	0.78
35	0.05	0.04	1.11	1.28	78	0.24	0.04	0.99	1.00
36	0.35	0.04	1.08	1.14	79	-0.01	0.04	0.90	0.88
37	0.14	0.04	1.15	1.26	80	0.59	0.04	1.10	1.14
38	0.60	0.04	1.06	1.12	81	0.40	0.04	1.12	1.22
39	0.35	0.04	0.97	0.96	82	0.57	0.04	1.09	1.07
40	-0.59	0.04	0.88	0.85	83	0.79	0.04	1.01	0.99
41	0.75	0.04	1.06	1.07	84	0.46	0.04	0.92	0.92
42	0.66	0.04	0.96	0.92	85	0.92	0.04	1.04	1.07
43	1.50	0.04	1.19	1.32					

Table 7.3.1.8
2005 Spring AIMS IRT Item Statistics
Reading Grade 3

Item	Rasch Difficulty	SE	MNSQ Infit	MNSQ Outfit	Item	Rasch Difficulty	SE	MNSQ Infit	MNSQ Outfit
1	-2.32	0.07	0.92	0.67	28	0.05	0.04	0.93	0.85
2	-1.10	0.05	1.03	1.16	29	-1.83	0.06	0.83	0.46
3	-2.35	0.07	0.91	0.65	30	-0.54	0.04	0.91	0.77
4	-0.84	0.05	0.97	0.93	31	0.26	0.04	1.04	1.15
5	0.07	0.04	0.94	0.91	32	-1.22	0.05	0.90	0.82
6	-0.77	0.05	0.85	0.70	33	-0.33	0.04	1.11	1.18
7	-1.83	0.06	0.88	0.64	34	-1.13	0.05	0.84	0.62
8	-0.69	0.04	0.95	0.89	35	0.89	0.04	1.10	1.12
9	-0.37	0.04	0.86	0.71	36	1.59	0.04	1.16	1.32
10	0.26	0.04	1.00	0.96	37	1.48	0.04	1.04	1.13
11	1.92	0.04	1.09	1.34	38	0.30	0.04	0.95	0.89
12	0.57	0.04	1.38	1.62	39	0.17	0.04	0.94	0.94
13	0.15	0.04	0.96	0.92	40	1.05	0.04	0.92	0.94
14	0.87	0.04	1.05	1.07	41	0.50	0.04	1.07	1.05
15	-0.60	0.04	0.88	0.83	42	-0.14	0.04	0.90	0.77
16	0.56	0.04	1.33	1.52	43	-0.25	0.04	1.09	1.26
17	-0.64	0.04	0.95	0.92	44	1.45	0.04	1.15	1.27
18	0.45	0.04	1.07	1.12	45	0.47	0.04	1.09	1.12
19	0.85	0.04	0.98	0.99	46	1.44	0.04	0.93	0.97
20	0.45	0.04	1.09	1.10	47	0.41	0.04	0.93	0.87
21	-1.41	0.05	0.85	0.62	48	-0.76	0.04	0.76	0.55
22	1.77	0.04	1.28	1.50	49	0.22	0.04	1.10	1.20
23	0.30	0.04	1.01	0.98	50	0.18	0.04	0.85	0.77
24	-0.11	0.04	0.96	0.90	51	1.05	0.04	1.14	1.23
25	0.69	0.04	0.98	0.95	52	0.04	0.04	1.06	1.15
26	-0.40	0.04	0.88	0.75	53	-0.58	0.04	0.88	0.76
27	-0.14	0.04	0.88	0.82	54	-0.10	0.04	0.89	0.80

Table 7.3.1.9
2005 Spring AIMS IRT Item Statistics
Reading Grade 4

Item	Rasch Difficulty	SE	MNSQ Infit	MNSQ Outfit	Item	Rasch Difficulty	SE	MNSQ Infit	MNSQ Outfit
1	-1.07	0.05	0.97	1.00	28	-0.27	0.04	0.87	0.72
2	0.00	0.04	1.24	1.45	29	0.12	0.04	0.88	0.78
3	0.54	0.04	0.99	0.95	30	2.64	0.04	1.09	2.16
4	1.12	0.04	1.31	1.48	31	-0.10	0.04	0.94	0.86
5	-0.65	0.05	0.92	0.80	32	-0.73	0.05	0.93	0.82
6	0.10	0.04	1.19	1.35	33	-0.89	0.05	0.93	0.80
7	-1.18	0.05	0.86	0.70	34	0.35	0.04	1.27	1.40
8	-0.49	0.04	0.98	0.94	35	1.14	0.04	0.90	0.90
9	0.84	0.04	1.14	1.17	36	-0.46	0.04	0.88	0.75
10	0.74	0.04	1.17	1.23	37	0.41	0.04	1.06	1.04
11	-0.37	0.04	0.96	0.83	38	-0.15	0.04	0.90	0.77
12	-0.44	0.04	1.00	1.07	39	0.83	0.04	0.92	0.89
13	-1.64	0.06	0.86	0.67	40	0.25	0.04	0.97	0.91
14	0.85	0.04	1.02	1.02	41	0.41	0.04	0.94	0.99
15	-0.14	0.04	0.99	0.96	42	1.11	0.04	1.20	1.29
16	-0.94	0.05	0.89	0.78	43	-0.53	0.04	0.94	0.85
17	-0.39	0.04	0.96	0.99	44	-0.14	0.04	0.90	0.77
18	0.81	0.04	1.10	1.19	45	-0.22	0.04	0.84	0.67
19	0.46	0.04	1.07	1.12	46	-0.07	0.04	0.91	0.77
20	-0.35	0.04	1.09	1.24	47	1.05	0.04	0.95	0.93
21	-0.23	0.04	0.82	0.71	48	1.86	0.04	1.28	1.60
22	-0.54	0.04	1.09	1.27	49	0.00	0.04	1.05	1.01
23	-0.14	0.04	0.88	0.76	50	-1.20	0.05	0.90	0.76
24	0.47	0.04	0.89	0.85	51	-0.76	0.05	1.02	1.43
25	0.64	0.04	1.09	1.11	52	-1.22	0.05	0.81	0.55
26	1.02	0.04	1.12	1.20	53	-1.06	0.05	0.81	0.61
27	-1.12	0.05	0.86	0.67	54	-0.26	0.04	0.93	0.80

Table 7.3.1.10
2005 Spring AIMS IRT Item Statistics
Reading Grade 5

Item	Rasch Difficulty	SE	MNSQ Infit	MNSQ Outfit	Item	Rasch Difficulty	SE	MNSQ Infit	MNSQ Outfit
1	-0.56	0.04	0.98	0.94	28	-0.11	0.04	0.81	0.68
2	-2.04	0.06	0.95	0.76	29	0.51	0.04	1.23	1.26
3	-0.66	0.04	0.94	0.84	30	0.51	0.04	0.97	0.94
4	0.68	0.04	1.34	1.52	31	1.56	0.04	1.09	1.20
5	-1.27	0.05	1.04	1.12	32	-0.04	0.04	0.93	0.85
6	-0.27	0.04	1.01	1.08	33	0.50	0.04	1.14	1.17
7	0.50	0.04	1.10	1.13	34	0.44	0.04	1.22	1.33
8	0.06	0.04	1.01	0.95	35	0.60	0.04	1.15	1.20
9	-1.15	0.05	0.90	0.73	36	-1.18	0.05	0.93	0.84
10	-0.42	0.04	0.94	0.84	37	0.98	0.04	1.11	1.15
11	-0.02	0.04	1.09	1.07	38	-0.67	0.04	0.89	0.75
12	0.36	0.04	0.92	0.85	39	0.38	0.04	0.98	0.97
13	0.05	0.04	0.88	0.80	40	-0.48	0.04	0.86	0.75
14	0.53	0.04	1.12	1.13	41	-0.55	0.04	0.82	0.67
15	0.89	0.04	1.01	1.03	42	0.16	0.04	0.91	0.86
16	0.56	0.04	1.22	1.33	43	-0.10	0.04	0.98	0.94
17	0.48	0.04	0.97	0.92	44	-0.04	0.04	0.93	0.90
18	-0.07	0.04	1.00	1.04	45	-0.30	0.04	0.97	0.92
19	0.31	0.04	0.97	0.91	46	-0.12	0.04	0.95	0.91
20	-0.86	0.04	0.86	0.74	47	-1.08	0.05	0.84	0.64
21	0.90	0.04	1.31	1.43	48	-0.06	0.04	0.83	0.70
22	0.77	0.04	1.11	1.15	49	-0.72	0.04	0.84	0.65
23	-1.28	0.05	0.94	0.86	50	-0.37	0.04	0.87	0.75
24	0.18	0.04	1.10	1.13	51	0.25	0.04	0.93	0.89
25	0.30	0.04	0.97	0.94	52	-0.04	0.04	0.82	0.72
26	0.32	0.04	1.09	1.15	53	0.51	0.04	1.04	1.07
27	0.23	0.04	1.05	1.05	54	0.96	0.04	0.95	0.95

Table 7.3.1.11
2005 Spring AIMS IRT Item Statistics
Reading Grade 6

Item	Rasch Difficulty	SE	MNSQ Infit	MNSQ Outfit	Item	Rasch Difficulty	SE	MNSQ Infit	MNSQ Outfit
1	0.02	0.04	1.00	1.03	28	0.94	0.04	1.12	1.15
2	-2.00	0.06	0.88	0.54	29	0.18	0.04	0.92	0.83
3	-0.74	0.05	0.85	0.72	30	1.04	0.04	1.09	1.15
4	-1.19	0.05	0.81	0.53	31	0.78	0.04	1.15	1.25
5	-0.08	0.04	1.04	1.06	32	-0.52	0.04	0.93	0.87
6	-1.55	0.06	0.98	1.03	33	-1.47	0.05	0.81	0.48
7	-0.15	0.04	0.97	0.91	34	0.01	0.04	0.96	0.90
8	-1.02	0.05	0.96	0.90	35	0.14	0.04	0.95	0.86
9	-1.39	0.05	1.02	1.15	36	-0.04	0.04	1.17	1.24
10	-0.61	0.04	1.12	1.31	37	0.87	0.04	1.20	1.28
11	-1.95	0.06	0.92	0.80	38	0.54	0.04	1.01	1.00
12	-1.30	0.05	0.88	0.67	39	1.73	0.04	0.96	1.12
13	0.21	0.04	1.05	1.08	40	0.12	0.04	0.89	0.77
14	-1.18	0.05	0.81	0.58	41	0.18	0.04	0.98	0.97
15	-0.51	0.04	0.84	0.67	42	0.13	0.04	1.05	1.04
16	-0.35	0.04	0.80	0.64	43	0.82	0.04	0.96	0.94
17	0.33	0.04	1.18	1.33	44	1.30	0.04	1.13	1.27
18	-0.55	0.04	0.98	0.96	45	1.26	0.04	1.12	1.23
19	-1.32	0.05	0.89	0.74	46	1.27	0.04	1.12	1.18
20	-0.89	0.05	0.94	0.80	47	-0.31	0.04	0.95	0.90
21	0.20	0.04	0.91	0.83	48	-0.36	0.04	0.87	0.83
22	0.53	0.04	1.14	1.22	49	-0.02	0.04	1.05	1.10
23	1.10	0.04	0.98	0.99	50	0.01	0.04	0.88	0.77
24	0.81	0.04	1.03	1.03	51	1.48	0.04	1.15	1.28
25	0.86	0.04	1.05	1.05	52	0.50	0.04	1.06	1.11
26	0.81	0.04	1.09	1.13	53	-0.23	0.04	0.77	0.60
27	0.30	0.04	0.93	0.97	54	1.21	0.04	1.19	1.27

Table 7.3.1.12
2005 Spring AIMS IRT Item Statistics
Reading Grade 7

Item	Rasch Difficulty	SE	MNSQ Infit	MNSQ Outfit	Item	Rasch Difficulty	SE	MNSQ Infit	MNSQ Outfit
1	-1.83	0.07	0.96	0.92	28	1.06	0.04	1.07	1.11
2	0.39	0.04	1.10	1.14	29	0.25	0.04	0.92	0.85
3	-0.94	0.05	0.89	0.74	30	0.45	0.04	0.94	0.88
4	-0.10	0.05	0.94	0.88	31	0.00	0.04	0.83	0.72
5	-0.42	0.05	0.98	0.99	32	-0.16	0.05	0.90	0.83
6	-1.09	0.06	1.05	1.34	33	-0.18	0.05	0.89	0.79
7	0.15	0.04	0.97	0.91	34	-0.47	0.05	0.86	0.69
8	-1.11	0.06	0.88	0.74	35	0.24	0.04	0.89	0.82
9	0.32	0.04	1.02	1.01	36	1.98	0.04	1.06	1.34
10	-0.39	0.05	0.95	0.91	37	0.98	0.04	1.25	1.33
11	-0.46	0.05	0.93	0.88	38	-0.58	0.05	0.97	0.90
12	-0.36	0.05	0.90	0.84	39	-0.21	0.05	1.00	1.01
13	-1.16	0.06	0.91	0.74	40	0.15	0.04	1.07	1.13
14	-0.50	0.05	0.98	1.01	41	0.45	0.04	1.05	1.05
15	-1.07	0.06	0.98	1.05	42	-0.35	0.05	0.94	0.83
16	0.87	0.04	1.05	1.06	43	-0.02	0.04	1.12	1.24
17	0.75	0.04	1.14	1.18	44	1.33	0.04	1.31	1.49
18	-0.57	0.05	1.10	1.38	45	-0.34	0.05	0.96	0.88
19	0.76	0.04	1.03	1.04	46	0.13	0.04	1.05	1.07
20	-0.20	0.05	1.14	1.41	47	0.45	0.04	0.96	0.94
21	-0.03	0.05	0.91	0.83	48	-0.58	0.05	0.85	0.67
22	-0.11	0.05	0.95	0.99	49	1.28	0.04	1.05	1.13
23	0.75	0.04	1.19	1.25	50	0.12	0.04	0.95	0.91
24	0.19	0.04	0.89	0.79	51	-0.10	0.05	0.94	0.87
25	1.00	0.04	1.20	1.26	52	-0.22	0.05	0.92	0.88
26	-0.49	0.05	1.03	1.00	53	-0.30	0.05	0.94	0.87
27	-0.38	0.05	0.93	0.82	54	0.62	0.04	1.00	1.00

Table 7.3.1.13
2005 Spring AIMS IRT Item Statistics
Reading Grade 8

Item	Rasch Difficulty	SE	MNSQ Infit	MNSQ Outfit	Item	Rasch Difficulty	SE	MNSQ Infit	MNSQ Outfit
1	-1.53	0.06	1.02	1.06	28	-0.28	0.05	0.96	1.00
2	0.35	0.04	1.14	1.16	29	0.77	0.04	0.95	0.93
3	-0.77	0.05	0.91	0.80	30	1.17	0.04	1.03	1.06
4	0.84	0.04	1.17	1.22	31	0.15	0.04	1.00	1.05
5	-1.06	0.05	0.97	0.98	32	1.31	0.04	1.17	1.28
6	-1.82	0.07	0.92	0.70	33	0.28	0.04	0.95	0.92
7	-1.00	0.05	1.02	1.10	34	-0.18	0.04	1.14	1.48
8	0.75	0.04	1.24	1.33	35	0.32	0.04	0.99	1.02
9	-0.11	0.04	1.06	1.07	36	-0.11	0.04	0.99	0.98
10	-0.38	0.05	0.94	0.84	37	1.16	0.04	1.11	1.15
11	-0.06	0.04	0.96	0.90	38	0.13	0.04	1.07	1.04
12	0.47	0.04	0.98	0.95	39	-0.12	0.04	1.05	1.11
13	0.51	0.04	1.00	0.98	40	-0.50	0.05	0.91	0.87
14	-1.02	0.05	0.87	0.67	41	0.85	0.04	0.97	0.97
15	-0.06	0.04	0.95	0.91	42	-1.02	0.05	0.92	0.82
16	-1.54	0.06	0.88	0.65	43	1.38	0.04	1.10	1.17
17	1.67	0.04	1.16	1.29	44	0.27	0.04	1.00	0.97
18	1.32	0.04	1.11	1.15	45	0.63	0.04	1.15	1.19
19	-1.34	0.06	0.93	0.79	46	0.03	0.04	0.93	0.87
20	0.67	0.04	1.11	1.12	47	0.03	0.04	0.90	0.84
21	-0.16	0.04	1.05	1.03	48	0.49	0.04	0.95	0.91
22	-0.53	0.05	0.98	1.00	49	-0.66	0.05	0.90	0.74
23	0.96	0.04	1.03	1.04	50	0.20	0.04	0.92	0.88
24	-0.83	0.05	0.92	0.86	51	-0.17	0.04	0.84	0.73
25	-0.75	0.05	0.95	0.95	52	-0.30	0.05	0.90	0.81
26	0.11	0.04	1.03	1.07	53	-0.07	0.04	0.86	0.77
27	-0.35	0.05	0.85	0.74	54	-0.15	0.04	0.94	0.87

Table 7.3.1.14
2005 Spring AIMS IRT Item Statistics
Reading High School

Item	Rasch Difficulty	SE	MNSQ Infit	MNSQ Outfit	Item	Rasch Difficulty	SE	MNSQ Infit	MNSQ Outfit
1	0.02	0.01	0.98	0.95	28	-0.41	0.01	0.92	0.87
2	0.13	0.01	1.08	1.10	29	-0.22	0.01	0.95	0.87
3	-0.88	0.01	1.03	1.00	30	-0.18	0.01	0.87	0.82
4	-0.21	0.01	1.00	1.03	31	-0.17	0.01	1.00	1.07
5	0.28	0.01	1.12	1.17	32	0.37	0.01	1.06	1.15
6	0.00	0.01	1.19	1.29	33	0.15	0.01	0.94	0.99
7	0.55	0.01	0.92	0.88	34	0.24	0.01	0.96	0.88
8	-0.23	0.01	1.07	1.15	35	0.69	0.01	0.97	0.94
9	0.65	0.01	1.13	1.17	36	0.07	0.01	0.95	0.90
10	-0.35	0.01	1.13	1.14	37	-0.28	0.01	0.96	0.97
11	-0.42	0.01	1.00	0.96	38	0.72	0.01	0.93	0.89
12	-1.40	0.01	0.91	0.81	39	-0.23	0.01	1.15	1.37
13	-1.30	0.01	0.96	0.92	40	0.75	0.01	1.04	1.05
14	-0.68	0.01	0.99	1.06	41	0.18	0.01	0.94	0.90
15	1.37	0.01	1.04	1.12	42	-0.01	0.01	0.91	0.88
16	-0.31	0.01	0.98	0.92	43	-0.23	0.01	0.95	0.91
17	0.50	0.01	1.11	1.12	44	1.44	0.01	1.15	1.25
18	0.67	0.01	1.14	1.17	45	-0.86	0.01	0.85	0.67
19	-0.60	0.01	0.92	0.79	46	0.24	0.01	0.96	0.97
20	0.38	0.01	1.10	1.15	47	-0.08	0.01	0.86	0.76
21	1.34	0.01	1.10	1.17	48	-0.83	0.01	0.84	0.68
22	-0.90	0.01	0.87	0.75	49	-0.69	0.01	0.82	0.63
23	0.16	0.01	0.97	0.92	50	0.21	0.01	0.90	0.88
24	0.38	0.01	1.20	1.30	51	0.88	0.01	1.18	1.25
25	-1.12	0.01	0.90	0.74	52	0.32	0.01	0.98	0.95
26	-1.24	0.01	0.89	0.72	53	1.39	0.01	0.99	1.08
27	0.49	0.01	1.07	1.05	54	-0.72	0.01	0.90	0.82

Table 7.3.1.15
2005 Spring AIMS IRT Item Statistics
Writing Grade 3

Trait	Rasch difficulty	SE	MNSQ Infit	MNSQ Outfit	Threshold difficulty 1	Threshold difficulty 2	Threshold difficulty 3	Threshold difficulty 4	Threshold difficulty 5
1	-0.06	0.03	1.25	1.25	-6.76	-3.65	0.09	3.90	6.11
2	-0.57	0.03	0.86	0.86	-7.27	-4.16	-0.42	3.39	5.61
3	0.17	0.03	0.82	0.81	-6.53	-3.42	0.32	4.13	6.35
4	-0.03	0.03	1.31	1.31	-6.73	-3.61	0.13	3.93	6.15
5	0.58	0.03	0.89	0.87	-6.12	-3.01	0.74	4.54	6.76
6	-0.09	0.03	0.86	0.85	-6.80	-3.68	0.06	3.87	6.08

Note. For constructed response items, Rasch difficulty is the location on the theta metric at which the highest and lowest category are equally probable. Threshold difficulty is the location on the theta metric at which two score points are equally probable. For example, threshold difficulty 1 is the location at which score point 1 and score point 2 are equally probable. Note that because the Rating scale model was used for the calibration of the writing prompt, the relative distance between thresholds is the same for all traits.

Trait 1=Ideas and Content, Trait 2=Organization, Trait 3=Voice, Trait 4= Word Choice, Trait 5= Sentence Fluency, Trait 6= Conventions, SE= Standard Error of Estimate, MNSQ= Mean-Square.

Table 7.3.1.16
2005 Spring AIMS IRT Item Statistics
Writing Grade 4

Trait	Rasch difficulty	SE	MNSQ Infit	MNSQ Outfit	Threshold difficulty 1	Threshold difficulty 2	Threshold difficulty 3	Threshold difficulty 4	Threshold difficulty 5
1	0.28	0.03	1.08	1.08	-7.09	-3.19	0.34	4.26	7.06
2	0.03	0.03	0.90	0.89	-7.34	-3.43	0.10	4.01	6.81
3	-0.28	0.03	1.00	1.00	-7.64	-3.74	-0.21	3.71	6.51
4	-0.09	0.03	1.09	1.09	-7.46	-3.56	-0.03	3.89	6.69
5	-0.04	0.03	0.88	0.88	-7.40	-3.50	0.03	3.95	6.75
6	0.10	0.03	1.03	1.02	-7.27	-3.37	0.16	4.08	6.88

Note. For constructed response items, Rasch difficulty is the location on the theta metric at which the highest and lowest category are equally probable. Threshold difficulty is the location on the theta metric at which two score points are equally probable. For example, threshold difficulty 1 is the location at which score point 1 and score point 2 are equally probable. Note that because the Rating scale model was used for the calibration of the writing prompt, the relative distance between thresholds is the same for all traits.

Trait 1=Ideas and Content, Trait 2=Organization, Trait 3=Voice, Trait 4= Word Choice, Trait 5= Sentence Fluency, Trait 6= Conventions, SE= Standard Error of Estimate, MNSQ= Mean-Square.

Table 7.3.1.17
2005 Spring AIMS IRT Item Statistics
Writing Grade 5

Trait	Rasch difficulty	SE	MNSQ Infit	MNSQ Outfit	Threshold difficulty 1	Threshold difficulty 2	Threshold difficulty 3	Threshold difficulty 4	Threshold difficulty 5
1	-0.28	0.03	1.30	1.30	-7.57	-3.69	-0.11	3.66	6.33
2	-0.71	0.03	0.92	0.92	-8.00	-4.13	-0.55	3.23	5.90
3	0.37	0.03	0.80	0.79	-6.92	-3.04	0.53	4.31	6.98
4	0.37	0.03	1.24	1.25	-6.92	-3.05	0.53	4.30	6.98
5	0.71	0.03	0.80	0.79	-6.58	-2.71	0.87	4.64	7.32
6	-0.46	0.03	0.92	0.91	-7.75	-3.88	-0.30	3.47	6.15

Note. For constructed response items, Rasch difficulty is the location on the theta metric at which the highest and lowest category are equally probable. Threshold difficulty is the location on the theta metric at which two score points are equally probable. For example, threshold difficulty 1 is the location at which score point 1 and score point 2 are equally probable. Note that because the Rating scale model was used for the calibration of the writing prompt, the relative distance between thresholds is the same for all traits.

Trait 1=Ideas and Content, Trait 2=Organization, Trait 3=Voice, Trait 4= Word Choice, Trait 5= Sentence Fluency, Trait 6= Conventions, SE= Standard Error of Estimate, MNSQ= Mean-Square.

Table 7.3.1.18
2005 Spring AIMS IRT Item Statistics
Writing Grade 6

Trait	Rasch difficulty	SE	MNSQ Infit	MNSQ Outfit	Threshold difficulty 1	Threshold difficulty 2	Threshold difficulty 3	Threshold difficulty 4	Threshold difficulty 5
1	0.41	0.03	1.37	1.37	-7.37	-3.16	0.55	4.62	7.43
2	-0.16	0.03	0.94	0.92	-7.94	-3.74	-0.02	4.05	6.85
3	0.05	0.03	0.86	0.85	-7.73	-3.52	0.19	4.26	7.07
4	0.03	0.03	1.08	1.08	-7.75	-3.55	0.17	4.24	7.04
5	0.13	0.03	0.85	0.84	-7.65	-3.45	0.27	4.34	7.14
6	-0.46	0.03	0.89	0.89	-8.24	-4.04	-0.32	3.74	6.55

Note. For constructed response items, Rasch difficulty is the location on the theta metric at which the highest and lowest category are equally probable. Threshold difficulty is the location on the theta metric at which two score points are equally probable. For example, threshold difficulty 1 is the location at which score point 1 and score point 2 are equally probable. Note that because the Rating scale model was used for the calibration of the writing prompt, the relative distance between thresholds is the same for all traits.

Trait 1=Ideas and Content, Trait 2=Organization, Trait 3=Voice, Trait 4= Word Choice, Trait 5= Sentence Fluency, Trait 6= Conventions, SE= Standard Error of Estimate, MNSQ= Mean-Square.

Table 7.3.1.19
2005 Spring AIMS IRT Item Statistics
Writing Grade 7

Trait	Rasch difficulty	SE	MNSQ Infit	MNSQ Outfit	Threshold difficulty 1	Threshold difficulty 2	Threshold difficulty 3	Threshold difficulty 4	Threshold difficulty 5
1	0.19	0.04	1.64	1.65	-7.94	-3.23	1.08	4.65	6.38
2	-0.42	0.04	0.84	0.84	-8.55	-3.85	0.47	4.04	5.77
3	-0.29	0.04	0.77	0.76	-8.42	-3.72	0.60	4.17	5.90
4	0.58	0.04	1.06	1.04	-7.55	-2.84	1.48	5.05	6.78
5	0.13	0.04	0.79	0.77	-8.00	-3.30	1.02	4.59	6.32
6	-0.18	0.04	0.91	0.91	-8.31	-3.60	0.72	4.29	6.02

Note. For constructed response items, Rasch difficulty is the location on the theta metric at which the highest and lowest category are equally probable. Threshold difficulty is the location on the theta metric at which two score points are equally probable. For example, threshold difficulty 1 is the location at which score point 1 and score point 2 are equally probable. Note that because the Rating scale model was used for the calibration of the writing prompt, the relative distance between thresholds is the same for all traits.

Trait 1=Ideas and Content, Trait 2=Organization, Trait 3=Voice, Trait 4= Word Choice, Trait 5= Sentence Fluency, Trait 6= Conventions, SE= Standard Error of Estimate, MNSQ= Mean-Square.

Table 7.3.1.20
2005 Spring AIMS IRT Item Statistics
Writing Grade 8

Trait	Rasch difficulty	SE	MNSQ Infit	MNSQ Outfit	Threshold difficulty 1	Threshold difficulty 2	Threshold difficulty 3	Threshold difficulty 4	Threshold difficulty 5
1	-0.14	0.04	1.31	1.32	-7.99	-4.14	0.39	4.50	6.56
2	-0.30	0.04	0.84	0.82	-8.15	-4.31	0.23	4.34	6.40
3	0.18	0.04	0.80	0.78	-7.67	-3.82	0.71	4.82	6.88
4	-0.29	0.04	1.28	1.26	-8.14	-4.29	0.24	4.35	6.41
5	0.39	0.04	0.90	0.89	-7.47	-3.62	0.91	5.02	7.09
6	0.15	0.04	0.85	0.84	-7.70	-3.85	0.68	4.79	6.85

Note. For constructed response items, Rasch difficulty is the location on the theta metric at which the highest and lowest category are equally probable. Threshold difficulty is the location on the theta metric at which two score points are equally probable. For example, threshold difficulty 1 is the location at which score point 1 and score point 2 are equally probable. Note that because the Rating scale model was used for the calibration of the writing prompt, the relative distance between thresholds is the same for all traits.

Trait 1=Ideas and Content, Trait 2=Organization, Trait 3=Voice, Trait 4= Word Choice, Trait 5= Sentence Fluency, Trait 6= Conventions, SE= Standard Error of Estimate, MNSQ= Mean-Square.

Table 7.3.1.21
2005 Spring AIMS IRT Item Statistics
Writing High School Prompt A

Trait	Rater	Rasch difficulty	SE	MNSQ Infit	MNSQ Outfit	Threshold difficulty 1	Threshold difficulty 2	Threshold difficulty 3	Threshold difficulty 4	Threshold difficulty 5
1	1	0.34	0.01	1.16	1.17	-7.28	-3.63	0.36	4.65	7.61
2	1	-0.27	0.01	0.98	0.97	-7.89	-4.24	-0.26	4.03	6.99
3	1	-0.30	0.01	0.87	0.87	-7.92	-4.27	-0.29	4.00	6.96
4	1	0.20	0.01	1.05	1.05	-7.42	-3.77	0.22	4.51	7.47
5	1	0.14	0.01	0.92	0.91	-7.48	-3.83	0.15	4.44	7.40
6	1	-0.09	0.01	1.03	1.02	-7.71	-4.06	-0.07	4.22	7.18
1	2	0.34	0.01	1.15	1.16	-7.28	-3.63	0.36	4.65	7.61
2	2	-0.28	0.01	0.98	0.97	-7.90	-4.25	-0.26	4.03	6.99
3	2	-0.31	0.01	0.88	0.87	-7.93	-4.28	-0.29	4.00	6.96
4	2	0.20	0.01	1.04	1.04	-7.42	-3.77	0.22	4.51	7.47
5	2	0.12	0.01	0.92	0.91	-7.50	-3.85	0.14	4.43	7.39
6	2	-0.10	0.01	1.02	1.01	-7.72	-4.07	-0.08	4.21	7.17

Note. For constructed response items, Rasch difficulty is the location on the theta metric at which the highest and lowest category are equally probable. Threshold difficulty is the location on the theta metric at which two score points are equally probable. For example, threshold difficulty 1 is the location at which score point 1 and score point 2 are equally probable. Note that because the Rating scale model was used for the calibration of the writing prompt, the relative distance between thresholds is the same for all traits.
Each trait was scored by two raters. For purposes of calibration, each rating on each trait was treated as a separate item, resulting in the 12 items presented in this table.
When calibrated on the logit metric, writing prompts A and T were calibrated simultaneously with reading anchors. The calibrations for the transformed parameters were conducted for each form independently. This table presents the results of the logit calibration.
Trait 1=Ideas and Content, Trait 2=Organization, Trait 3=Voice, Trait 4= Word Choice, Trait 5= Sentence Fluency, Trait 6= Conventions, SE= Standard Error of Estimate, MNSQ= Mean-Square.

Table 7.3.1.22
2005 Spring AIMS IRT Item Statistics
Writing High School Prompt T

Trait	Rater	Rasch difficulty	SE	MNSQ Infit	MNSQ Outfit	Threshold difficulty 1	Threshold difficulty 2	Threshold difficulty 3	Threshold difficulty 4	Threshold difficulty 5
1	1	0.42	0.05	1.30	1.31	-7.79	-3.82	0.44	5.15	8.11
2	1	-0.08	0.05	0.97	0.97	-8.29	-4.32	-0.05	4.66	7.62
3	1	-0.16	0.05	0.85	0.84	-8.37	-4.40	-0.14	4.57	7.53
4	1	-0.22	0.05	1.08	1.11	-8.44	-4.47	-0.20	4.51	7.47
5	1	0.09	0.05	0.93	0.91	-8.12	-4.15	0.11	4.82	7.78
6	1	-0.14	0.05	0.94	0.92	-8.36	-4.38	-0.12	4.59	7.55
1	2	0.39	0.05	1.31	1.32	-7.82	-3.85	0.41	5.12	8.09
2	2	-0.11	0.05	0.92	0.90	-8.32	-4.35	-0.09	4.63	7.59
3	2	-0.11	0.05	0.76	0.75	-8.32	-4.35	-0.09	4.62	7.59
4	2	-0.10	0.05	1.05	1.06	-8.31	-4.34	-0.08	4.64	7.60
5	2	0.14	0.05	0.87	0.86	-8.07	-4.10	0.16	4.87	7.84
6	2	-0.11	0.05	0.99	0.97	-8.32	-4.35	-0.09	4.62	7.59

Note. For constructed response items, Rasch difficulty is the location on the theta metric at which the highest and lowest category are equally probable. Threshold difficulty is the location on the theta metric at which two score points are equally probable. For example, threshold difficulty 1 is the location at which score point 1 and score point 2 are equally probable. Note that because the Rating scale model was used for the calibration of the writing prompt, the relative distance between thresholds is the same for all traits.
Each trait was scored by two raters. For purposes of calibration, each rating on each trait was treated as a separate item, resulting in the 12 items presented in this table.
When calibrated on the logit metric, writing prompts A and T were calibrated simultaneously with reading anchors. The calibrations for the transformed parameters were conducted for each form independently. This table presents the results of the logit calibration.
Trait 1=Ideas and Content, Trait 2=Organization, Trait 3=Voice, Trait 4= Word Choice, Trait 5= Sentence Fluency, Trait 6= Conventions, SE= Standard Error of Estimate, MNSQ= Mean-Square.

7.3.2 Scoring and Standard Error of Measurement

Item response theory makes available two types of scoring: number correct and item-pattern. With number-correct scoring, a student's number-correct score (or raw score) is converted to a scale score. Item-pattern scoring calculates a student's scale score, taking into account not only how many items a student answered correctly, but also which items, and the characteristics of each item. For groups of 25 or more students, the two methods produce tau-equivalent results. Number-correct scoring was used to derive scales scores for the AIMS CRT tests, while the AIMS NRT tests were scored using item-pattern scoring with TerraNova national standardization item parameters.

Typically, a test score is obtained from a single observation of behavior and represents an estimate of the trait being measured. As an estimate, an observed test score contains some measurement error and does not perfectly reflect an individual's true score. The degree of measurement error in a test score can be estimated using a statistic called the standard error of measurement (SEM).

A student's exact true score cannot be known. The true score is defined as the average test score that would result if the test could be administered repeatedly without the effects of practice or fatigue. The standard error of measurement is an estimate of the standard deviation of an individual's observed scores from these repeated administrations. For practical purposes, this statistic can be used to obtain a range within which a student's true score is likely to fall. Using item response theory, the standard error of measurement can be calculated for every possible scale score. These SEM values can be computed for both number-correct and item-pattern scoring.

From a single administration, a student's true score can be expected to fall within one standard error of measurement of that student's obtained score 68 percent of the time, and the true score would fall within two standard errors of the observed score 95 percent of the time. An observed score, therefore, should not be regarded as a student's true score but as a point within a range that probably includes a student's true score.

Tables 7.3.2.1 through 7.3.2.22 present raw score to scale score conversion tables for all AIMS CRT tests as well as IRT conditional standard errors of measurement. Tables 7.3.2.23 through 7.3.2.28 present IRT conditional standard errors of measurement for all AIMS NRT tests.

Table 7.3.2.1
2005 Spring AIMS Raw Score to Scale Score Table
Mathematics CRT Grade 3

Raw Score	Scale Score	SEM	Raw Score	Scale Score	SEM
0	200	40	37	400	11
1	200	40	38	403	11
2	226	31	39	406	11
3	245	25	40	409	11
4	259	22	41	411	11
5	270	20	42	414	11
6	279	19	43	417	11
7	287	18	44	420	11
8	294	17	45	423	11
9	300	16	46	426	11
10	306	15	47	429	11
11	312	15	48	432	11
12	317	14	49	435	11
13	321	14	50	439	12
14	326	13	51	442	12
15	330	13	52	445	12
16	334	13	53	449	12
17	338	13	54	452	12
18	342	12	55	456	12
19	345	12	56	460	13
20	349	12	57	464	13
21	352	12	58	468	13
22	356	12	59	472	13
23	359	11	60	477	14
24	362	11	61	481	14
25	365	11	62	486	15
26	368	11	63	492	15
27	371	11	64	498	16
28	374	11	65	505	17
29	377	11	66	512	18
30	380	11	67	521	20
31	383	11	68	531	22
32	386	11	69	544	25
33	389	11	70	562	30
34	392	11	71	592	42
35	394	11	72	650	83
36	397	11			

Note. SEM is the standard error of measurement for the scale score.

Table 7.3.2.2
2005 Spring AIMS Raw Score to Scale Score Table
Mathematics CRT Grade 4

Raw Score	Scale Score	SEM	Raw Score	Scale Score	SEM
0	230	38	36	422	12
1	230	38	37	425	12
2	246	32	38	428	12
3	265	27	39	431	12
4	279	24	40	434	12
5	290	21	41	437	12
6	300	20	42	440	12
7	308	18	43	443	12
8	315	17	44	446	12
9	321	17	45	450	12
10	327	16	46	453	12
11	333	15	47	456	12
12	338	15	48	460	12
13	343	14	49	463	13
14	347	14	50	467	13
15	351	14	51	470	13
16	356	13	52	474	13
17	360	13	53	478	13
18	363	13	54	482	14
19	367	13	55	486	14
20	371	13	56	491	14
21	374	13	57	495	15
22	378	12	58	500	15
23	381	12	59	506	16
24	384	12	60	511	16
25	388	12	61	517	17
26	391	12	62	524	18
27	394	12	63	531	19
28	397	12	64	539	20
29	400	12	65	549	21
30	403	12	66	560	24
31	407	12	67	574	27
32	410	12	68	594	33
33	413	12	69	626	45
34	416	12	70	675	77
35	419	12			

Note. SEM is the standard error of measurement for the scale score.

Table 7.3.2.3
2005 Spring AIMS Raw Score to Scale Score Table
Mathematics CRT Grade 5

Raw Score	Scale Score	SEM	Raw Score	Scale Score	SEM
0	255	46	35	453	11
1	264	41	36	456	11
2	293	30	37	459	11
3	311	24	38	462	11
4	324	21	39	464	11
5	334	19	40	467	11
6	343	18	41	470	11
7	350	17	42	473	11
8	357	16	43	476	11
9	363	15	44	479	11
10	368	15	45	482	11
11	373	14	46	485	11
12	378	14	47	489	11
13	382	13	48	492	12
14	386	13	49	495	12
15	390	13	50	499	12
16	394	12	51	502	12
17	398	12	52	506	12
18	402	12	53	510	13
19	405	12	54	514	13
20	409	12	55	518	13
21	412	11	56	522	14
22	415	11	57	527	14
23	418	11	58	532	15
24	421	11	59	538	15
25	424	11	60	544	16
26	427	11	61	550	17
27	430	11	62	558	18
28	433	11	63	566	19
29	436	11	64	576	21
30	439	11	65	589	24
31	442	11	66	607	29
32	445	11	67	636	41
33	447	11	68	700	88
34	450	11			

Note. SEM is the standard error of measurement for the scale score.

Table 7.3.2.4
2005 Spring AIMS Raw Score to Scale Score Table
Mathematics CRT Grade 6

Raw Score	Scale Score	SEM	Raw Score	Scale Score	SEM
0	270	41	35	469	12
1	270	41	36	472	12
2	292	33	37	475	12
3	311	27	38	478	12
4	326	24	39	481	12
5	337	22	40	484	12
6	347	20	41	487	12
7	355	19	42	491	12
8	362	18	43	494	12
9	369	17	44	497	12
10	375	16	45	501	12
11	381	16	46	504	13
12	386	15	47	507	13
13	391	15	48	511	13
14	396	14	49	515	13
15	400	14	50	519	13
16	404	14	51	523	14
17	409	13	52	527	14
18	413	13	53	531	14
19	416	13	54	535	14
20	420	13	55	540	15
21	424	13	56	545	15
22	427	13	57	550	16
23	431	12	58	556	16
24	434	12	59	562	17
25	437	12	60	568	18
26	441	12	61	576	19
27	444	12	62	584	20
28	447	12	63	594	22
29	450	12	64	605	24
30	453	12	65	620	28
31	456	12	66	640	33
32	459	12	67	672	46
33	463	12	68	725	81
34	466	12			

Note. SEM is the standard error of measurement for the scale score.

Table 7.3.2.5
2005 Spring AIMS Raw Score to Scale Score Table
Mathematics CRT Grade 7

Raw Score	Scale Score	SEM	Raw Score	Scale Score	SEM
0	290	44	35	494	11
1	290	44	36	497	11
2	321	32	37	500	11
3	340	26	38	503	11
4	354	23	39	506	11
5	365	21	40	509	12
6	375	19	41	512	12
7	383	18	42	515	12
8	390	17	43	518	12
9	396	16	44	521	12
10	402	16	45	525	12
11	408	15	46	528	12
12	413	15	47	531	12
13	418	14	48	535	12
14	422	14	49	538	12
15	427	14	50	542	13
16	431	13	51	546	13
17	435	13	52	550	13
18	439	13	53	554	13
19	442	13	54	558	14
20	446	12	55	563	14
21	450	12	56	567	14
22	453	12	57	572	15
23	456	12	58	578	16
24	460	12	59	583	16
25	463	12	60	590	17
26	466	12	61	597	18
27	469	12	62	605	19
28	472	12	63	614	21
29	475	12	64	625	23
30	479	11	65	638	26
31	482	11	66	657	31
32	485	11	67	688	44
33	488	11	68	740	78
34	491	11			

Note. SEM is the standard error of measurement for the scale score.

Table 7.3.2.6
2005 Spring AIMS Raw Score to Scale Score Table
Mathematics CRT Grade 8

Raw Score	Scale Score	SEM	Raw Score	Scale Score	SEM
0	300	44	34	508	13
1	300	44	35	512	13
2	324	35	36	515	13
3	344	29	37	519	13
4	359	25	38	522	13
5	371	23	39	526	13
6	381	21	40	529	13
7	390	20	41	533	13
8	398	19	42	537	13
9	405	18	43	540	13
10	411	17	44	544	14
11	417	17	45	548	14
12	423	16	46	552	14
13	428	16	47	556	14
14	433	15	48	561	14
15	437	15	49	565	15
16	442	15	50	569	15
17	446	14	51	574	15
18	451	14	52	579	16
19	455	14	53	584	16
20	459	14	54	590	16
21	462	14	55	595	17
22	466	13	56	601	17
23	470	13	57	608	18
24	474	13	58	615	19
25	477	13	59	623	20
26	481	13	60	632	21
27	484	13	61	643	23
28	488	13	62	655	26
29	491	13	63	670	29
30	495	13	64	691	35
31	498	13	65	726	49
32	501	13	66	800	103
33	505	13			

Note. SEM is the standard error of measurement for the scale score.

Table 7.3.2.7
2005 Spring AIMS Raw Score to Scale Score Table
Mathematics CRT High School

Raw Score	Scale Score	SEM	Raw Score	Scale Score	SEM
0	500	34	43	668	8
1	500	34	44	670	8
2	522	25	45	672	8
3	537	21	46	673	8
4	548	18	47	675	8
5	557	16	48	677	8
6	564	15	49	679	8
7	571	14	50	681	8
8	576	13	51	683	8
9	581	13	52	685	8
10	586	12	53	687	8
11	590	12	54	689	8
12	594	11	55	691	8
13	598	11	56	693	8
14	601	11	57	695	9
15	604	11	58	697	9
16	608	10	59	700	9
17	611	10	60	702	9
18	613	10	61	704	9
19	616	10	62	706	9
20	619	9	63	709	9
21	621	9	64	711	9
22	624	9	65	714	9
23	626	9	66	716	9
24	629	9	67	719	10
25	631	9	68	722	10
26	633	9	69	725	10
27	636	9	70	728	10
28	638	9	71	731	11
29	640	9	72	734	11
30	642	8	73	738	11
31	644	8	74	741	12
32	646	8	75	745	12
33	648	8	76	750	13
34	650	8	77	755	13
35	652	8	78	760	14
36	654	8	79	766	15
37	656	8	80	773	16
38	658	8	81	782	18
39	660	8	82	792	20
40	662	8	83	807	25
41	664	8	84	832	35
42	666	8	85	900	92

Note. SEM is the standard error of measurement for the scale score. High school mathematics scale scores are not on the same vertical scale as grades 3-8.

Table 7.3.2.8
2005 Spring AIMS Raw Score to Scale Score Table
Reading CRT Grade 3

Raw Score	Scale Score	SEM	Raw Score	Scale Score	SEM
0	200	56	28	413	12
1	226	42	29	416	12
2	256	30	30	420	12
3	275	25	31	424	12
4	289	22	32	427	12
5	300	20	33	431	12
6	309	19	34	435	13
7	317	18	35	439	13
8	324	17	36	443	13
9	331	16	37	447	13
10	337	15	38	451	13
11	343	15	39	455	13
12	348	15	40	460	14
13	353	14	41	464	14
14	358	14	42	469	14
15	362	14	43	475	15
16	367	13	44	480	15
17	371	13	45	486	16
18	375	13	46	492	16
19	379	13	47	499	17
20	383	13	48	507	18
21	387	13	49	516	20
22	391	12	50	527	22
23	395	12	51	540	25
24	398	12	52	558	30
25	402	12	53	588	42
26	406	12	54	640	77
27	409	12			

Note. SEM is the standard error of measurement for the scale score.

Table 7.3.2.9
2005 Spring AIMS Raw Score to Scale Score Table
Reading CRT Grade 4

Raw Score	Scale Score	SEM	Raw Score	Scale Score	SEM
0	220	68	28	427	11
1	265	38	29	431	11
2	292	27	30	434	11
3	308	23	31	437	11
4	320	20	32	440	11
5	330	18	33	444	11
6	338	17	34	447	11
7	345	16	35	451	12
8	351	15	36	454	12
9	357	14	37	458	12
10	362	14	38	462	12
11	367	13	39	465	12
12	371	13	40	469	12
13	375	13	41	474	13
14	380	12	42	478	13
15	383	12	43	483	14
16	387	12	44	488	14
17	391	12	45	493	15
18	394	12	46	499	15
19	398	11	47	506	16
20	401	11	48	513	17
21	405	11	49	521	18
22	408	11	50	531	20
23	411	11	51	544	23
24	415	11	52	561	28
25	418	11	53	588	38
26	421	11	54	660	96
27	424	11			

Note. SEM is the standard error of measurement for the scale score.

Table 7.3.2.10
2005 Spring AIMS Raw Score to Scale Score Table
Reading CRT Grade 5

Raw Score	Scale Score	SEM	Raw Score	Scale Score	SEM
0	240	64	28	451	11
1	278	41	29	454	11
2	307	29	30	457	12
3	325	24	31	461	12
4	338	21	32	464	12
5	348	19	33	468	12
6	356	18	34	471	12
7	364	17	35	474	12
8	371	16	36	478	12
9	377	15	37	482	12
10	382	15	38	486	12
11	387	14	39	489	13
12	392	14	40	494	13
13	397	13	41	498	13
14	401	13	42	502	14
15	405	13	43	507	14
16	409	13	44	512	14
17	413	12	45	517	15
18	417	12	46	523	16
19	421	12	47	530	17
20	424	12	48	537	18
21	428	12	49	545	19
22	431	12	50	556	21
23	434	12	51	568	24
24	438	12	52	585	29
25	441	12	53	614	40
26	444	11	54	675	85
27	448	11			

Note. SEM is the standard error of measurement for the scale score.

Table 7.3.2.11
2005 Spring AIMS Raw Score to Scale Score Table
Reading CRT Grade 6

Raw Score	Scale Score	SEM	Raw Score	Scale Score	SEM
0	250	57	28	460	12
1	278	41	29	464	12
2	308	30	30	467	12
3	326	25	31	471	12
4	339	22	32	474	12
5	350	20	33	478	12
6	359	18	34	482	12
7	367	17	35	486	12
8	374	16	36	490	13
9	380	16	37	493	13
10	386	15	38	498	13
11	391	15	39	502	13
12	397	14	40	506	13
13	401	14	41	511	14
14	406	14	42	515	14
15	411	13	43	520	14
16	415	13	44	526	15
17	419	13	45	531	15
18	423	13	46	538	16
19	427	13	47	544	17
20	431	12	48	552	18
21	435	12	49	561	20
22	438	12	50	571	22
23	442	12	51	584	25
24	446	12	52	602	30
25	449	12	53	631	41
26	453	12	54	690	83
27	456	12			

Note. SEM is the standard error of measurement for the scale score.

Table 7.3.2.12
2005 Spring AIMS Raw Score to Scale Score Table
Reading CRT Grade 7

Raw Score	Scale Score	SEM	Raw Score	Scale Score	SEM
0	260	59	28	472	12
1	286	44	29	475	12
2	317	32	30	479	13
3	336	26	31	483	13
4	350	23	32	486	13
5	361	21	33	490	13
6	370	19	34	494	13
7	378	18	35	498	13
8	385	17	36	502	13
9	392	16	37	506	13
10	398	16	38	510	14
11	403	15	39	514	14
12	408	15	40	519	14
13	413	14	41	523	14
14	418	14	42	528	15
15	422	14	43	533	15
16	427	14	44	539	16
17	431	13	45	545	16
18	435	13	46	552	17
19	439	13	47	559	18
20	443	13	48	567	19
21	446	13	49	576	21
22	450	13	50	587	23
23	454	13	51	601	26
24	457	13	52	620	32
25	461	12	53	652	44
26	465	12	54	720	94
27	468	12			

Note. SEM is the standard error of measurement for the scale score.

Table 7.3.2.13
2005 Spring AIMS Raw Score to Scale Score Table
Reading CRT Grade 8

Raw Score	Scale Score	SEM	Raw Score	Scale Score	SEM
0	270	49	28	482	14
1	270	49	29	486	14
2	302	36	30	490	14
3	324	30	31	494	14
4	340	26	32	499	15
5	353	24	33	503	15
6	363	22	34	507	15
7	373	21	35	512	15
8	381	20	36	517	15
9	388	19	37	521	15
10	395	18	38	526	16
11	402	18	39	531	16
12	408	17	40	536	16
13	413	17	41	542	17
14	419	16	42	547	17
15	424	16	43	553	17
16	429	16	44	560	18
17	434	15	45	567	19
18	439	15	46	574	20
19	443	15	47	582	21
20	448	15	48	591	22
21	452	15	49	602	24
22	457	15	50	615	26
23	461	15	51	630	30
24	465	14	52	652	36
25	469	14	53	688	50
26	473	14	54	800	152
27	478	14			

Note. SEM is the standard error of measurement for the scale score.

Table 7.3.2.14
2005 Spring AIMS Raw Score to Scale Score Table
Reading CRT High School

Raw Score	Scale Score	SEM	Raw Score	Scale Score	SEM
0	500	34	28	660	12
1	500	34	29	663	12
2	507	31	30	667	12
3	526	26	31	670	12
4	540	23	32	674	12
5	550	21	33	677	13
6	559	19	34	681	13
7	567	18	35	685	13
8	574	17	36	689	13
9	581	16	37	693	13
10	587	16	38	697	13
11	592	15	39	701	14
12	597	15	40	706	14
13	602	14	41	710	14
14	606	14	42	715	15
15	611	14	43	720	15
16	615	13	44	726	16
17	619	13	45	731	16
18	623	13	46	738	17
19	627	13	47	745	18
20	631	13	48	753	19
21	635	13	49	762	21
22	638	12	50	773	23
23	642	12	51	786	26
24	645	12	52	805	31
25	649	12	53	836	44
26	652	12	54	900	90
27	656	12			

Note. SEM is the standard error of measurement for the scale score. High school reading scale scores are not on the same vertical scale as grades 3-8.

Table 7.3.2.15
2005 Spring AIMS Raw Score to Scale Score Table
Writing CRT Grade 3

Raw Score	Scale Score	SEM
0	200	216
1	200	216
2	200	216
3	200	216
4	200	216
5	200	216
6	200	216
7	296	21
8	314	16
9	326	15
10	337	14
11	347	14
12	358	14
13	369	14
14	379	14
15	389	14
16	400	15
17	411	15
18	424	16
19	437	15
20	449	15
21	460	15
22	471	15
23	483	16
24	496	16
25	509	15
26	520	14
27	529	13
28	538	13
29	546	12
30	554	12
31	562	13
32	571	13
33	580	14
34	591	16
35	608	21
36	650	54

Note. SEM is the standard error of measurement for the scale score.

Table 7.3.2.16
2005 Spring AIMS Raw Score to Scale Score Table
Writing CRT Grade 4

Raw Score	Scale Score	SEM
0	230	253
1	230	253
2	230	253
3	230	253
4	230	253
5	230	253
6	230	253
7	331	21
8	348	16
9	361	15
10	373	15
11	385	16
12	399	16
13	412	16
14	425	15
15	435	14
16	446	14
17	457	15
18	469	15
19	481	15
20	492	14
21	503	14
22	514	15
23	526	16
24	539	16
25	553	15
26	564	14
27	575	14
28	584	13
29	594	13
30	603	13
31	612	13
32	622	14
33	632	14
34	644	16
35	660	20
36	700	51

Note. SEM is the standard error of measurement for the scale score.

Table 7.3.2.17
2005 Spring AIMS Raw Score to Scale Score Table
Writing CRT Grade 5

Raw Score	Scale Score	SEM
0	255	126
1	255	126
2	255	126
3	255	126
4	255	126
5	255	126
6	255	126
7	333	23
8	353	18
9	367	17
10	380	16
11	394	17
12	408	17
13	422	17
14	435	16
15	447	16
16	459	16
17	471	16
18	484	16
19	497	16
20	509	16
21	521	15
22	533	16
23	546	16
24	559	17
25	572	16
26	584	15
27	595	15
28	606	14
29	615	14
30	625	14
31	635	14
32	645	15
33	656	15
34	669	17
35	688	22
36	740	68

Note. SEM is the standard error of measurement for the scale score.

Table 7.3.2.18
2005 Spring AIMS Raw Score to Scale Score Table
Writing CRT Grade 6

Raw Score	Scale Score	SEM
0	275	117
1	275	117
2	275	117
3	275	117
4	275	117
5	275	117
6	275	117
7	351	23
8	370	18
9	384	17
10	397	17
11	412	18
12	429	19
13	445	18
14	460	17
15	472	16
16	484	16
17	497	17
18	511	17
19	525	17
20	538	16
21	551	16
22	563	16
23	577	18
24	593	18
25	608	17
26	621	16
27	633	15
28	644	15
29	654	15
30	664	15
31	675	15
32	686	15
33	697	16
34	710	18
35	728	23
36	760	43

Note. SEM is the standard error of measurement for the scale score.

Table 7.3.2.19
2005 Spring AIMS Raw Score to Scale Score Table
Writing CRT Grade 7

Raw Score	Scale Score	SEM
0	290	105
1	290	105
2	290	105
3	290	105
4	290	105
5	290	105
6	290	105
7	360	22
8	378	17
9	392	16
10	405	17
11	420	18
12	439	20
13	458	18
14	472	16
15	485	16
16	498	16
17	512	17
18	528	18
19	545	17
20	558	16
21	570	15
22	582	15
23	594	16
24	606	16
25	618	15
26	628	14
27	637	13
28	645	12
29	652	12
30	659	12
31	667	12
32	674	13
33	683	14
34	694	16
35	710	21
36	770	85

Note. SEM is the standard error of measurement for the scale score.

Table 7.3.2.20
2005 Spring AIMS Raw Score to Scale Score Table
Writing CRT Grade 8

Raw Score	Scale Score	SEM
0	300	50
1	300	50
2	300	50
3	300	50
4	300	50
5	300	50
6	300	50
7	339	23
8	358	18
9	372	16
10	385	16
11	398	17
12	413	18
13	427	17
14	441	16
15	453	16
16	466	17
17	481	19
18	499	20
19	517	19
20	532	17
21	545	16
22	558	16
23	572	18
24	588	18
25	603	17
26	615	15
27	626	14
28	635	13
29	643	13
30	652	13
31	660	13
32	669	14
33	678	15
34	690	17
35	708	22
36	800	182

Note. SEM is the standard error of measurement for the scale score.

Table 7.3.2.21
2005 Spring AIMS Raw Score to Scale Score Table
Writing CRT High School Prompt A

Raw Score	Scale Score	SEM	Raw Score	Scale Score	SEM
0	500	31	18.5	657	10
0.5	500	31	19	663	9
1	500	31	19.5	668	9
1.5	500	31	20	673	9
2	500	31	20.5	678	9
2.5	500	31	21	683	9
3	500	31	21.5	688	9
3.5	500	31	22	693	9
4	500	31	22.5	698	9
4.5	500	31	23	704	10
5	500	31	23.5	710	10
5.5	500	31	24	717	10
6	511	23	24.5	723	10
6.5	522	17	25	730	10
7	535	12	25.5	735	9
7.5	543	11	26	740	9
8	549	10	26.5	745	9
8.5	555	9	27	749	8
9	560	9	27.5	754	8
9.5	565	9	28	758	8
10	569	9	28.5	762	8
10.5	574	9	29	766	8
11	579	9	29.5	770	8
11.5	585	9	30	775	8
12	590	9	30.5	779	8
12.5	595	9	31	783	8
13	600	9	31.5	787	8
13.5	605	9	32	791	8
14	610	9	32.5	796	8
14.5	615	9	33	800	9
15	619	9	33.5	805	9
15.5	624	9	34	810	9
16	629	9	34.5	816	10
16.5	634	9	35	824	12
17	639	9	35.5	837	17
17.5	645	10	36	900	111
18	651	10			

Note. SEM is the standard error of measurement for the scale score. High school writing scale scores are not on the same vertical scale as grades 3-8.

Table 7.3.2.22
2005 Spring AIMS Raw Score to Scale Score Table
Writing CRT High School Prompt T

Raw Score	Scale Score	SEM	Raw Score	Scale Score	SEM
0	500	24	18.5	655	10
0.5	500	24	19	662	10
1	500	24	19.5	668	9
1.5	500	24	20	673	9
2	500	24	20.5	678	9
2.5	500	24	21	683	9
3	500	24	21.5	688	9
3.5	500	24	22	693	9
4	500	24	22.5	699	10
4.5	500	24	23	705	10
5	500	24	23.5	712	11
5.5	500	24	24	720	11
6	501	23	24.5	728	11
6.5	513	17	25	735	10
7	526	12	25.5	741	10
7.5	534	11	26	747	9
8	540	10	26.5	752	9
8.5	546	9	27	756	8
9	551	9	27.5	760	8
9.5	556	9	28	765	8
10	561	9	28.5	769	8
10.5	566	9	29	773	8
11	571	9	29.5	777	8
11.5	577	10	30	781	8
12	583	10	30.5	786	8
12.5	589	10	31	790	8
13	595	9	31.5	794	8
13.5	600	9	32	798	8
14	605	9	32.5	803	8
14.5	610	9	33	807	9
15	615	9	33.5	812	9
15.5	620	9	34	817	9
16	625	9	34.5	823	10
16.5	630	9	35	831	12
17	636	10	35.5	844	17
17.5	642	10	36	900	90
18	649	10			

Note. SEM is the standard error of measurement for the scale score. High school writing scale scores are not on the same vertical scale as grades 3-8.

Table 7.3.2.23
2005 Spring AIMS NRT SEM Table
Grade 3

	Reading		Language		Mathematics	
Raw Score	Scale Score	IRT SEM	Scale Score	IRT SEM	Scale Score	IRT SEM
0	427	150	455	128	385	148
1	427	150	455	128	385	148
2	427	150	455	128	385	148
3	427	150	455	128	385	148
4	427	150	455	128	385	148
5	427	150	552	31	385	148
6	516	61	568	18	481	52
7	545	33	578	14	506	31
8	561	25	586	12	521	24
9	572	21	592	12	532	20
10	582	18	599	11	542	17
11	590	16	605	11	550	16
12	597	15	612	12	557	15
13	603	14	619	12	564	14
14	610	13	627	13	571	14
15	615	12	634	13	578	14
16	621	12	643	13	585	14
17	627	12	652	14	592	14
18	633	12	663	16	600	15
19	640	13	681	22	607	15
20	647	13	730	63	616	15
21	655	14			625	15
22	665	16			635	16
23	678	19			648	18
24	699	28			667	24
25	750	69			740	87

Table 7.3.2.24
2005 Spring AIMS NRT SEM Table
Grade 4

	Reading		Language		Mathematics	
Raw Score	Scale Score	IRT SEM	Scale Score	IRT SEM	Scale Score	IRT SEM
0	433	142	465	130	403	161
1	433	142	465	130	403	161
2	433	142	465	130	403	161
3	433	142	465	130	403	161
4	433	142	490	105	403	161
5	465	110	561	34	403	161
6	544	34	579	22	508	56
7	564	25	590	18	536	34
8	576	21	599	16	552	25
9	586	18	608	15	564	21
10	593	15	615	14	574	18
11	600	14	622	14	582	17
12	606	12	629	13	589	16
13	611	12	636	13	596	15
14	616	11	644	14	603	14
15	621	10	652	14	610	14
16	626	10	661	15	616	14
17	630	10	672	17	623	14
18	635	10	686	20	629	13
19	641	11	709	29	636	14
20	647	11	757	66	644	14
21	653	12			653	15
22	662	14			663	17
23	673	17			678	22
24	692	25			704	34
25	780	102			770	90

Table 7.3.2.25
2005 Spring AIMS NRT SEM Table
Grade 5

	Reading		Language		Mathematics	
Raw Score	Scale Score	IRT SEM	Scale Score	IRT SEM	Scale Score	IRT SEM
0	475	138	480	150	430	155
1	475	138	480	150	430	155
2	475	138	480	150	430	155
3	475	138	480	150	430	155
4	475	138	480	150	430	155
5	510	103	589	41	430	155
6	571	42	608	24	529	56
7	589	26	619	18	561	31
8	600	19	627	15	577	24
9	609	16	634	13	589	20
10	616	14	640	12	598	17
11	622	13	646	11	605	15
12	628	12	651	11	612	14
13	634	12	656	11	619	13
14	639	11	662	11	625	12
15	644	11	668	11	631	12
16	650	11	674	12	637	12
17	655	12	682	13	643	12
18	661	12	692	15	649	12
19	668	13	707	20	655	12
20	675	14	782	87	662	12
21	684	15			670	13
22	695	18			679	15
23	709	21			693	19
24	734	31			718	32
25	790	76			797	105

Table 7.3.2.26
2005 Spring AIMS NRT SEM Table
Grade 6

	Reading		Language		Mathematics	
Raw Score	Scale Score	IRT SEM	Scale Score	IRT SEM	Scale Score	IRT SEM
0	486	120	495	135	477	143
1	486	120	495	135	477	143
2	486	120	495	135	477	143
3	486	120	495	135	477	143
4	486	120	495	135	477	143
5	486	120	590	40	477	143
6	562	44	608	22	544	76
7	582	27	619	16	583	39
8	595	20	626	13	600	28
9	604	17	633	12	613	22
10	613	15	639	11	622	19
11	620	15	644	11	630	17
12	627	14	650	11	637	15
13	633	14	656	11	644	14
14	639	14	662	12	650	13
15	646	14	669	12	655	12
16	652	13	677	13	661	12
17	658	13	686	15	667	12
18	665	13	697	17	673	12
19	672	14	715	23	679	13
20	679	14	808	106	686	13
21	688	16			694	15
22	699	18			704	17
23	713	22			718	20
24	737	31			740	29
25	800	82			820	98

Table 7.3.2.27
2005 Spring AIMS NRT SEM Table
Grade 7

	Reading		Language		Mathematics	
Raw Score	Scale Score	IRT SEM	Scale Score	IRT SEM	Scale Score	IRT SEM
0	498	130	502	128	487	146
1	498	130	502	128	487	146
2	498	130	502	128	487	146
3	498	130	502	128	487	146
4	498	130	512	118	487	146
5	498	130	595	35	487	146
6	557	71	611	22	584	49
7	595	34	621	17	608	30
8	612	24	630	14	623	24
9	624	20	637	13	635	21
10	633	17	643	12	644	18
11	640	16	649	12	652	17
12	647	14	655	12	659	15
13	653	13	661	12	666	14
14	659	12	668	13	672	13
15	664	11	675	13	678	13
16	669	11	683	14	684	13
17	674	11	692	16	690	12
18	680	11	705	18	696	12
19	686	11	724	25	702	13
20	692	12	814	103	709	13
21	699	13			717	14
22	708	14			726	16
23	719	17			739	19
24	737	23			758	26
25	810	86			850	107

Table 7.3.2.28
2005 Spring AIMS NRT SEM Table
Grade 8

	Reading		Language		Mathematics	
Raw Score	Scale Score	IRT SEM	Scale Score	IRT SEM	Scale Score	IRT SEM
0	507	111	523	115	502	140
1	507	111	523	115	502	140
2	507	111	523	115	502	140
3	507	111	523	115	502	140
4	507	111	523	115	502	140
5	507	111	591	47	502	140
6	541	77	615	25	576	66
7	581	38	628	18	607	37
8	599	27	638	15	624	27
9	612	21	645	13	637	23
10	622	18	653	13	648	21
11	630	16	659	12	658	19
12	638	15	666	13	666	18
13	645	14	673	13	674	17
14	652	14	681	13	682	17
15	659	14	688	13	690	16
16	665	14	696	13	697	15
17	672	14	704	13	704	15
18	679	14	714	14	712	15
19	687	14	729	19	720	15
20	695	15	819	100	728	16
21	704	16			737	16
22	714	17			748	18
23	729	21			763	22
24	753	31			788	32
25	820	89			872	107

Part 8: Test Results

8.1 Data

Part 8 of this technical report contains information on the results of the 2005 Spring administration of AIMS DPA and AIMS High School. The first section provides information on the CRT scores from the AIMS assessments. The second section provides information on the NRT scores from AIMS DPA. The AERA/APA/NCME standards addressed in Part 8 include: 1.5, 4.3, 4.5, 4.6, 4.7, 6.35, 7.1, 7.10, 13.15, and 13.19.

Results presented below are based on population data contained within the final electronic data files. The results presented in this part of the technical report may differ slightly from final testing results presented on the Arizona Department of Education website due to slight differences in the application of exclusion rules. Official final results typically use more detailed school-level information for generating state summary reports than is used to conduct research analyses. The results in the following tables are presented as evidence of reliability and validity of the AIMS assessments and should not be used for state accountability purposes.

8.1.1 AIMS CRT State Test Results

Test results for each grade level and content area CRT test follow in Tables 8.1.1.1 through 8.1.1.6. For each grade, scale score means and standard deviations as well as the percentages of students in each performance level are presented for the state as a whole and disaggregated into various demographic groups. Disaggregated results were produced for the various groups by using demographic data on student answer documents.

In addition to the descriptive statistics presented in Tables 8.1.1.1 through 8.1.1.6, scale score frequency distributions are also presented in Tables 8.1.1.7 through 8.1.1.34. Each grade and content area is presented in a separate table. These tables show the scale score, frequency (Freq), cumulative frequency (Cum Freq), percentage (%), and cumulative percentage (Cum %).

The AIMS CRT test results for mathematics, reading, and writing are each on a vertical scale for Grades 3-8. The AIMS CRT Grades 3-8 vertical scale runs from a lowest obtainable scale score (LOSS) of 200 to a highest obtainable scale score (HOSS) of 800. The AIMS high school assessments for mathematics, reading, and writing are each on a separate scale where the LOSS is 500 and the HOSS is 900. Please see Part 7 for more information on scales.

Results for AIMS high school assessments are included for Grades 10, 11, and 12. Results for Grades 11 and 12 include students who retested to meet the standard. Students who retested to exceed the standard are not included in these results. Caution should be used when interpreting the Grade 11 and 12 results, particularly when comparing results from the 2005 Grade 11 and 12 students to students in other grades or other test administrations. Caution is warranted because of changes in the testing program. For example, the test scales and cut scores changed from 2004 to 2005 such that the level of proficiency required to pass the tests changed from 2004 to 2005. In addition, over time, the number and proficiency level of students in Grades 11 and 12 who retest will not likely remain stable.

Table 8.1.1.1
2005 Spring AIMS State Test Results
Mathematics CRT Grades 3-8

		Scale Score		% at Performance Level			
	N	M	SD	FFBS	AS	MS	ES
Grade 3							
Total	77443	448.03	50.28	10	19	51	20
Ethnic Background							
White (Not Hispanic)	35048	466.89	49.23	5	11	53	31
Black or African American	3891	430.38	46.49	18	23	49	10
Hispanic or Latino	31611	431.76	44.12	15	25	51	10
American Indian or Alaskan Native	4794	420.93	40.58	19	31	44	6
Asian or Pacific Islander	1882	477.26	53.19	4	9	49	39
Special Program Membership							
Title 1	11948	430.32	43.84	15	26	50	9
English Learner Program	15466	420.06	40.45	20	31	45	5
Special Education	7065	420.74	51.42	27	25	37	10
Grade 4							
Total	76152	476.55	53.20	13	17	49	20
Ethnic Background							
White (Not Hispanic)	34822	496.29	50.45	6	10	53	31
Black or African American	3777	458.00	51.39	21	21	47	11
Hispanic or Latino	30697	458.97	48.16	19	23	48	10
American Indian or Alaskan Native	4727	448.73	44.93	24	28	42	6
Asian or Pacific Islander	1936	506.58	54.90	5	9	47	39
Special Program Membership							
Title 1	11668	458.25	48.42	19	23	47	10
English Learner Program	13760	442.00	43.67	28	29	38	4
Special Education	7509	440.22	52.87	37	23	32	8
Grade 5							
Total	76719	501.46	54.34	13	20	48	19
Ethnic Background							
White (Not Hispanic)	35128	521.27	53.29	6	13	52	30
Black or African American	3891	483.31	49.52	20	25	44	10
Hispanic or Latino	30617	484.08	47.74	19	26	46	10
American Indian or Alaskan Native	5113	471.37	42.70	25	31	39	5
Asian or Pacific Islander	1804	537.27	59.31	5	8	46	41
Special Program Membership							
Title 1	11656	481.86	47.04	20	27	45	9
English Learner Program	13686	467.44	41.69	28	31	37	4
Special Education	7239	460.18	49.98	41	26	27	6

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(table continues)

Table 8.1.1.1 (continued)
2005 Spring AIMS State Test Results
Mathematics CRT Grades 3-8

		Scale Score		% at Performance Level			
	N	M	SD	FFBS	AS	MS	ES
Grade 6							
Total	75884	515.57	57.72	18	20	46	16
Ethnic Background							
White (Not Hispanic)	35216	537.56	55.77	9	14	53	25
Black or African American	3915	495.59	52.45	28	24	41	8
Hispanic or Latino	29407	495.73	50.40	27	26	40	7
American Indian or Alaskan Native	5345	482.85	46.46	36	28	32	4
Asian or Pacific Islander	1767	553.91	62.84	6	11	46	37
Special Program Membership							
Title 1	11108	495.37	51.17	27	26	40	7
English Learner Program	12103	476.16	43.33	40	30	28	2
Special Education	6440	464.57	48.80	56	22	19	3
Grade 7							
Total	77084	539.32	54.28	16	20	52	13
Ethnic Background							
White (Not Hispanic)	36219	559.47	52.60	7	13	60	20
Black or African American	3897	521.56	49.34	22	25	47	6
Hispanic or Latino	29593	520.85	47.59	23	26	46	5
American Indian or Alaskan Native	5467	509.41	44.76	30	30	37	3
Asian or Pacific Islander	1640	573.43	59.37	5	12	52	31
Special Program Membership							
Title 1	10382	519.07	47.36	24	27	44	5
English Learner Program	11467	500.52	41.42	36	32	30	2
Special Education	6215	488.46	44.92	53	24	21	2
Grade 8							
Total	75599	552.01	58.62	22	19	48	12
Ethnic Background							
White (Not Hispanic)	36720	572.28	56.57	11	14	56	19
Black or African American	3825	530.15	51.81	32	23	40	5
Hispanic or Latino	27737	531.66	52.42	32	23	40	5
American Indian or Alaskan Native	5379	523.62	48.76	36	25	35	4
Asian or Pacific Islander	1694	591.07	62.54	8	10	51	31
Special Program Membership							
Title 1	10290	530.47	51.12	32	25	39	5
English Learner Program	10556	511.48	45.99	47	24	26	2
Special Education	5677	495.33	47.78	63	18	17	2

Note. FFBS= Falls Far Below the Standard; AS= Approaches the Standard; MS= Meets the Standard; ES= Exceeds the Standard. Students with no valid attempt, invalidation, off-grade, or a non-standard accommodation are not included in this summary. In addition, home-schooled students and students attending Bureau of Indian Affairs schools are not included in this summary. These results are not final results and are presented here for purposes of addressing reliability and validity. These results should not be used for accountability purposes.

Table 8.1.1.2
2005 Spring AIMS State Test Results
Mathematics CRT High School

		Scale Score		% at Performance Level			
	N	M	SD	FFBS	AS	MS	ES
Grade 10							
Total	66788	704.70	46.06	22	12	49	17
Ethnic Background							
White (Not Hispanic)	34360	720.16	45.36	11	8	55	25
Black or African American	3263	689.00	39.19	31	15	46	8
Hispanic or Latino	22303	686.59	38.59	34	16	44	7
American Indian or Alaskan Native	4762	679.76	35.53	41	18	37	4
Asian or Pacific Islander	1761	734.26	53.53	10	7	46	37
Special Program Membership							
Title 1	6451	677.97	36.75	43	17	36	5
English Learner Program	5419	668.74	31.31	54	18	26	2
Special Education	3459	659.42	32.81	66	12	20	2
Grade 11 (retake)							
Total	27209	685.99	32.40	28	16	53	3
Ethnic Background							
White (Not Hispanic)	10127	694.84	33.24	19	13	64	5
Black or African American	1758	682.76	31.55	30	16	51	2
Hispanic or Latino	11970	680.51	30.42	34	18	47	1
American Indian or Alaskan Native	2692	677.55	28.21	38	19	42	1
Asian or Pacific Islander	508	698.83	38.85	21	12	58	9
Special Program Membership							
Title 1	3594	675.01	29.69	41	19	39	1
English Learner Program	3306	671.22	27.68	46	20	34	0
Special Education	2058	657.25	28.57	67	12	20	0
Grade 12 (retake)							
Total	10191	664.70	29.73	55	18	26	1
Ethnic Background							
White (Not Hispanic)	2877	666.97	34.21	52	16	30	1
Black or African American	529	658.63	29.34	67	13	19	1
Hispanic or Latino	4900	662.28	27.69	59	18	22	0
American Indian or Alaskan Native	1681	668.95	25.45	47	22	31	0
Asian or Pacific Islander	142	674.63	34.43	42	18	39	1
Special Program Membership							
Title 1	2236	664.87	27.82	55	19	26	0
English Learner Program	1379	661.21	25.77	60	20	20	0
Special Education	776	642.84	21.61	88	7	6	0

Note. FFBS= Falls Far Below the Standard; AS= Approaches the Standard; MS= Meets the Standard; ES= Exceeds the Standard. Students with no valid attempt, invalidation, off-grade, or a non-standard accommodation are not included in this summary. In addition, home-schooled students, students attending Bureau of Indian Affairs schools, and students who already met expectations in a previous test administration are not included in this summary. These results are not final results and are presented here for purposes of addressing reliability and validity. These results should not be used for accountability purposes. High school results are not on the same scale as grade 3-8 results.

Table 8.1.1.3
2005 Spring AIMS State Test Results
Reading CRT Grades 3-8

		Scale Score		% at Performance Level			
	N	M	SD	FFBS	AS	MS	ES
Grade 3							
Total	77047	448.29	51.03	10	26	55	10
Ethnic Background							
White (Not Hispanic)	34863	469.19	47.07	4	15	64	17
Black or African American	3881	437.54	48.58	12	30	52	5
Hispanic or Latino	31458	429.10	46.91	15	35	46	4
American Indian or Alaskan Native	4758	422.40	43.08	16	41	41	2
Asian or Pacific Islander	1874	471.17	47.60	4	15	63	19
Special Program Membership							
Title 1	11894	430.50	46.83	14	35	46	4
English Learner Program	15373	412.22	41.59	22	43	33	1
Special Education	6626	417.82	52.88	27	34	34	5
Grade 4							
Total	75685	468.70	53.56	12	24	54	9
Ethnic Background							
White (Not Hispanic)	34685	490.96	50.92	5	15	65	16
Black or African American	3749	455.04	49.57	16	30	49	5
Hispanic or Latino	30427	447.97	47.45	19	33	45	3
American Indian or Alaskan Native	4703	441.07	42.27	20	39	39	2
Asian or Pacific Islander	1930	491.26	51.16	5	15	63	17
Special Program Membership							
Title 1	11563	449.42	47.72	19	32	45	4
English Learner Program	13625	427.07	39.55	31	41	27	1
Special Education	7077	433.61	51.68	34	31	31	4
Grade 5							
Total	76379	486.68	48.19	10	24	58	9
Ethnic Background							
White (Not Hispanic)	35031	506.57	44.57	4	14	68	15
Black or African American	3874	476.12	45.58	13	28	54	5
Hispanic or Latino	30417	468.37	43.74	16	32	48	3
American Indian or Alaskan Native	5088	460.28	39.80	18	40	40	2
Asian or Pacific Islander	1804	508.34	48.49	4	13	66	17
Special Program Membership							
Title 1	11605	469.25	43.79	16	33	48	3
English Learner Program	13556	448.30	36.96	27	43	30	1
Special Education	6922	449.65	45.81	33	34	30	2

Note. FFBS= Falls Far Below the Standard; AS= Approaches the Standard; MS= Meets the Standard; ES= Exceeds the Standard. Students with no valid attempt, invalidation, off-grade, or a non-standard accommodation are not included in this summary. In addition, home-schooled students and students attending Bureau of Indian Affairs schools are not included in this summary. These results are not final results and are presented here for purposes of addressing reliability and validity. These results should not be used for accountability purposes.

(table continues)

Table 8.1.1.3 (continued)
2005 Spring AIMS State Test Results
Reading CRT

		Scale Score		% at Performance Level			
	N	M	SD	FFBS	AS	MS	ES
Grade 6							
Total	75940	494.22	49.30	12	25	57	7
Ethnic Background							
White (Not Hispanic)	35272	514.30	46.09	5	15	68	12
Black or African American	3936	482.35	45.78	15	29	53	3
Hispanic or Latino	29377	475.38	44.41	18	33	46	2
American Indian or Alaskan Native	5356	466.99	39.42	20	41	38	1
Asian or Pacific Islander	1762	517.97	49.40	4	16	66	15
Special Program Membership							
Title 1	11066	477.83	44.50	17	33	47	3
English Learner Program	12051	453.35	36.80	31	43	26	0
Special Education	6444	450.84	43.12	39	36	24	1
Grade 7							
Total	77541	509.05	51.42	10	25	58	7
Ethnic Background							
White (Not Hispanic)	36483	529.54	48.29	4	15	69	12
Black or African American	3937	496.24	48.84	14	29	53	4
Hispanic or Latino	29693	488.98	46.12	16	34	48	2
American Indian or Alaskan Native	5505	484.95	42.90	17	37	45	1
Asian or Pacific Islander	1645	531.06	52.65	4	15	65	15
Special Program Membership							
Title 1	10427	490.65	45.92	15	34	49	3
English Learner Program	11482	464.52	38.80	29	44	26	0
Special Education	6585	462.59	44.76	37	37	24	1
Grade 8							
Total	76356	515.56	52.76	11	26	57	6
Ethnic Background							
White (Not Hispanic)	37129	534.81	50.24	5	17	68	10
Black or African American	3890	503.87	48.45	14	30	53	3
Hispanic or Latino	27931	495.31	47.37	18	35	45	2
American Indian or Alaskan Native	5464	489.49	43.18	19	39	40	1
Asian or Pacific Islander	1694	543.01	55.01	5	14	66	16
Special Program Membership							
Title 1	10387	497.75	46.68	16	35	47	2
English Learner Program	10622	471.55	38.90	31	44	24	0
Special Education	6379	464.92	42.85	41	37	21	1

Note. FFBS= Falls Far Below the Standard; AS= Approaches the Standard; MS= Meets the Standard; ES= Exceeds the Standard. Students with no valid attempt, invalidation, off-grade, or a non-standard accommodation are not included in this summary. In addition, home-schooled students and students attending Bureau of Indian Affairs schools are not included in this summary. These results are not final results and are presented here for purposes of addressing reliability and validity. These results should not be used for accountability purposes.

Table 8.1.1.4
2005 Spring AIMS State Test Results
Reading CRT High School

		Scale Score		% at Performance Level			
	N	M	SD	FFBS	AS	MS	ES
Grade 10							
Total	68788	699.75	50.35	8	21	63	8
Ethnic Background							
White (Not Hispanic)	35391	718.98	46.23	3	12	72	13
Black or African American	3347	687.30	45.42	9	27	60	4
Hispanic or Latino	22883	677.75	45.60	14	32	52	3
American Indian or Alaskan Native	5122	669.36	41.13	15	39	45	1
Asian or Pacific Islander	1689	719.09	50.15	3	13	68	16
Special Program Membership							
Title 1	8553	673.14	46.17	16	34	47	3
English Learner Program	5646	645.81	34.60	31	47	22	0
Special Education	4913	651.39	41.02	30	42	28	1
Grade 11 (Retest)							
Total	18204	669.18	43.55	15	39	43	3
Ethnic Background							
White (Not Hispanic)	5288	687.12	49.79	10	29	55	7
Black or African American	1119	665.20	40.36	16	39	44	1
Hispanic or Latino	9035	659.44	37.37	20	43	37	1
American Indian or Alaskan Native	2118	663.77	33.69	12	46	41	1
Asian or Pacific Islander	462	692.03	52.79	10	26	55	9
Special Program Membership							
Title 1	3758	656.69	37.08	21	45	34	0
English Learner Program	3299	646.20	32.86	28	50	22	0
Special Education	2422	644.76	34.08	31	48	22	0
Grade 12 (Retest)							
Total	8882	651.91	40.67	28	44	28	1
Ethnic Background							
White (Not Hispanic)	2147	662.24	49.97	25	36	35	3
Black or African American	465	650.23	38.60	27	44	28	0
Hispanic or Latino	4626	646.35	36.67	31	46	23	0
American Indian or Alaskan Native	1401	654.78	32.72	19	51	30	0
Asian or Pacific Islander	131	658.15	48.75	24	38	34	3
Special Program Membership							
Title 1	2455	648.24	37.57	30	45	25	0
English Learner Program	1463	637.17	31.14	38	49	13	0
Special Education	1023	632.38	34.63	48	40	12	0

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Table 8.1.1.5
2005 Spring AIMS State Test Results
Writing CRT Grades 3-8

		Scale Score		% at Performance Level			
	N	M	SD	FFBS	AS	MS	ES
Grade 3							
Total	77058	444.76	75.47	6	21	63	10
Ethnic Background							
White (Not Hispanic)	34929	462.73	67.03	3	15	67	14
Black or African American	3868	434.06	78.19	8	25	60	7
Hispanic or Latino	31397	427.31	78.80	9	27	59	5
American Indian or Alaskan Native	4781	426.31	76.65	9	26	61	4
Asian or Pacific Islander	1871	473.95	69.63	3	11	65	21
Special Program Membership							
Title 1	11898	429.53	78.39	8	26	60	6
English Learner Program	15341	411.06	81.67	12	32	54	2
Special Education	7048	396.85	85.57	16	39	41	4
Grade 4							
Total	76049	470.86	76.49	7	31	56	6
Ethnic Background							
White (Not Hispanic)	34763	489.14	69.59	4	24	63	9
Black or African American	3778	458.52	80.77	10	34	52	4
Hispanic or Latino	30676	452.64	78.38	10	37	50	2
American Indian or Alaskan Native	4712	453.43	74.87	9	39	50	2
Asian or Pacific Islander	1932	500.31	73.02	4	19	64	14
Special Program Membership							
Title 1	11632	454.31	78.29	10	36	51	3
English Learner Program	13734	430.61	81.50	15	45	39	1
Special Education	7546	414.38	86.92	23	47	28	2
Grade 5							
Total	76681	502.76	70.74	6	29	63	2
Ethnic Background							
White (Not Hispanic)	35113	520.70	61.71	3	21	72	4
Black or African American	3907	490.55	76.08	8	32	58	1
Hispanic or Latino	30571	484.89	74.28	9	36	55	1
American Indian or Alaskan Native	5127	485.93	70.13	8	38	54	1
Asian or Pacific Islander	1797	533.84	64.22	3	16	75	7
Special Program Membership							
Title 1	11707	485.70	74.21	9	36	55	1
English Learner Program	13663	461.14	77.63	14	47	40	0
Special Education	7319	442.84	80.81	21	51	28	0

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(table continues)

Table 8.1.1.5 (continued)
2005 Spring AIMS State Test Results
Writing CRT Grades 3-8

		Scale Score		% at Performance Level			
	N	M	SD	FFBS	AS	MS	ES
Grade 6							
Total	76125	525.89	65.43	4	26	66	3
Ethnic Background							
White (Not Hispanic)	35314	540.98	60.77	2	20	72	5
Black or African American	3946	516.24	66.09	6	31	61	2
Hispanic or Latino	29458	510.30	66.84	6	32	60	1
American Indian or Alaskan Native	5410	511.37	60.22	5	33	61	1
Asian or Pacific Islander	1761	552.82	65.09	2	16	72	9
Special Program Membership							
Title 1	11166	514.45	65.06	6	31	62	2
English Learner Program	12127	488.23	69.27	11	42	47	0
Special Education	6797	466.06	70.59	18	51	31	1
Grade 7							
Total	77537	543.12	61.26	3	18	77	2
Ethnic Background							
White (Not Hispanic)	36398	557.07	54.46	1	14	82	3
Black or African American	3929	538.33	61.58	4	20	75	1
Hispanic or Latino	29775	527.63	65.05	5	23	71	1
American Indian or Alaskan Native	5526	530.86	59.15	4	22	73	1
Asian or Pacific Islander	1636	571.20	55.17	1	10	81	8
Special Program Membership							
Title 1	10456	530.31	65.13	5	22	72	1
English Learner Program	11533	502.30	70.62	10	32	57	0
Special Education	6731	487.41	67.47	12	44	43	0
Grade 8							
Total	76227	548.41	66.65	4	18	77	2
Ethnic Background							
White (Not Hispanic)	37031	568.16	56.97	2	11	85	3
Black or African American	3879	537.37	69.01	5	22	72	1
Hispanic or Latino	27910	525.55	69.54	6	27	67	0
American Indian or Alaskan Native	5465	531.76	65.01	4	25	70	0
Asian or Pacific Islander	1693	578.09	64.92	2	9	82	7
Special Program Membership							
Title 1	10367	530.69	67.69	5	25	70	0
English Learner Program	10610	491.93	73.14	12	41	47	0
Special Education	6368	480.91	74.86	14	46	39	0

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Table 8.1.1.6
2005 Spring AIMS State Test Results
Writing CRT High School

		Scale Score		% at Performance Level			
	N	M	SD	FFBS	AS	MS	ES
Grade 10							
Total	68272	693.41	48.63	5	24	62	9
Ethnic Background							
White (Not Hispanic)	35139	708.08	41.47	2	16	70	13
Black or African American	3343	687.28	47.05	6	27	62	5
Hispanic or Latino	22722	675.93	50.55	9	33	54	4
American Indian or Alaskan Native	5036	669.41	47.69	9	42	47	2
Asian or Pacific Islander	1689	715.69	46.07	2	12	64	21
Special Program Membership							
Title 1	8439	669.95	50.64	10	39	48	3
English Learner Program	5579	638.26	52.47	24	51	25	0
Special Education	4755	640.26	51.56	24	50	25	1
Grade 11 (Retest)							
Total	15977	665.69	51.55	12	43	41	4
Ethnic Background							
White (Not Hispanic)	5642	683.13	51.20	7	34	51	8
Black or African American	880	665.41	45.88	10	45	43	3
Hispanic or Latino	7333	652.80	49.30	17	49	34	1
American Indian or Alaskan Native	1598	658.29	44.35	12	52	36	1
Asian or Pacific Islander	372	689.66	55.49	7	30	50	13
Special Program Membership							
Title 1	2975	649.75	48.16	17	52	31	1
English Learner Program	2776	633.26	48.32	26	55	19	0
Special Education	2286	634.32	47.89	25	56	19	0
Grade 12 (Retest)							
Total	7609	649.49	52.88	18	50	30	2
Ethnic Background							
White (Not Hispanic)	2035	662.78	58.67	15	41	39	5
Black or African American	386	647.52	49.35	18	53	28	1
Hispanic or Latino	3930	642.62	50.42	21	53	25	1
American Indian or Alaskan Native	1058	650.97	43.82	13	58	29	0
Asian or Pacific Islander	118	658.61	59.79	14	46	36	4
Special Program Membership							
Title 1	2006	643.17	50.27	20	53	26	1
English Learner Program	1254	622.36	48.10	32	56	12	0
Special Education	983	616.74	51.91	37	51	11	0

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Table 8.1.1.7
2005 Spring AIMS Frequency Distribution
Mathematics CRT Grade 3

Scale Score	Freq.	%	Cum. Freq.	Cum. %	Scale Score	Freq.	%	Cum. Freq.	Cum. %
200	3	0.00	3	0.00	411	1398	1.81	19547	25.24
226	4	0.01	7	0.01	414	1511	1.95	21058	27.19
245	2	0.00	9	0.01	417	1482	1.91	22540	29.11
270	1	0.00	10	0.01	420	1494	1.93	24034	31.03
279	1	0.00	11	0.01	423	1561	2.02	25595	33.05
287	1	0.00	12	0.02	426	1655	2.14	27250	35.19
294	1	0.00	13	0.02	429	1735	2.24	28985	37.43
300	4	0.01	17	0.02	432	1757	2.27	30742	39.70
306	5	0.01	22	0.03	435	1916	2.47	32658	42.17
312	11	0.01	33	0.04	439	1937	2.50	34595	44.67
317	15	0.02	48	0.06	442	2014	2.60	36609	47.27
321	23	0.03	71	0.09	445	2142	2.77	38751	50.04
326	45	0.06	116	0.15	449	2120	2.74	40871	52.78
330	67	0.09	183	0.24	452	2195	2.83	43066	55.61
334	83	0.11	266	0.34	456	2319	2.99	45385	58.60
338	130	0.17	396	0.51	460	2317	2.99	47702	61.60
342	155	0.20	551	0.71	464	2368	3.06	50070	64.65
345	229	0.30	780	1.01	468	2418	3.12	52488	67.78
349	279	0.36	1059	1.37	472	2404	3.10	54892	70.88
352	333	0.43	1392	1.80	477	2380	3.07	57272	73.95
356	405	0.52	1797	2.32	481	2486	3.21	59758	77.16
359	436	0.56	2233	2.88	486	2444	3.16	62202	80.32
362	523	0.68	2756	3.56	492	2272	2.93	64474	83.25
365	591	0.76	3347	4.32	498	2281	2.95	66755	86.20
368	632	0.82	3979	5.14	505	2189	2.83	68944	89.03
371	715	0.92	4694	6.06	512	1929	2.49	70873	91.52
374	769	0.99	5463	7.05	521	1827	2.36	72700	93.88
377	800	1.03	6263	8.09	531	1557	2.01	74257	95.89
380	827	1.07	7090	9.16	544	1352	1.75	75609	97.63
383	911	1.18	8001	10.33	562	976	1.26	76585	98.89
386	922	1.19	8923	11.52	592	600	0.77	77185	99.67
389	993	1.28	9916	12.80	650	258	0.33	77443	100.00
392	1063	1.37	10979	14.18					
394	1091	1.41	12070	15.59					
397	1151	1.49	13221	17.07					
400	1170	1.51	14391	18.58					
403	1231	1.59	15622	20.17					
406	1241	1.60	16863	21.77					
409	1286	1.66	18149	23.44					

Note. Freq.=Frequency; Cum.=Cumulative. Students with no valid attempt, invalidation, off-grade, or a non-standard accommodation are not included in this summary. In addition, home-schooled students and students attending Bureau of Indian Affairs schools are not included in this summary.

Table 8.1.1.8
2005 Spring AIMS Frequency Distribution
Mathematics CRT Grade 4

Scale Score	Freq.	%	Cum. Freq.	Cum. %	Scale Score	Freq.	%	Cum. Freq.	Cum. %
230	3	0.00	3	0.00	440	1364	1.79	20082	26.37
246	4	0.01	7	0.01	443	1386	1.82	21468	28.19
265	1	0.00	8	0.01	446	1539	2.02	23007	30.21
279	1	0.00	9	0.01	450	1529	2.01	24536	32.22
300	1	0.00	10	0.01	453	1562	2.05	26098	34.27
315	1	0.00	11	0.01	456	1698	2.23	27796	36.50
321	6	0.01	17	0.02	460	1769	2.32	29565	38.82
327	6	0.01	23	0.03	463	1844	2.42	31409	41.25
333	12	0.02	35	0.05	467	1955	2.57	33364	43.81
338	19	0.02	54	0.07	470	2048	2.69	35412	46.50
343	46	0.06	100	0.13	474	2156	2.83	37568	49.33
347	70	0.09	170	0.22	478	2263	2.97	39831	52.30
351	92	0.12	262	0.34	482	2262	2.97	42093	55.27
356	131	0.17	393	0.52	486	2373	3.12	44466	58.39
360	165	0.22	558	0.73	491	2477	3.25	46943	61.64
363	245	0.32	803	1.05	495	2582	3.39	49525	65.03
367	275	0.36	1078	1.42	500	2662	3.50	52187	68.53
371	346	0.45	1424	1.87	506	2846	3.74	55033	72.27
374	378	0.50	1802	2.37	511	2821	3.70	57854	75.97
378	457	0.60	2259	2.97	517	2842	3.73	60696	79.70
381	441	0.58	2700	3.55	524	2851	3.74	63547	83.45
384	566	0.74	3266	4.29	531	2686	3.53	66233	86.97
388	572	0.75	3838	5.04	539	2471	3.24	68704	90.22
391	614	0.81	4452	5.85	549	2264	2.97	70968	93.19
394	587	0.77	5039	6.62	560	1927	2.53	72895	95.72
397	703	0.92	5742	7.54	574	1506	1.98	74401	97.70
400	743	0.98	6485	8.52	594	1035	1.36	75436	99.06
403	778	1.02	7263	9.54	626	538	0.71	75974	99.77
407	873	1.15	8136	10.68	675	178	0.23	76152	100.00
410	871	1.14	9007	11.83					
413	924	1.21	9931	13.04					
416	1009	1.32	10940	14.37					
419	960	1.26	11900	15.63					
422	1040	1.37	12940	16.99					
425	1090	1.43	14030	18.42					
428	1088	1.43	15118	19.85					
431	1138	1.49	16256	21.35					
434	1218	1.60	17474	22.95					
437	1244	1.63	18718	24.58					

Note. Freq.=Frequency; Cum.=Cumulative. Students with no valid attempt, invalidation, off-grade, or a non-standard accommodation are not included in this summary. In addition, home-schooled students and students attending Bureau of Indian Affairs schools are not included in this summary.

Table 8.1.1.9
2005 Spring AIMS Frequency Distribution
Mathematics CRT Grade 5

Scale Score	Freq.	%	Cum. Freq.	Cum. %	Scale Score	Freq.	%	Cum. Freq.	Cum. %
255	1	0.00	1	0.00	470	1481	1.93	23652	30.83
264	3	0.00	4	0.01	473	1521	1.98	25173	32.81
293	2	0.00	6	0.01	476	1552	2.02	26725	34.83
334	1	0.00	7	0.01	479	1575	2.05	28300	36.89
343	2	0.00	9	0.01	482	1576	2.05	29876	38.94
350	2	0.00	11	0.01	485	1793	2.34	31669	41.28
357	4	0.01	15	0.02	489	1762	2.30	33431	43.58
363	5	0.01	20	0.03	492	1860	2.42	35291	46.00
368	17	0.02	37	0.05	495	1914	2.49	37205	48.50
373	24	0.03	61	0.08	499	1950	2.54	39155	51.04
378	44	0.06	105	0.14	502	2024	2.64	41179	53.68
382	82	0.11	187	0.24	506	2084	2.72	43263	56.39
386	93	0.12	280	0.36	510	2148	2.80	45411	59.19
390	173	0.23	453	0.59	514	2160	2.82	47571	62.01
394	205	0.27	658	0.86	518	2305	3.00	49876	65.01
398	297	0.39	955	1.24	522	2291	2.99	52167	68.00
402	332	0.43	1287	1.68	527	2467	3.22	54634	71.21
405	439	0.57	1726	2.25	532	2376	3.10	57010	74.31
409	512	0.67	2238	2.92	538	2485	3.24	59495	77.55
412	594	0.77	2832	3.69	544	2405	3.13	61900	80.68
415	595	0.78	3427	4.47	550	2467	3.22	64367	83.90
418	669	0.87	4096	5.34	558	2432	3.17	66799	87.07
421	714	0.93	4810	6.27	566	2397	3.12	69196	90.19
424	770	1.00	5580	7.27	576	2273	2.96	71469	93.16
427	882	1.15	6462	8.42	589	1938	2.53	73407	95.68
430	853	1.11	7315	9.53	607	1586	2.07	74993	97.75
433	924	1.20	8239	10.74	636	1165	1.52	76158	99.27
436	1002	1.31	9241	12.05	700	561	0.73	76719	100.00
439	957	1.25	10198	13.29					
442	1016	1.32	11214	14.62					
445	1028	1.34	12242	15.96					
447	1144	1.49	13386	17.45					
450	1139	1.48	14525	18.93					
453	1170	1.53	15695	20.46					
456	1185	1.54	16880	22.00					
459	1276	1.66	18156	23.67					
462	1257	1.64	19413	25.30					
464	1343	1.75	20756	27.05					
467	1415	1.84	22171	28.90					

Note. Freq.=Frequency; Cum.=Cumulative. Students with no valid attempt, invalidation, off-grade, or a non-standard accommodation are not included in this summary. In addition, home-schooled students and students attending Bureau of Indian Affairs schools are not included in this summary.

Table 8.1.1.10
2005 Spring AIMS Frequency Distribution
Mathematics CRT Grade 6

Scale Score	Freq.	%	Cum. Freq.	Cum. %	Scale Score	Freq.	%	Cum. Freq.	Cum. %
270	5	0.01	5	0.01	487	1496	1.97	26063	34.35
292	5	0.01	10	0.01	491	1544	2.03	27607	36.38
311	3	0.00	13	0.02	494	1571	2.07	29178	38.45
326	1	0.00	14	0.02	497	1649	2.17	30827	40.62
347	1	0.00	15	0.02	501	1701	2.24	32528	42.87
355	1	0.00	16	0.02	504	1758	2.32	34286	45.18
362	4	0.01	20	0.03	507	1722	2.27	36008	47.45
369	8	0.01	28	0.04	511	1786	2.35	37794	49.80
375	21	0.03	49	0.06	515	1946	2.56	39740	52.37
381	39	0.05	88	0.12	519	1918	2.53	41658	54.90
386	48	0.06	136	0.18	523	1955	2.58	43613	57.47
391	94	0.12	230	0.30	527	1936	2.55	45549	60.02
396	135	0.18	365	0.48	531	2171	2.86	47720	62.89
400	191	0.25	556	0.73	535	2209	2.91	49929	65.80
404	272	0.36	828	1.09	540	2211	2.91	52140	68.71
409	324	0.43	1152	1.52	545	2315	3.05	54455	71.76
413	472	0.62	1624	2.14	550	2310	3.04	56765	74.80
416	527	0.69	2151	2.83	556	2339	3.08	59104	77.89
420	617	0.81	2768	3.65	562	2272	2.99	61376	80.88
424	692	0.91	3460	4.56	568	2360	3.11	63736	83.99
427	704	0.93	4164	5.49	576	2243	2.96	65979	86.95
431	804	1.06	4968	6.55	584	2199	2.90	68178	89.85
434	843	1.11	5811	7.66	594	2048	2.70	70226	92.54
437	899	1.18	6710	8.84	605	1766	2.33	71992	94.87
441	1014	1.34	7724	10.18	620	1562	2.06	73554	96.93
444	975	1.28	8699	11.46	640	1213	1.60	74767	98.53
447	1018	1.34	9717	12.81	672	755	0.99	75522	99.52
450	1074	1.42	10791	14.22	725	362	0.48	75884	100.00
453	1089	1.44	11880	15.66					
456	1055	1.39	12935	17.05					
459	1091	1.44	14026	18.48					
463	1164	1.53	15190	20.02					
466	1144	1.51	16334	21.52					
469	1270	1.67	17604	23.20					
472	1332	1.76	18936	24.95					
475	1339	1.76	20275	26.72					
478	1435	1.89	21710	28.61					
481	1389	1.83	23099	30.44					
484	1468	1.93	24567	32.37					

Note. Freq.=Frequency; Cum.=Cumulative. Students with no valid attempt, invalidation, off-grade, or a non-standard accommodation are not included in this summary. In addition, home-schooled students and students attending Bureau of Indian Affairs schools are not included in this summary.

Table 8.1.1.11
2005 Spring AIMS Frequency Distribution
Mathematics CRT Grade 7

Scale Score	Freq.	%	Cum. Freq.	Cum. %	Scale Score	Freq.	%	Cum. Freq.	Cum. %
290	9	0.01	9	0.01	518	1707	2.21	28887	37.47
321	4	0.01	13	0.02	521	1746	2.27	30633	39.74
354	1	0.00	14	0.02	525	1794	2.33	32427	42.07
383	2	0.00	16	0.02	528	1849	2.40	34276	44.47
390	4	0.01	20	0.03	531	2020	2.62	36296	47.09
396	6	0.01	26	0.03	535	1902	2.47	38198	49.55
402	24	0.03	50	0.06	538	2115	2.74	40313	52.30
408	30	0.04	80	0.10	542	2074	2.69	42387	54.99
413	40	0.05	120	0.16	546	2129	2.76	44516	57.75
418	82	0.11	202	0.26	550	2205	2.86	46721	60.61
422	129	0.17	331	0.43	554	2264	2.94	48985	63.55
427	205	0.27	536	0.70	558	2223	2.88	51208	66.43
431	234	0.30	770	1.00	563	2274	2.95	53482	69.38
435	311	0.40	1081	1.40	567	2316	3.00	55798	72.39
439	427	0.55	1508	1.96	572	2311	3.00	58109	75.38
442	493	0.64	2001	2.60	578	2412	3.13	60521	78.51
446	512	0.66	2513	3.26	583	2305	2.99	62826	81.50
450	620	0.80	3133	4.06	590	2241	2.91	65067	84.41
453	679	0.88	3812	4.95	597	2286	2.97	67353	87.38
456	714	0.93	4526	5.87	605	2117	2.75	69470	90.12
460	798	1.04	5324	6.91	614	1929	2.50	71399	92.62
463	875	1.14	6199	8.04	625	1843	2.39	73242	95.02
466	884	1.15	7083	9.19	638	1551	2.01	74793	97.03
469	895	1.16	7978	10.35	657	1190	1.54	75983	98.57
472	969	1.26	8947	11.61	688	773	1.00	76756	99.57
475	980	1.27	9927	12.88	740	328	0.43	77084	100.00
479	1006	1.31	10933	14.18					
482	1065	1.38	11998	15.56					
485	1140	1.48	13138	17.04					
488	1183	1.53	14321	18.58					
491	1204	1.56	15525	20.14					
494	1271	1.65	16796	21.79					
497	1330	1.73	18126	23.51					
500	1353	1.76	19479	25.27					
503	1440	1.87	20919	27.14					
506	1454	1.89	22373	29.02					
509	1530	1.98	23903	31.01					
512	1602	2.08	25505	33.09					
515	1675	2.17	27180	35.26					

Note. Freq.=Frequency; Cum.=Cumulative. Students with no valid attempt, invalidation, off-grade, or a non-standard accommodation are not included in this summary. In addition, home-schooled students and students attending Bureau of Indian Affairs schools are not included in this summary.

Table 8.1.1.12
2005 Spring AIMS Frequency Distribution
Mathematics CRT Grade 8

Scale Score	Freq.	%	Cum. Freq.	Cum. %	Scale Score	Freq.	%	Cum. Freq.	Cum. %
300	2	0.00	2	0.00	544	1856	2.46	35849	47.42
381	2	0.00	4	0.01	548	1932	2.56	37781	49.98
390	5	0.01	9	0.01	552	1973	2.61	39754	52.59
398	8	0.01	17	0.02	556	2048	2.71	41802	55.29
405	20	0.03	37	0.05	561	2071	2.74	43873	58.03
411	45	0.06	82	0.11	565	2128	2.81	46001	60.85
417	66	0.09	148	0.20	569	2150	2.84	48151	63.69
423	121	0.16	269	0.36	574	2255	2.98	50406	66.68
428	147	0.19	416	0.55	579	2322	3.07	52728	69.75
433	242	0.32	658	0.87	584	2330	3.08	55058	72.83
437	320	0.42	978	1.29	590	2294	3.03	57352	75.86
442	398	0.53	1376	1.82	595	2341	3.10	59693	78.96
446	452	0.60	1828	2.42	601	2285	3.02	61978	81.98
451	599	0.79	2427	3.21	608	2238	2.96	64216	84.94
455	610	0.81	3037	4.02	615	2073	2.74	66289	87.69
459	730	0.97	3767	4.98	623	1938	2.56	68227	90.25
462	725	0.96	4492	5.94	632	1827	2.42	70054	92.67
466	865	1.14	5357	7.09	643	1630	2.16	71684	94.82
470	876	1.16	6233	8.24	655	1371	1.81	73055	96.63
474	980	1.30	7213	9.54	670	1082	1.43	74137	98.07
477	938	1.24	8151	10.78	691	794	1.05	74931	99.12
481	1004	1.33	9155	12.11	726	477	0.63	75408	99.75
484	1080	1.43	10235	13.54	800	191	0.25	75599	100.00
488	1066	1.41	11301	14.95					
491	1185	1.57	12486	16.52					
495	1174	1.55	13660	18.07					
498	1274	1.69	14934	19.75					
501	1350	1.79	16284	21.54					
505	1361	1.80	17645	23.34					
508	1316	1.74	18961	25.08					
512	1482	1.96	20443	27.04					
515	1514	2.00	21957	29.04					
519	1589	2.10	23546	31.15					
522	1597	2.11	25143	33.26					
526	1708	2.26	26851	35.52					
529	1679	2.22	28530	37.74					
533	1818	2.40	30348	40.14					
537	1832	2.42	32180	42.57					
540	1813	2.40	33993	44.96					

Note. Freq.=Frequency; Cum.=Cumulative. Students with no valid attempt, invalidation, off-grade, or a non-standard accommodation are not included in this summary. In addition, home-schooled students and students attending Bureau of Indian Affairs schools are not included in this summary.

Table 8.1.1.13
2005 Spring AIMS Frequency Distribution
Mathematics CRT Grade 10

Scale Score	Freq.	%	Cum. Freq.	Cum. %	Scale Score	Freq.	%	Cum. Freq.	Cum. %
522	1	0.00	1	0.00	675	953	1.43	19465	29.14
548	1	0.00	2	0.00	677	1015	1.52	20480	30.66
564	1	0.00	3	0.00	679	1069	1.60	21549	32.26
586	2	0.00	5	0.01	681	1024	1.53	22573	33.80
590	1	0.00	6	0.01	683	1027	1.54	23600	35.34
594	3	0.00	9	0.01	685	1102	1.65	24702	36.99
598	4	0.01	13	0.02	687	1047	1.57	25749	38.55
601	9	0.01	22	0.03	689	1144	1.71	26893	40.27
604	23	0.03	45	0.07	691	1134	1.70	28027	41.96
608	50	0.07	95	0.14	693	1165	1.74	29192	43.71
611	66	0.10	161	0.24	695	1219	1.83	30411	45.53
613	79	0.12	240	0.36	697	1240	1.86	31651	47.39
616	120	0.18	360	0.54	700	1267	1.90	32918	49.29
619	159	0.24	519	0.78	702	1248	1.87	34166	51.16
621	223	0.33	742	1.11	704	1276	1.91	35442	53.07
624	298	0.45	1040	1.56	706	1373	2.06	36815	55.12
626	362	0.54	1402	2.10	709	1345	2.01	38160	57.14
629	401	0.60	1803	2.70	711	1376	2.06	39536	59.20
631	454	0.68	2257	3.38	714	1412	2.11	40948	61.31
633	536	0.80	2793	4.18	716	1299	1.94	42247	63.26
636	540	0.81	3333	4.99	719	1369	2.05	43616	65.31
638	601	0.90	3934	5.89	722	1440	2.16	45056	67.46
640	656	0.98	4590	6.87	725	1421	2.13	46477	69.59
642	678	1.02	5268	7.89	728	1438	2.15	47915	71.74
644	637	0.95	5905	8.84	731	1484	2.22	49399	73.96
646	724	1.08	6629	9.93	734	1500	2.25	50899	76.21
648	738	1.10	7367	11.03	738	1417	2.12	52316	78.33
650	733	1.10	8100	12.13	741	1536	2.30	53852	80.63
652	791	1.18	8891	13.31	745	1552	2.32	55404	82.96
654	769	1.15	9660	14.46	750	1486	2.22	56890	85.18
656	808	1.21	10468	15.67	755	1485	2.22	58375	87.40
658	830	1.24	11298	16.92	760	1470	2.20	59845	89.60
660	811	1.21	12109	18.13	766	1392	2.08	61237	91.69
662	820	1.23	12929	19.36	773	1351	2.02	62588	93.71
664	907	1.36	13836	20.72	782	1260	1.89	63848	95.60
666	903	1.35	14739	22.07	792	1146	1.72	64994	97.31
668	896	1.34	15635	23.41	807	866	1.30	65860	98.61
670	939	1.41	16574	24.82	832	622	0.93	66482	99.54
672	1002	1.50	17576	26.32	900	306	0.46	66788	100.00
673	936	1.40	18512	27.72					

Note. Freq.=Frequency; Cum.=Cumulative. Students with no valid attempt, invalidation, off-grade, or a non-standard accommodation are not included in this summary. In addition, home-schooled students, students attending Bureau of Indian Affairs schools, and students who met expectations in a previous administration are not included in this summary.

Table 8.1.1.14
2005 Spring AIMS Frequency Distribution
Mathematics CRT Grade 11

Scale Score	Freq.	%	Cum. Freq.	Cum. %	Scale Score	Freq.	%	Cum. Freq.	Cum. %
522	1	0.00	1	0.00	672	528	1.94	9207	33.84
548	3	0.01	4	0.01	673	536	1.97	9743	35.81
557	1	0.00	5	0.02	675	553	2.03	10296	37.84
564	1	0.00	6	0.02	677	563	2.07	10859	39.91
571	1	0.00	7	0.03	679	548	2.01	11407	41.92
576	1	0.00	8	0.03	681	638	2.34	12045	44.27
581	1	0.00	9	0.03	683	636	2.34	12681	46.61
590	1	0.00	10	0.04	685	655	2.41	13336	49.01
594	6	0.02	16	0.06	687	669	2.46	14005	51.47
598	3	0.01	19	0.07	689	626	2.30	14631	53.77
601	10	0.04	29	0.11	691	718	2.64	15349	56.41
604	14	0.05	43	0.16	693	700	2.57	16049	58.98
608	19	0.07	62	0.23	695	751	2.76	16800	61.74
611	29	0.11	91	0.33	697	703	2.58	17503	64.33
613	43	0.16	134	0.49	700	763	2.80	18266	67.13
616	76	0.28	210	0.77	702	685	2.52	18951	69.65
619	112	0.41	322	1.18	704	721	2.65	19672	72.30
621	111	0.41	433	1.59	706	703	2.58	20375	74.88
624	163	0.60	596	2.19	709	742	2.73	21117	77.61
626	171	0.63	767	2.82	711	668	2.46	21785	80.07
629	220	0.81	987	3.63	714	621	2.28	22406	82.35
631	251	0.92	1238	4.55	716	613	2.25	23019	84.60
633	261	0.96	1499	5.51	719	575	2.11	23594	86.71
636	316	1.16	1815	6.67	722	516	1.90	24110	88.61
638	326	1.20	2141	7.87	725	481	1.77	24591	90.38
640	302	1.11	2443	8.98	728	456	1.68	25047	92.05
642	333	1.22	2776	10.20	731	367	1.35	25414	93.40
644	354	1.30	3130	11.50	734	331	1.22	25745	94.62
646	360	1.32	3490	12.83	738	292	1.07	26037	95.69
648	336	1.23	3826	14.06	741	245	0.90	26282	96.59
650	397	1.46	4223	15.52	745	202	0.74	26484	97.34
652	358	1.32	4581	16.84	750	162	0.60	26646	97.93
654	409	1.50	4990	18.34	755	139	0.51	26785	98.44
656	414	1.52	5404	19.86	760	117	0.43	26902	98.87
658	421	1.55	5825	21.41	766	76	0.28	26978	99.15
660	404	1.48	6229	22.89	773	73	0.27	27051	99.42
662	479	1.76	6708	24.65	782	55	0.20	27106	99.62
664	493	1.81	7201	26.47	792	45	0.17	27151	99.79
666	466	1.71	7667	28.18	807	33	0.12	27184	99.91
668	485	1.78	8152	29.96	832	18	0.07	27202	99.97
670	527	1.94	8679	31.90	900	7	0.03	27209	100.00

Note. Freq.=Frequency; Cum.=Cumulative. Students with no valid attempt, invalidation, off-grade, or a non-standard accommodation are not included in this summary. In addition, home-schooled students, students attending Bureau of Indian Affairs schools, and students who met expectations in a previous administration are not included in this summary.

Table 8.1.1.15
2005 Spring AIMS Frequency Distribution
Mathematics CRT Grade 12

Scale Score	Freq.	%	Cum. Freq.	Cum. %	Scale Score	Freq.	%	Cum. Freq.	Cum. %
500	3	0.03	3	0.03	673	197	1.93	6591	64.67
548	1	0.01	4	0.04	675	232	2.28	6823	66.95
564	1	0.01	5	0.05	677	224	2.20	7047	69.15
576	1	0.01	6	0.06	679	212	2.08	7259	71.23
586	1	0.01	7	0.07	681	213	2.09	7472	73.32
590	2	0.02	9	0.09	683	162	1.59	7634	74.91
594	2	0.02	11	0.11	685	176	1.73	7810	76.64
598	6	0.06	17	0.17	687	185	1.82	7995	78.45
601	12	0.12	29	0.28	689	190	1.86	8185	80.32
604	21	0.21	50	0.49	691	183	1.80	8368	82.11
608	29	0.28	79	0.78	693	159	1.56	8527	83.67
611	51	0.50	130	1.28	695	167	1.64	8694	85.31
613	57	0.56	187	1.83	697	140	1.37	8834	86.68
616	111	1.09	298	2.92	700	149	1.46	8983	88.15
619	108	1.06	406	3.98	702	133	1.31	9116	89.45
621	120	1.18	526	5.16	704	109	1.07	9225	90.52
624	187	1.83	713	7.00	706	141	1.38	9366	91.90
626	191	1.87	904	8.87	709	112	1.10	9478	93.00
629	209	2.05	1113	10.92	711	92	0.90	9570	93.91
631	200	1.96	1313	12.88	714	77	0.76	9647	94.66
633	247	2.42	1560	15.31	716	79	0.78	9726	95.44
636	284	2.79	1844	18.09	719	83	0.81	9809	96.25
638	273	2.68	2117	20.77	722	52	0.51	9861	96.76
640	281	2.76	2398	23.53	725	51	0.50	9912	97.26
642	256	2.51	2654	26.04	728	52	0.51	9964	97.77
644	259	2.54	2913	28.58	731	38	0.37	10002	98.15
646	247	2.42	3160	31.01	734	37	0.36	10039	98.51
648	261	2.56	3421	33.57	738	29	0.28	10068	98.79
650	249	2.44	3670	36.01	741	23	0.23	10091	99.02
652	286	2.81	3956	38.82	745	29	0.28	10120	99.30
654	241	2.36	4197	41.18	750	16	0.16	10136	99.46
656	229	2.25	4426	43.43	755	7	0.07	10143	99.53
658	251	2.46	4677	45.89	760	11	0.11	10154	99.64
660	228	2.24	4905	48.13	766	17	0.17	10171	99.80
662	255	2.50	5160	50.63	773	6	0.06	10177	99.86
664	242	2.37	5402	53.01	782	6	0.06	10183	99.92
666	249	2.44	5651	55.45	792	2	0.02	10185	99.94
668	270	2.65	5921	58.10	807	4	0.04	10189	99.98
670	246	2.41	6167	60.51	832	1	0.01	10190	99.99
672	227	2.23	6394	62.74	900	1	0.01	10191	100.00

Note. Freq.=Frequency; Cum.=Cumulative. Students with no valid attempt, invalidation, off-grade, or a non-standard accommodation are not included in this summary. In addition, home-schooled students, students attending Bureau of Indian Affairs schools, and students who met expectations in a previous administration are not included in this summary.

Table 8.1.1.16
2005 Spring AIMS Frequency Distribution
Reading CRT Grade 3

Scale Score	Freq.	%	Cum. Freq.	Cum. %	Scale Score	Freq.	%	Cum. Freq.	Cum. %
200	4	0.01	4	0.01	413	1466	1.90	20384	26.46
226	5	0.01	9	0.01	416	1559	2.02	21943	28.48
275	6	0.01	15	0.02	420	1714	2.22	23657	30.70
289	2	0.00	17	0.02	424	1723	2.24	25380	32.94
300	12	0.02	29	0.04	427	1771	2.30	27151	35.24
309	20	0.03	49	0.06	431	1878	2.44	29029	37.68
317	48	0.06	97	0.13	435	1991	2.58	31020	40.26
324	114	0.15	211	0.27	439	2116	2.75	33136	43.01
331	197	0.26	408	0.53	443	2141	2.78	35277	45.79
337	307	0.40	715	0.93	447	2253	2.92	37530	48.71
343	455	0.59	1170	1.52	451	2447	3.18	39977	51.89
348	571	0.74	1741	2.26	455	2554	3.31	42531	55.20
353	714	0.93	2455	3.19	460	2717	3.53	45248	58.73
358	854	1.11	3309	4.29	464	2687	3.49	47935	62.22
362	931	1.21	4240	5.50	469	3019	3.92	50954	66.13
367	1020	1.32	5260	6.83	475	3011	3.91	53965	70.04
371	1092	1.42	6352	8.24	480	2976	3.86	56941	73.90
375	1138	1.48	7490	9.72	486	3063	3.98	60004	77.88
379	1148	1.49	8638	11.21	492	3140	4.08	63144	81.96
383	1159	1.50	9797	12.72	499	3067	3.98	66211	85.94
387	1177	1.53	10974	14.24	507	2992	3.88	69203	89.82
391	1214	1.58	12188	15.82	516	2566	3.33	71769	93.15
395	1230	1.60	13418	17.42	527	2146	2.79	73915	95.93
398	1307	1.70	14725	19.11	540	1645	2.14	75560	98.07
402	1318	1.71	16043	20.82	558	962	1.25	76522	99.32
406	1384	1.80	17427	22.62	588	427	0.55	76949	99.87
409	1491	1.94	18918	24.55	640	98	0.13	77047	100.00

Note. Freq.=Frequency; Cum.=Cumulative. Students with no valid attempt, invalidation, off-grade, or a non-standard accommodation are not included in this summary. In addition, home-schooled students and students attending Bureau of Indian Affairs schools are not included in this summary.

Table 8.1.1.17
2005 Spring AIMS Frequency Distribution
Reading CRT Grade 4

Scale Score	Freq.	%	Cum. Freq.	Cum. %	Scale Score	Freq.	%	Cum. Freq.	Cum. %
220	11	0.01	11	0.01	427	1319	1.74	18633	24.62
265	12	0.02	23	0.03	431	1339	1.77	19972	26.39
292	3	0.00	26	0.03	434	1396	1.84	21368	28.23
308	4	0.01	30	0.04	437	1524	2.01	22892	30.25
320	6	0.01	36	0.05	440	1557	2.06	24449	32.30
330	12	0.02	48	0.06	444	1549	2.05	25998	34.35
338	19	0.03	67	0.09	447	1608	2.12	27606	36.47
345	56	0.07	123	0.16	451	1765	2.33	29371	38.81
351	96	0.13	219	0.29	454	1804	2.38	31175	41.19
357	204	0.27	423	0.56	458	1905	2.52	33080	43.71
362	298	0.39	721	0.95	462	2014	2.66	35094	46.37
367	393	0.52	1114	1.47	465	1973	2.61	37067	48.98
371	538	0.71	1652	2.18	469	2248	2.97	39315	51.95
375	674	0.89	2326	3.07	474	2323	3.07	41638	55.01
380	806	1.06	3132	4.14	478	2460	3.25	44098	58.27
383	883	1.17	4015	5.30	483	2667	3.52	46765	61.79
387	972	1.28	4987	6.59	488	2793	3.69	49558	65.48
391	1039	1.37	6026	7.96	493	2948	3.90	52506	69.37
394	1060	1.40	7086	9.36	499	3022	3.99	55528	73.37
398	1034	1.37	8120	10.73	506	3211	4.24	58739	77.61
401	1134	1.50	9254	12.23	513	3306	4.37	62045	81.98
405	1096	1.45	10350	13.68	521	3405	4.50	65450	86.48
408	1101	1.45	11451	15.13	531	3181	4.20	68631	90.68
411	1121	1.48	12572	16.61	544	2831	3.74	71462	94.42
415	1129	1.49	13701	18.10	561	2275	3.01	73737	97.43
418	1174	1.55	14875	19.65	588	1392	1.84	75129	99.27
421	1207	1.59	16082	21.25	660	556	0.73	75685	100.00
424	1232	1.63	17314	22.88					

Note. Freq.=Frequency; Cum.=Cumulative. Students with no valid attempt, invalidation, off-grade, or a non-standard accommodation are not included in this summary. In addition, home-schooled students and students attending Bureau of Indian Affairs schools are not included in this summary.

Table 8.1.1.18
2005 Spring AIMS Frequency Distribution
Reading CRT Grade 5

Scale Score	Freq.	%	Cum. Freq.	Cum. %	Scale Score	Freq.	%	Cum. Freq.	Cum. %
240	7	0.01	7	0.01	451	1473	1.93	19517	25.55
278	6	0.01	13	0.02	454	1503	1.97	21020	27.52
307	4	0.01	17	0.02	457	1527	2.00	22547	29.52
325	5	0.01	22	0.03	461	1596	2.09	24143	31.61
338	5	0.01	27	0.04	464	1658	2.17	25801	33.78
348	7	0.01	34	0.04	468	1756	2.30	27557	36.08
356	14	0.02	48	0.06	471	1900	2.49	29457	38.57
364	29	0.04	77	0.10	474	1935	2.53	31392	41.10
371	71	0.09	148	0.19	478	2062	2.70	33454	43.80
377	143	0.19	291	0.38	482	2193	2.87	35647	46.67
382	206	0.27	497	0.65	486	2295	3.00	37942	49.68
387	340	0.45	837	1.10	489	2336	3.06	40278	52.73
392	489	0.64	1326	1.74	494	2491	3.26	42769	56.00
397	634	0.83	1960	2.57	498	2675	3.50	45444	59.50
401	767	1.00	2727	3.57	502	2818	3.69	48262	63.19
405	853	1.12	3580	4.69	507	2892	3.79	51154	66.97
409	995	1.30	4575	5.99	512	3008	3.94	54162	70.91
413	972	1.27	5547	7.26	517	3189	4.18	57351	75.09
417	1154	1.51	6701	8.77	523	3144	4.12	60495	79.20
421	1116	1.46	7817	10.23	530	3227	4.22	63722	83.43
424	1181	1.55	8998	11.78	537	3154	4.13	66876	87.56
428	1199	1.57	10197	13.35	545	2880	3.77	69756	91.33
431	1244	1.63	11441	14.98	556	2543	3.33	72299	94.66
434	1279	1.67	12720	16.65	568	1906	2.50	74205	97.15
438	1324	1.73	14044	18.39	585	1325	1.73	75530	98.89
441	1313	1.72	15357	20.11	614	678	0.89	76208	99.78
444	1295	1.70	16652	21.80	675	171	0.22	76379	100.00
448	1392	1.82	18044	23.62					

Note. Freq.=Frequency; Cum.=Cumulative. Students with no valid attempt, invalidation, off-grade, or a non-standard accommodation are not included in this summary. In addition, home-schooled students and students attending Bureau of Indian Affairs schools are not included in this summary.

Table 8.1.1.19
2005 Spring AIMS Frequency Distribution
Reading CRT Grade 6

Scale Score	Freq.	%	Cum. Freq.	Cum. %	Scale Score	Freq.	%	Cum. Freq.	Cum. %
250	8	0.01	8	0.01	460	1668	2.20	20334	26.78
278	11	0.01	19	0.03	464	1731	2.28	22065	29.06
308	6	0.01	25	0.03	467	1802	2.37	23867	31.43
326	3	0.00	28	0.04	471	1879	2.47	25746	33.90
339	2	0.00	30	0.04	474	1908	2.51	27654	36.42
350	5	0.01	35	0.05	478	2039	2.69	29693	39.10
359	19	0.03	54	0.07	482	2156	2.84	31849	41.94
367	37	0.05	91	0.12	486	2138	2.82	33987	44.76
374	77	0.10	168	0.22	490	2226	2.93	36213	47.69
380	133	0.18	301	0.40	493	2327	3.06	38540	50.75
386	204	0.27	505	0.66	498	2433	3.20	40973	53.95
391	310	0.41	815	1.07	502	2548	3.36	43521	57.31
397	454	0.60	1269	1.67	506	2489	3.28	46010	60.59
401	588	0.77	1857	2.45	511	2697	3.55	48707	64.14
406	726	0.96	2583	3.40	515	2716	3.58	51423	67.72
411	831	1.09	3414	4.50	520	2877	3.79	54300	71.50
415	961	1.27	4375	5.76	526	2813	3.70	57113	75.21
419	1041	1.37	5416	7.13	531	2920	3.85	60033	79.05
423	1065	1.40	6481	8.53	538	2766	3.64	62799	82.70
427	1144	1.51	7625	10.04	544	2885	3.80	65684	86.49
431	1200	1.58	8825	11.62	552	2605	3.43	68289	89.92
435	1235	1.63	10060	13.25	561	2378	3.13	70667	93.06
438	1301	1.71	11361	14.96	571	2064	2.72	72731	95.77
442	1265	1.67	12626	16.63	584	1547	2.04	74278	97.81
446	1347	1.77	13973	18.40	602	1028	1.35	75306	99.17
449	1535	2.02	15508	20.42	631	464	0.61	75770	99.78
453	1524	2.01	17032	22.43	690	170	0.22	75940	100.00
456	1634	2.15	18666	24.58					

Note. Freq.=Frequency; Cum.=Cumulative. Students with no valid attempt, invalidation, off-grade, or a non-standard accommodation are not included in this summary. In addition, home-schooled students and students attending Bureau of Indian Affairs schools are not included in this summary.

Table 8.1.1.20
2005 Spring AIMS Frequency Distribution
Reading CRT Grade 7

Scale Score	Freq.	%	Cum. Freq.	Cum. %	Scale Score	Freq.	%	Cum. Freq.	Cum. %
260	10	0.01	10	0.01	472	1647	2.12	20028	25.83
286	9	0.01	19	0.02	475	1604	2.07	21632	27.90
317	1	0.00	20	0.03	479	1662	2.14	23294	30.04
350	3	0.00	23	0.03	483	1825	2.35	25119	32.39
361	10	0.01	33	0.04	486	1819	2.35	26938	34.74
370	17	0.02	50	0.06	490	1921	2.48	28859	37.22
378	40	0.05	90	0.12	494	1991	2.57	30850	39.79
385	71	0.09	161	0.21	498	2229	2.87	33079	42.66
392	146	0.19	307	0.40	502	2167	2.79	35246	45.45
398	239	0.31	546	0.70	506	2290	2.95	37536	48.41
403	354	0.46	900	1.16	510	2387	3.08	39923	51.49
408	506	0.65	1406	1.81	514	2550	3.29	42473	54.77
413	606	0.78	2012	2.59	519	2686	3.46	45159	58.24
418	777	1.00	2789	3.60	523	2757	3.56	47916	61.79
422	840	1.08	3629	4.68	528	2933	3.78	50849	65.58
427	994	1.28	4623	5.96	533	3058	3.94	53907	69.52
431	1061	1.37	5684	7.33	539	3088	3.98	56995	73.50
435	1076	1.39	6760	8.72	545	3125	4.03	60120	77.53
439	1152	1.49	7912	10.20	552	3037	3.92	63157	81.45
443	1220	1.57	9132	11.78	559	3166	4.08	66323	85.53
446	1176	1.52	10308	13.29	567	2891	3.73	69214	89.26
450	1252	1.61	11560	14.91	576	2699	3.48	71913	92.74
454	1239	1.60	12799	16.51	587	2207	2.85	74120	95.59
457	1285	1.66	14084	18.16	601	1622	2.09	75742	97.68
461	1432	1.85	15516	20.01	620	1098	1.42	76840	99.10
465	1439	1.86	16955	21.87	652	532	0.69	77372	99.78
468	1426	1.84	18381	23.70	720	169	0.22	77541	100.00

Note. Freq.=Frequency; Cum.=Cumulative. Students with no valid attempt, invalidation, off-grade, or a non-standard accommodation are not included in this summary. In addition, home-schooled students and students attending Bureau of Indian Affairs schools are not included in this summary.

Table 8.1.1.21
2005 Spring AIMS Frequency Distribution
Reading CRT Grade 8

Scale Score	Freq.	%	Cum. Freq.	Cum. %	Scale Score	Freq.	%	Cum. Freq.	Cum. %
270	6	0.01	6	0.01	482	1870	2.45	22087	28.93
302	2	0.00	8	0.01	486	2007	2.63	24094	31.55
324	1	0.00	9	0.01	490	2013	2.64	26107	34.19
340	2	0.00	11	0.01	494	2139	2.80	28246	36.99
353	3	0.00	14	0.02	499	2280	2.99	30526	39.98
363	6	0.01	20	0.03	503	2429	3.18	32955	43.16
373	23	0.03	43	0.06	507	2385	3.12	35340	46.28
381	39	0.05	82	0.11	512	2364	3.10	37704	49.38
388	103	0.13	185	0.24	517	2567	3.36	40271	52.74
395	144	0.19	329	0.43	521	2650	3.47	42921	56.21
402	278	0.36	607	0.79	526	2574	3.37	45495	59.58
408	365	0.48	972	1.27	531	2718	3.56	48213	63.14
413	480	0.63	1452	1.90	536	2755	3.61	50968	66.75
419	666	0.87	2118	2.77	542	2791	3.66	53759	70.41
424	767	1.00	2885	3.78	547	2851	3.73	56610	74.14
429	923	1.21	3808	4.99	553	2766	3.62	59376	77.76
434	1024	1.34	4832	6.33	560	2772	3.63	62148	81.39
439	1156	1.51	5988	7.84	567	2580	3.38	64728	84.77
443	1300	1.70	7288	9.54	574	2541	3.33	67269	88.10
448	1340	1.75	8628	11.30	582	2262	2.96	69531	91.06
452	1415	1.85	10043	13.15	591	2085	2.73	71616	93.79
457	1510	1.98	11553	15.13	602	1717	2.25	73333	96.04
461	1589	2.08	13142	17.21	615	1361	1.78	74694	97.82
465	1647	2.16	14789	19.37	630	855	1.12	75549	98.94
469	1693	2.22	16482	21.59	652	543	0.71	76092	99.65
473	1858	2.43	18340	24.02	688	227	0.30	76319	99.95
478	1877	2.46	20217	26.48	800	37	0.05	76356	100.00

Note. Freq.=Frequency; Cum.=Cumulative. Students with no valid attempt, invalidation, off-grade, or a non-standard accommodation are not included in this summary. In addition, home-schooled students and students attending Bureau of Indian Affairs schools are not included in this summary.

Table 8.1.1.22
2005 Spring AIMS Frequency Distribution
Reading CRT Grade 10

Scale Score	Freq.	%	Cum. Freq.	Cum. %	Scale Score	Freq.	%	Cum. Freq.	Cum. %
500	20	0.03	20	0.03	660	1231	1.79	15828	23.01
507	5	0.01	25	0.04	663	1286	1.87	17114	24.88
526	9	0.01	34	0.05	667	1372	1.99	18486	26.87
540	4	0.01	38	0.06	670	1528	2.22	20014	29.10
550	10	0.01	48	0.07	674	1541	2.24	21555	31.34
559	14	0.02	62	0.09	677	1737	2.53	23292	33.86
567	24	0.03	86	0.13	681	1761	2.56	25053	36.42
574	45	0.07	131	0.19	685	1856	2.70	26909	39.12
581	88	0.13	219	0.32	689	1996	2.90	28905	42.02
587	174	0.25	393	0.57	693	2117	3.08	31022	45.10
592	238	0.35	631	0.92	697	2280	3.31	33302	48.41
597	351	0.51	982	1.43	701	2416	3.51	35718	51.92
602	469	0.68	1451	2.11	706	2553	3.71	38271	55.64
606	609	0.89	2060	2.99	710	2535	3.69	40806	59.32
611	710	1.03	2770	4.03	715	2705	3.93	43511	63.25
615	801	1.16	3571	5.19	720	2760	4.01	46271	67.27
619	894	1.30	4465	6.49	726	2891	4.20	49162	71.47
623	865	1.26	5330	7.75	731	2880	4.19	52042	75.66
627	982	1.43	6312	9.18	738	2823	4.10	54865	79.76
631	932	1.35	7244	10.53	745	2874	4.18	57739	83.94
635	986	1.43	8230	11.96	753	2807	4.08	60546	88.02
638	973	1.41	9203	13.38	762	2554	3.71	63100	91.73
642	1048	1.52	10251	14.90	773	2139	3.11	65239	94.84
645	1032	1.50	11283	16.40	786	1681	2.44	66920	97.28
649	1072	1.56	12355	17.96	805	1158	1.68	68078	98.97
652	1032	1.50	13387	19.46	836	555	0.81	68633	99.77
656	1210	1.76	14597	21.22	900	155	0.23	68788	100.00

Note. Freq.=Frequency; Cum.=Cumulative. Students with no valid attempt, invalidation, off-grade, or a non-standard accommodation are not included in this summary. In addition, home-schooled students, students attending Bureau of Indian Affairs schools, and students who met expectations in a previous administration are not included in this summary.

Table 8.1.1.23
2005 Spring AIMS Frequency Distribution
Reading CRT Grade 11

Scale Score	Freq.	%	Cum. Freq.	Cum. %	Scale Score	Freq.	%	Cum. Freq.	Cum. %
500	12	0.07	12	0.07	660	552	3.03	7996	43.92
507	11	0.06	23	0.13	663	617	3.39	8613	47.31
526	2	0.01	25	0.14	667	586	3.22	9199	50.53
540	3	0.02	28	0.15	670	638	3.50	9837	54.04
550	7	0.04	35	0.19	674	685	3.76	10522	57.80
559	8	0.04	43	0.24	677	690	3.79	11212	61.59
567	21	0.12	64	0.35	681	657	3.61	11869	65.20
574	33	0.18	97	0.53	685	667	3.66	12536	68.86
581	66	0.36	163	0.90	689	669	3.68	13205	72.54
587	82	0.45	245	1.35	693	545	2.99	13750	75.53
592	136	0.75	381	2.09	697	593	3.26	14343	78.79
597	174	0.96	555	3.05	701	523	2.87	14866	81.66
602	290	1.59	845	4.64	706	461	2.53	15327	84.20
606	298	1.64	1143	6.28	710	406	2.23	15733	86.43
611	358	1.97	1501	8.25	715	345	1.90	16078	88.32
615	416	2.29	1917	10.53	720	311	1.71	16389	90.03
619	403	2.21	2320	12.74	726	301	1.65	16690	91.68
623	473	2.60	2793	15.34	731	247	1.36	16937	93.04
627	468	2.57	3261	17.91	738	223	1.23	17160	94.26
631	505	2.77	3766	20.69	745	204	1.12	17364	95.39
635	480	2.64	4246	23.32	753	196	1.08	17560	96.46
638	517	2.84	4763	26.16	762	169	0.93	17729	97.39
642	517	2.84	5280	29.00	773	160	0.88	17889	98.27
645	531	2.92	5811	31.92	786	147	0.81	18036	99.08
649	547	3.00	6358	34.93	805	103	0.57	18139	99.64
652	521	2.86	6879	37.79	836	51	0.28	18190	99.92
656	565	3.10	7444	40.89	900	14	0.08	18204	100.00

Note. Freq.=Frequency; Cum.=Cumulative. Students with no valid attempt, invalidation, off-grade, or a non-standard accommodation are not included in this summary. In addition, home-schooled students, students attending Bureau of Indian Affairs schools, and students who met expectations in a previous administration are not included in this summary.

Table 8.1.1.24
2005 Spring AIMS Frequency Distribution
Reading CRT Grade 12

Scale Score	Freq.	%	Cum. Freq.	Cum. %	Scale Score	Freq.	%	Cum. Freq.	Cum. %
500	15	0.17	15	0.17	660	265	2.98	5518	62.13
507	1	0.01	16	0.18	663	291	3.28	5809	65.40
526	5	0.06	21	0.24	667	265	2.98	6074	68.39
540	7	0.08	28	0.32	670	273	3.07	6347	71.46
550	4	0.05	32	0.36	674	240	2.70	6587	74.16
559	11	0.12	43	0.48	677	214	2.41	6801	76.57
567	14	0.16	57	0.64	681	257	2.89	7058	79.46
574	46	0.52	103	1.16	685	218	2.45	7276	81.92
581	62	0.70	165	1.86	689	201	2.26	7477	84.18
587	85	0.96	250	2.81	693	182	2.05	7659	86.23
592	164	1.85	414	4.66	697	165	1.86	7824	88.09
597	187	2.11	601	6.77	701	164	1.85	7988	89.93
602	233	2.62	834	9.39	706	133	1.50	8121	91.43
606	290	3.27	1124	12.65	710	108	1.22	8229	92.65
611	333	3.75	1457	16.40	715	115	1.29	8344	93.94
615	307	3.46	1764	19.86	720	83	0.93	8427	94.88
619	316	3.56	2080	23.42	726	102	1.15	8529	96.03
623	370	4.17	2450	27.58	731	58	0.65	8587	96.68
627	359	4.04	2809	31.63	738	71	0.80	8658	97.48
631	321	3.61	3130	35.24	745	49	0.55	8707	98.03
635	289	3.25	3419	38.49	753	48	0.54	8755	98.57
638	324	3.65	3743	42.14	762	44	0.50	8799	99.07
642	291	3.28	4034	45.42	773	34	0.38	8833	99.45
645	312	3.51	4346	48.93	786	23	0.26	8856	99.71
649	301	3.39	4647	52.32	805	15	0.17	8871	99.88
652	282	3.17	4929	55.49	836	8	0.09	8879	99.97
656	324	3.65	5253	59.14	900	3	0.03	8882	100.00

Note. Freq.=Frequency; Cum.=Cumulative. Students with no valid attempt, invalidation, off-grade, or a non-standard accommodation are not included in this summary. In addition, home-schooled students, students attending Bureau of Indian Affairs schools, and students who met expectations in a previous administration are not included in this summary.

Table 8.1.1.25
2005 Spring AIMS Frequency Distribution
Writing CRT Grade 3

Scale Score	Freq.	%	Cum. Freq.	Cum. %
200	3315	4.30	3315	4.30
296	403	0.52	3718	4.82
314	459	0.60	4177	5.42
326	534	0.69	4711	6.11
337	773	1.00	5484	7.12
347	901	1.17	6385	8.29
358	1609	2.09	7994	10.37
369	1699	2.20	9693	12.58
379	1958	2.54	11651	15.12
389	2450	3.18	14101	18.30
400	3221	4.18	17322	22.48
411	3615	4.69	20937	27.17
424	5795	7.52	26732	34.69
437	4698	6.10	31430	40.79
449	5780	7.50	37210	48.29
460	5638	7.32	42848	55.60
471	6201	8.05	49049	63.65
483	6948	9.02	55997	72.67
496	6453	8.37	62450	81.04
509	3972	5.15	66422	86.20
520	3053	3.96	69475	90.16
529	2300	2.98	71775	93.14
538	1634	2.12	73409	95.26
546	1241	1.61	74650	96.88
554	926	1.20	75576	98.08
562	569	0.74	76145	98.82
571	342	0.44	76487	99.26
580	265	0.34	76752	99.60
591	165	0.21	76917	99.82
608	82	0.11	76999	99.92
650	59	0.08	77058	100.00

Note. Freq.=Frequency; Cum.=Cumulative. Students with no valid attempt, invalidation, off-grade, or a non-standard accommodation are not included in this summary. In addition, home-schooled students and students attending Bureau of Indian Affairs schools are not included in this summary.

Table 8.1.1.26
2005 Spring AIMS Frequency Distribution
Writing CRT Grade 4

Scale Score	Freq.	%	Cum. Freq.	Cum. %
230	3425	4.50	3425	4.50
331	541	0.71	3966	5.22
348	675	0.89	4641	6.10
361	904	1.19	5545	7.29
373	1137	1.50	6682	8.79
385	1349	1.77	8031	10.56
399	2604	3.42	10635	13.98
412	2524	3.32	13159	17.30
425	3098	4.07	16257	21.38
435	3530	4.64	19787	26.02
446	4536	5.96	24323	31.98
457	4557	5.99	28880	37.98
469	6847	9.00	35727	46.98
481	5288	6.95	41015	53.93
492	5787	7.61	46802	61.54
503	5398	7.10	52200	68.64
514	5288	6.95	57488	75.59
526	4746	6.24	62234	81.83
539	4662	6.13	66896	87.96
553	2605	3.43	69501	91.39
564	2141	2.82	71642	94.21
575	1473	1.94	73115	96.14
584	1006	1.32	74121	97.46
594	708	0.93	74829	98.40
603	481	0.63	75310	99.03
612	312	0.41	75622	99.44
622	193	0.25	75815	99.69
632	109	0.14	75924	99.84
644	61	0.08	75985	99.92
660	34	0.04	76019	99.96
700	30	0.04	76049	100.00

Note. Freq.=Frequency; Cum.=Cumulative. Students with no valid attempt, invalidation, off-grade, or a non-standard accommodation are not included in this summary. In addition, home-schooled students and students attending Bureau of Indian Affairs schools are not included in this summary.

Table 8.1.1.27
2005 Spring AIMS Frequency Distribution
Writing CRT Grade 5

Scale Score	Freq.	%	Cum. Freq.	Cum. %
255	2490	3.25	2490	3.25
333	339	0.44	2829	3.69
353	412	0.54	3241	4.23
367	594	0.77	3835	5.00
380	712	0.93	4547	5.93
394	786	1.03	5333	6.95
408	1372	1.79	6705	8.74
422	1429	1.86	8134	10.61
435	2090	2.73	10224	13.33
447	2687	3.50	12911	16.84
459	3592	4.68	16503	21.52
471	3872	5.05	20375	26.57
484	6156	8.03	26531	34.60
497	5945	7.75	32476	42.35
509	6842	8.92	39318	51.27
521	7086	9.24	46404	60.52
533	6748	8.80	53152	69.32
546	6237	8.13	59389	77.45
559	6599	8.61	65988	86.06
572	3545	4.62	69533	90.68
584	2717	3.54	72250	94.22
595	1671	2.18	73921	96.40
606	1083	1.41	75004	97.81
615	726	0.95	75730	98.76
625	447	0.58	76177	99.34
635	270	0.35	76447	99.69
645	118	0.15	76565	99.85
656	71	0.09	76636	99.94
669	25	0.03	76661	99.97
688	15	0.02	76676	99.99
740	5	0.01	76681	100.00

Note. Freq.=Frequency; Cum.=Cumulative. Students with no valid attempt, invalidation, off-grade, or a non-standard accommodation are not included in this summary. In addition, home-schooled students and students attending Bureau of Indian Affairs schools are not included in this summary.

Table 8.1.1.28
2005 Spring AIMS Frequency Distribution
Writing CRT Grade 6

Scale Score	Freq.	%	Cum. Freq.	Cum. %
275	1178	1.55	1178	1.55
351	284	0.37	1462	1.92
370	429	0.56	1891	2.48
384	581	0.76	2472	3.25
397	879	1.15	3351	4.40
412	1024	1.35	4375	5.75
429	1831	2.41	6206	8.15
445	2210	2.90	8416	11.06
460	2839	3.73	11255	14.78
472	3209	4.22	14464	19.00
484	4075	5.35	18539	24.35
497	4846	6.37	23385	30.72
511	7347	9.65	30732	40.37
525	6860	9.01	37592	49.38
538	6998	9.19	44590	58.57
551	6578	8.64	51168	67.22
563	6183	8.12	57351	75.34
577	5862	7.70	63213	83.04
593	6150	8.08	69363	91.12
608	2580	3.39	71943	94.51
621	1690	2.22	73633	96.73
633	1026	1.35	74659	98.07
644	603	0.79	75262	98.87
654	392	0.51	75654	99.38
664	218	0.29	75872	99.67
675	110	0.14	75982	99.81
686	68	0.09	76050	99.90
697	43	0.06	76093	99.96
710	16	0.02	76109	99.98
728	8	0.01	76117	99.99
760	8	0.01	76125	100.00

Note. Freq.=Frequency; Cum.=Cumulative. Students with no valid attempt, invalidation, off-grade, or a non-standard accommodation are not included in this summary. In addition, home-schooled students and students attending Bureau of Indian Affairs schools are not included in this summary.

Table 8.1.1.29
2005 Spring AIMS Frequency Distribution
Writing CRT Grade 7

Scale Score	Freq.	%	Cum. Freq.	Cum. %
290	951	1.23	951	1.23
360	275	0.35	1226	1.58
378	273	0.35	1499	1.93
392	376	0.48	1875	2.42
405	626	0.81	2501	3.23
420	778	1.00	3279	4.23
439	2133	2.75	5412	6.98
458	1978	2.55	7390	9.53
472	2369	3.06	9759	12.59
485	2799	3.61	12558	16.20
498	3876	5.00	16434	21.20
512	5253	6.77	21687	27.97
528	9728	12.55	31415	40.52
545	7548	9.73	38963	50.25
558	7511	9.69	46474	59.94
570	6869	8.86	53343	68.80
582	6452	8.32	59795	77.12
594	5846	7.54	65641	84.66
606	5162	6.66	70803	91.32
618	2440	3.15	73243	94.46
628	1749	2.26	74992	96.72
637	978	1.26	75970	97.98
645	620	0.80	76590	98.78
652	393	0.51	76983	99.29
659	242	0.31	77225	99.60
667	126	0.16	77351	99.76
674	89	0.11	77440	99.87
683	55	0.07	77495	99.95
694	25	0.03	77520	99.98
710	8	0.01	77528	99.99
770	9	0.01	77537	100.00

Note. Freq.=Frequency; Cum.=Cumulative. Students with no valid attempt, invalidation, off-grade, or a non-standard accommodation are not included in this summary. In addition, home-schooled students and students attending Bureau of Indian Affairs schools are not included in this summary.

Table 8.1.1.30
2005 Spring AIMS Frequency Distribution
Writing CRT Grade 8

Scale Score	Freq.	%	Cum. Freq.	Cum. %
300	1194	1.57	1194	1.57
339	247	0.32	1441	1.89
358	235	0.31	1676	2.20
372	250	0.33	1926	2.53
385	384	0.50	2310	3.03
398	428	0.56	2738	3.59
413	858	1.13	3596	4.72
427	922	1.21	4518	5.93
441	1060	1.39	5578	7.32
453	1308	1.72	6886	9.03
466	1884	2.47	8770	11.51
481	2474	3.25	11244	14.75
499	5447	7.15	16691	21.90
517	5087	6.67	21778	28.57
532	5912	7.76	27690	36.33
545	6189	8.12	33879	44.44
558	7195	9.44	41074	53.88
572	8355	10.96	49429	64.84
588	10652	13.97	60081	78.82
603	4998	6.56	65079	85.38
615	3712	4.87	68791	90.24
626	2404	3.15	71195	93.40
635	1799	2.36	72994	95.76
643	1204	1.58	74198	97.34
652	824	1.08	75022	98.42
660	510	0.67	75532	99.09
669	308	0.40	75840	99.49
678	192	0.25	76032	99.74
690	116	0.15	76148	99.90
708	51	0.07	76199	99.96
800	28	0.04	76227	100.00

Note. Freq.=Frequency; Cum.=Cumulative. Students with no valid attempt, invalidation, off-grade, or a non-standard accommodation are not included in this summary. In addition, home-schooled students and students attending Bureau of Indian Affairs schools are not included in this summary.

Table 8.1.1.31
2005 Spring AIMS Frequency Distribution
Writing CRT Grade 10 Prompt A

Scale Score	Freq.	%	Cum. Freq.	Cum. %	Scale Score	Freq.	%	Cum. Freq.	Cum. %
500	276	0.42	276	0.42	683	2736	4.15	24169	36.70
511	174	0.26	450	0.68	688	3031	4.60	27200	41.31
522	97	0.15	547	0.83	693	3256	4.94	30456	46.25
535	102	0.15	649	0.99	698	3666	5.57	34122	51.82
543	104	0.16	753	1.14	704	3952	6.00	38074	57.82
549	128	0.19	881	1.34	710	4076	6.19	42150	64.01
555	110	0.17	991	1.50	717	4065	6.17	46215	70.18
560	124	0.19	1115	1.69	723	3342	5.08	49557	75.26
565	126	0.19	1241	1.88	730	2858	4.34	52415	79.60
569	169	0.26	1410	2.14	735	2458	3.73	54873	83.33
574	166	0.25	1576	2.39	740	2098	3.19	56971	86.52
579	206	0.31	1782	2.71	745	1759	2.67	58730	89.19
585	234	0.36	2016	3.06	749	1428	2.17	60158	91.36
590	268	0.41	2284	3.47	754	1159	1.76	61317	93.12
595	299	0.45	2583	3.92	758	989	1.50	62306	94.62
600	364	0.55	2947	4.48	762	761	1.16	63067	95.77
605	373	0.57	3320	5.04	766	662	1.01	63729	96.78
610	445	0.68	3765	5.72	770	487	0.74	64216	97.52
615	469	0.71	4234	6.43	775	405	0.62	64621	98.13
619	571	0.87	4805	7.30	779	342	0.52	64963	98.65
624	666	1.01	5471	8.31	783	228	0.35	65191	99.00
629	779	1.18	6250	9.49	787	195	0.30	65386	99.30
634	875	1.33	7125	10.82	791	141	0.21	65527	99.51
639	1087	1.65	8212	12.47	796	111	0.17	65638	99.68
645	1273	1.93	9485	14.40	800	78	0.12	65716	99.80
651	1476	2.24	10961	16.65	805	56	0.09	65772	99.88
657	1686	2.56	12647	19.21	810	38	0.06	65810	99.94
663	1860	2.82	14507	22.03	816	20	0.03	65830	99.97
668	2088	3.17	16595	25.20	824	14	0.02	65844	99.99
673	2304	3.50	18899	28.70	837	4	0.01	65848	100.00
678	2534	3.85	21433	32.55	900	2	0.00	65850	100.00

Note. Freq.=Frequency; Cum.=Cumulative. Students with no valid attempt, invalidation, off-grade, or a non-standard accommodation are not included in this summary. In addition, home-schooled students, students attending Bureau of Indian Affairs schools, and students who met expectations in a previous administration are not included in this summary.

Table 8.1.1.32
2005 Spring AIMS Frequency Distribution
Writing CRT Grade 10 Prompt T

Scale Score	Freq.	%	Cum. Freq.	Cum. %	Scale Score	Freq.	%	Cum. Freq.	Cum. %
500	38	1.57	38	1.57	683	87	3.59	1348	55.66
501	16	0.66	54	2.23	688	97	4.00	1445	59.66
513	12	0.50	66	2.73	693	98	4.05	1543	63.71
526	8	0.33	74	3.06	699	102	4.21	1645	67.92
534	5	0.21	79	3.26	705	98	4.05	1743	71.97
540	7	0.29	86	3.55	712	97	4.00	1840	75.97
546	9	0.37	95	3.92	720	98	4.05	1938	80.02
551	10	0.41	105	4.34	728	65	2.68	2003	82.70
556	17	0.70	122	5.04	735	78	3.22	2081	85.92
561	12	0.50	134	5.53	741	57	2.35	2138	88.27
566	15	0.62	149	6.15	747	46	1.90	2184	90.17
571	12	0.50	161	6.65	752	42	1.73	2226	91.91
577	22	0.91	183	7.56	756	33	1.36	2259	93.27
583	31	1.28	214	8.84	760	33	1.36	2292	94.63
589	27	1.11	241	9.95	765	24	0.99	2316	95.62
595	34	1.40	275	11.35	769	22	0.91	2338	96.53
600	32	1.32	307	12.68	773	18	0.74	2356	97.27
605	41	1.69	348	14.37	777	18	0.74	2374	98.02
610	41	1.69	389	16.06	781	10	0.41	2384	98.43
615	39	1.61	428	17.67	786	11	0.45	2395	98.89
620	51	2.11	479	19.78	790	2	0.08	2397	98.97
625	60	2.48	539	22.25	794	2	0.08	2399	99.05
630	71	2.93	610	25.19	798	6	0.25	2405	99.30
636	64	2.64	674	27.83	803	6	0.25	2411	99.55
642	84	3.47	758	31.30	807	3	0.12	2414	99.67
649	88	3.63	846	34.93	812	2	0.08	2416	99.75
655	80	3.30	926	38.23	817	2	0.08	2418	99.83
662	83	3.43	1009	41.66	831	2	0.08	2420	99.92
668	76	3.14	1085	44.80	844	1	0.04	2421	99.96
673	81	3.34	1166	48.14	900	1	0.04	2422	100.00
678	95	3.92	1261	52.06					

Note. Freq.=Frequency; Cum.=Cumulative. Students with no valid attempt, invalidation, off-grade, or a non-standard accommodation are not included in this summary. In addition, home-schooled students, students attending Bureau of Indian Affairs schools, and students who met expectations in a previous administration are not included in this summary.

Table 8.1.1.33
2005 Spring AIMS Frequency Distribution
Writing CRT Grade 11 Prompt A

Scale Score	Freq.	%	Cum. Freq.	Cum. %	Scale Score	Freq.	%	Cum. Freq.	Cum. %
500	115	0.78	115	0.78	678	732	4.94	8862	59.77
511	84	0.57	199	1.34	683	734	4.95	9596	64.72
522	46	0.31	245	1.65	688	664	4.48	10260	69.20
535	53	0.36	298	2.01	693	635	4.28	10895	73.48
543	46	0.31	344	2.32	698	635	4.28	11530	77.76
549	55	0.37	399	2.69	704	558	3.76	12088	81.53
555	65	0.44	464	3.13	710	481	3.24	12569	84.77
560	57	0.38	521	3.51	717	423	2.85	12992	87.62
565	79	0.53	600	4.05	723	334	2.25	13326	89.88
569	89	0.60	689	4.65	730	261	1.76	13587	91.64
574	95	0.64	784	5.29	735	221	1.49	13808	93.13
579	123	0.83	907	6.12	740	195	1.32	14003	94.44
585	123	0.83	1030	6.95	745	134	0.90	14137	95.35
590	149	1.00	1179	7.95	749	123	0.83	14260	96.18
595	164	1.11	1343	9.06	754	111	0.75	14371	96.92
600	182	1.23	1525	10.29	758	82	0.55	14453	97.48
605	219	1.48	1744	11.76	762	91	0.61	14544	98.09
610	235	1.58	1979	13.35	766	59	0.40	14603	98.49
615	238	1.61	2217	14.95	770	56	0.38	14659	98.87
619	302	2.04	2519	16.99	775	41	0.28	14700	99.14
624	323	2.18	2842	19.17	779	30	0.20	14730	99.35
629	396	2.67	3238	21.84	783	29	0.20	14759	99.54
634	419	2.83	3657	24.66	787	16	0.11	14775	99.65
639	463	3.12	4120	27.79	791	16	0.11	14791	99.76
645	551	3.72	4671	31.50	796	15	0.10	14806	99.86
651	653	4.40	5324	35.91	800	12	0.08	14818	99.94
657	678	4.57	6002	40.48	805	4	0.03	14822	99.97
663	691	4.66	6693	45.14	810	3	0.02	14825	99.99
668	710	4.79	7403	49.93	816	1	0.01	14826	99.99
673	727	4.90	8130	54.83	824	1	0.01	14827	100.00

Note. Freq.=Frequency; Cum.=Cumulative. Students with no valid attempt, invalidation, off-grade, or a non-standard accommodation are not included in this summary. In addition, home-schooled students, students attending Bureau of Indian Affairs schools, and students who met expectations in a previous administration are not included in this summary.

Table 8.1.1.34
2005 Spring AIMS Frequency Distribution
Writing CRT Grade 11 Prompt T

Scale Score	Freq.	%	Cum. Freq.	Cum. %	Scale Score	Freq.	%	Cum. Freq.	Cum. %
500	17	1.48	17	1.48	673	51	4.43	674	58.61
501	8	0.70	25	2.17	678	51	4.43	725	63.04
513	5	0.43	30	2.61	683	41	3.57	766	66.61
526	4	0.35	34	2.96	688	40	3.48	806	70.09
534	4	0.35	38	3.30	693	40	3.48	846	73.57
540	6	0.52	44	3.83	699	29	2.52	875	76.09
546	5	0.43	49	4.26	705	34	2.96	909	79.04
551	6	0.52	55	4.78	712	40	3.48	949	82.52
556	5	0.43	60	5.22	720	37	3.22	986	85.74
561	5	0.43	65	5.65	728	26	2.26	1012	88.00
566	9	0.78	74	6.43	735	22	1.91	1034	89.91
571	11	0.96	85	7.39	741	16	1.39	1050	91.30
577	9	0.78	94	8.17	747	15	1.30	1065	92.61
583	19	1.65	113	9.83	752	12	1.04	1077	93.65
589	10	0.87	123	10.70	756	14	1.22	1091	94.87
595	21	1.83	144	12.52	760	11	0.96	1102	95.83
600	15	1.30	159	13.83	765	7	0.61	1109	96.43
605	20	1.74	179	15.57	769	5	0.43	1114	96.87
610	22	1.91	201	17.48	773	4	0.35	1118	97.22
615	25	2.17	226	19.65	777	6	0.52	1124	97.74
620	28	2.43	254	22.09	781	4	0.35	1128	98.09
625	38	3.30	292	25.39	786	9	0.78	1137	98.87
630	31	2.70	323	28.09	790	5	0.43	1142	99.30
636	42	3.65	365	31.74	794	2	0.17	1144	99.48
642	53	4.61	418	36.35	798	2	0.17	1146	99.65
649	56	4.87	474	41.22	807	1	0.09	1147	99.74
655	35	3.04	509	44.26	823	2	0.17	1149	99.91
662	60	5.22	569	49.48	831	1	0.09	1150	100.00
668	54	4.70	623	54.17					

Note. Freq.=Frequency; Cum.=Cumulative. Students with no valid attempt, invalidation, off-grade, or a non-standard accommodation are not included in this summary. In addition, home-schooled students, students attending Bureau of Indian Affairs schools, and students who met expectations in a previous administration are not included in this summary.

Table 8.1.1.35
2005 Spring AIMS Frequency Distribution
Writing CRT Grade 12 Prompt A

Scale Score	Freq.	%	Cum. Freq.	Cum. %	Scale Score	Freq.	%	Cum. Freq.	Cum. %
500	99	1.41	99	1.41	673	315	4.47	4805	68.23
511	64	0.91	163	2.31	678	304	4.32	5109	72.55
522	48	0.68	211	3.00	683	288	4.09	5397	76.64
535	36	0.51	247	3.51	688	256	3.64	5653	80.28
543	42	0.60	289	4.10	693	242	3.44	5895	83.71
549	44	0.62	333	4.73	698	215	3.05	6110	86.77
555	54	0.77	387	5.50	704	161	2.29	6271	89.05
560	52	0.74	439	6.23	710	189	2.68	6460	91.74
565	54	0.77	493	7.00	717	125	1.78	6585	93.51
569	67	0.95	560	7.95	723	78	1.11	6663	94.62
574	68	0.97	628	8.92	730	90	1.28	6753	95.90
579	92	1.31	720	10.22	735	58	0.82	6811	96.72
585	78	1.11	798	11.33	740	59	0.84	6870	97.56
590	104	1.48	902	12.81	745	36	0.51	6906	98.07
595	88	1.25	990	14.06	749	23	0.33	6929	98.40
600	115	1.63	1105	15.69	754	20	0.28	6949	98.68
605	137	1.95	1242	17.64	758	21	0.30	6970	98.98
610	175	2.49	1417	20.12	762	16	0.23	6986	99.20
615	192	2.73	1609	22.85	766	6	0.09	6992	99.29
619	188	2.67	1797	25.52	770	13	0.18	7005	99.47
624	228	3.24	2025	28.76	775	14	0.20	7019	99.67
629	239	3.39	2264	32.15	779	7	0.10	7026	99.77
634	261	3.71	2525	35.86	783	5	0.07	7031	99.84
639	268	3.81	2793	39.66	787	3	0.04	7034	99.89
645	292	4.15	3085	43.81	791	4	0.06	7038	99.94
651	365	5.18	3450	48.99	796	1	0.01	7039	99.96
657	342	4.86	3792	53.85	805	1	0.01	7040	99.97
663	345	4.90	4137	58.75	810	1	0.01	7041	99.99
668	353	5.01	4490	63.76	816	1	0.01	7042	100.00

Note. Freq.=Frequency; Cum.=Cumulative. Students with no valid attempt, invalidation, off-grade, or a non-standard accommodation are not included in this summary. In addition, home-schooled students, students attending Bureau of Indian Affairs schools, and students who met expectations in a previous administration are not included in this summary.

Table 8.1.1.36
2005 Spring AIMS Frequency Distribution
Writing CRT Grade 12 Prompt T

Scale Score	Freq.	%	Cum. Freq.	Cum. %	Scale Score	Freq.	%	Cum. Freq.	Cum. %
500	21	3.70	21	3.70	662	19	3.35	343	60.49
501	8	1.41	29	5.11	668	23	4.06	366	64.55
513	3	0.53	32	5.64	673	22	3.88	388	68.43
526	5	0.88	37	6.53	678	18	3.17	406	71.60
534	4	0.71	41	7.23	683	12	2.12	418	73.72
540	5	0.88	46	8.11	688	15	2.65	433	76.37
546	2	0.35	48	8.47	693	15	2.65	448	79.01
551	3	0.53	51	8.99	699	15	2.65	463	81.66
556	8	1.41	59	10.41	705	10	1.76	473	83.42
561	8	1.41	67	11.82	712	15	2.65	488	86.07
566	7	1.23	74	13.05	720	14	2.47	502	88.54
571	7	1.23	81	14.29	728	8	1.41	510	89.95
577	10	1.76	91	16.05	735	8	1.41	518	91.36
583	9	1.59	100	17.64	741	9	1.59	527	92.95
589	7	1.23	107	18.87	747	5	0.88	532	93.83
595	8	1.41	115	20.28	752	4	0.71	536	94.53
600	8	1.41	123	21.69	756	6	1.06	542	95.59
605	9	1.59	132	23.28	760	4	0.71	546	96.30
610	16	2.82	148	26.10	765	3	0.53	549	96.83
615	11	1.94	159	28.04	769	2	0.35	551	97.18
620	16	2.82	175	30.86	773	6	1.06	557	98.24
625	27	4.76	202	35.63	777	3	0.53	560	98.77
630	14	2.47	216	38.10	786	3	0.53	563	99.29
636	20	3.53	236	41.62	790	2	0.35	565	99.65
642	33	5.82	269	47.44	798	1	0.18	566	99.82
649	25	4.41	294	51.85	817	1	0.18	567	100.00
655	30	5.29	324	57.14					

Note. Freq.=Frequency; Cum.=Cumulative. Students with no valid attempt, invalidation, off-grade, or a non-standard accommodation are not included in this summary. In addition, home-schooled students, students attending Bureau of Indian Affairs schools, and students who met expectations in a previous administration are not included in this summary.

8.1.2 AIMS DPA NRT State Results

This section of the technical report provides information on the results of the norm-referenced scores provided by the AIMS DPA. Students in Grades 3-8 were administered a number of TerraNova items embedded within the AIMS DPA to provide norm-referenced scores. Please see Parts 3 and 4 of this report for more details on the design of the AIMS DPA. The AIMS DPA provided scale scores on the TerraNova vertical scale. In addition to scale scores, Arizona students were also assigned norm scores based on their scale scores and the 2000 TerraNova norms. For more information regarding the development of TerraNova norms please see *TerraNova, The Second Edition: California Achievement Tests Technical Report* (CTB/McGraw-Hill, 2003) and *TerraNova, The Second Edition, Norms Boo*k (CTB, 2001).

Table 8.1.2 presents norm-referenced results from the 2005 Spring AIMS DPA. Included in the table for each grade and content are the mean (M), standard deviation (SD), and scales scores at the 25^{th}, 50^{th}, and 75^{th} percentiles for both the Arizona students (AZ) and the TerraNova national standardization data.

Table 8.1.2
2005 Spring AIMS NRT State Test Results

Test		N	M	SD	Percentile 25	50	75
Mathematics							
3	AZ	77443	610.4	47.0	583	611	636
	TN	1819	604.5	39.4	583	609	632
4	AZ	76152	635.2	49.7	610	636	660
	TN	1756	619.7	47.8	605	632	655
5	AZ	76719	648.4	50.1	621	648	673
	TN	1726	635.0	48.3	620	649	675
6	AZ	75884	668.6	54.7	642	673	698
	TN	1786	655.5	49.2	639	666	692
7	AZ	77084	671.9	50.8	648	676	702
	TN	1784	657.7	47.8	644	675	702
8	AZ	75599	692.4	52.4	664	696	725
	TN	1646	674.2	51.3	658	689	718
Reading							
3	AZ	77047	621.1	47.3	597	625	649
	TN	1886	624.1	41.7	606	631	655
4	AZ	75685	639.8	50.5	618	641	663
	TN	1882	631.4	47.6	616	644	668
5	AZ	76379	655.3	44.5	634	657	680
	TN	1596	648.5	46.8	631	657	681
6	AZ	75940	661.1	44.0	638	663	686
	TN	1773	650.6	46.7	633	660	686
7	AZ	77541	662.7	53.4	637	670	694
	TN	1852	648.2	54.4	639	667	693
8	AZ	76356	677.4	47.7	650	678	705
	TN	1666	662.8	50.5	646	676	704
Language							
3	AZ	77047	619.0	38.7	599	621	641
	TN	1886	621.2	40.2	602	626	650
4	AZ	75685	638.5	45.3	617	641	663
	TN	1882	632.0	45.0	616	642	665
5	AZ	76379	652.6	51.9	633	656	678
	TN	1596	644.8	51.6	631	655	678
6	AZ	75940	652.3	52.9	633	656	678
	TN	1773	649.2	46.4	633	658	682
7	AZ	77541	666.2	47.0	643	668	690
	TN	1852	648.4	53.5	637	664	687
8	AZ	76356	670.5	43.1	651	672	693
	TN	1666	657.5	49.3	643	670	696

Note. AZ=Arizona NRT; TN=TerraNova National Standardization Sample. Source for TN data *TerraNova, The Second Edition* Technical Report (2003) by CTB/McGraw-Hill. Students with no valid attempt, invalidation, off-grade, or a non-standard accommodation are not included in the AZ NRT data summary. In addition, home-schooled students and students attending Bureau of Indian Affairs schools are not included in the AZ NRT summary. The AZ NRT results are not final results and are presented here for purposes of addressing reliability and validity. AZ NRT results should not be used for accountability purposes.

8.2 Longitudinal Data

The Spring 2005 administration of the AIMS assessments represents the baseline year for the new AIMS testing program. For this administration a new vertical scale was established for Grades 3-8, new scales were established for the high school assessments, and new cut scores were assigned for each grade and content area. Given that 2005 is the baseline year, comparisons to previous years' test results would provide little meaningful information. In future years, longitudinal comparisons will be made examining year-to-year results for the entire state and NCLB categories.

Part 9: Reliability and Validity

Part 9 of the technical report provides evidence supporting the reliability and validity of the 2005 AIMS DPA and high school assessments. All data presented in this section were computed using population test data available in the final electronic data files. The following AERA/APA/NCME standards are addressed: 1.5, 1.7, 2.1, 2.4, 2.10, 2.13, 3.16, 4.15, 6.5, 7.1, 7.3, and 7.10.

9.1 Reliability

AERA/APA/NCME standards for Educational and Psychological Testing refer to reliability as the "consistency of [a measure] when the testing procedure is repeated on a population of individuals or groups." A reliable test produces stable scores; that is, very similar score distributions would result if the test were administered repeatedly under similar conditions to the same students without memory or fatigue affecting the scores. Reliability of the 2005 Spring AIMS assessments was estimated in two ways: internal consistency for all multiple choice tests and inter-rater reliability for all writing tests.

9.1.1 Measures of Internal Consistency

The Kuder-Richardson Formula 20 (K-R 20) is a frequently used measure of internal consistency for tests consisting of dichotomously scored items (Allen & Yen, 1979). Based on a single administration of a test, this statistic provides a reliability estimate that equals the average of all split-half coefficients that would be obtained on all possible divisions of the test into halves. Such a split-half coefficient would be obtained by correlating scores on one half of the test with the scores on the other half, and then adjusting the correlation with the Spearman-Brown formula so that it applies to the whole test. K-R 20 is used as the measure of internal consistency for the 2005 AIMS Spring CRT reading, CRT mathematics, NRT reading, NRT mathematics, and NRT language tests. K-R 20 is computed as (Crocker & Algina, 1986)

$$KR_{20} = \frac{k}{k-1}\left(1 - \frac{\sum pq}{\sigma_X^2}\right),$$

where k = number of items, σ_X^2 = the total score variance, and pq = the variance of item i.

For tests consisting of constructed response and/or multiple choice items, Cronbach's alpha is a frequently used measure of internal consistency. Cronbach's alpha can be estimated for tests consisting of dichotomous items only as well, and as such, will produce the same result as the K-R 20 estimate. Cronbach's alpha is computed as (Crocker & Algina, 1986)

$$\hat{\alpha} = \frac{k}{k-1}\left(1 - \frac{\sum \sigma_i^2}{\sigma_X^2}\right),$$

where k = number of items, σ_X^2 = the total score variance, and σ_i^2 = the variance of item i.

Although Cronbach's alpha could be used as the measure of internal consistency for the 2005 Spring AIMS CRT writing tests, this measure would likely overestimate the coefficient because the trait scores are based on the same response. Furthermore, split-half reliability for a single prompt test may not be a valid estimate of reliability for a single prompt test.

Reliability estimates for the multiple choice tests administered as part of the 2006 Spring AIMS assessment are presented in Table 9.1.1. Note that a high degree of internal consistency is evident for all tests. Typically, internal consistency is denoted as coefficient alpha for both K-R 20 and Cronbach's alpha.

Table 9.1.1
2005 Spring AIMS Internal Consistency

	CRT				NRT					
	Reading		Mathematics		Reading		Language		Mathematics	
Grade	N	Alpha	N	Alpha	N	Alpha	N	Alpha	N	Alpha
03	77047	0.93	77443	0.93	77047	0.83	77047	0.79	77443	0.82
04	75685	0.94	76152	0.93	75685	0.87	75685	0.80	76152	0.83
05	76379	0.92	76719	0.94	76379	0.83	76379	0.84	76719	0.85
06	75940	0.92	75884	0.94	75940	0.83	75940	0.83	75884	0.86
07	77541	0.92	77084	0.94	77541	0.87	77541	0.81	77084	0.85
08	76356	0.90	75599	0.93	76356	0.83	76356	0.79	75599	0.82
HS	68788	0.92	66788	0.95	--	--	--	--	--	--

9.1.2 Inter-Rater Reliability

Reliability for constructed responses items are typically examined by calculating indices of inter-rater agreement: the reliability with which human raters assign scores to student responses. Evidence supporting inter-rater reliability for each trait of the AIMS writing assessments is presented in terms of raw score means, raw score standard deviations, and percentage of agreement between raters. Prefect agreement is defined as trait scores that are exactly the same. Adjacent agreement is defined as trait scores differing by one point. Discrepant cases include students whose scores from the two raters differed by more than one point. In addition, Cohen's kappa and intraclass correlation are provided as indices of agreement between the raters.

Cohen's kappa (Cohen, 1960) is commonly used to summarize the agreement between raters and is computed as (Brennan & Prediger, 1981)

$$\kappa = \frac{\sum P_{ii} - \sum P_{i\cdot} P_{\cdot i}}{1 - \sum P_{i\cdot} P_{\cdot i}},$$

where $\sum P_{ii}$ is the observed proportion of agreement and $\sum P_{i\cdot} P_{\cdot i}$ is the chance proportion of agreement.

Intraclass correlation is defined by Shrout and Fleiss (1979) as "the correlation between one measurement on a target and another measurement obtained on that target." In the context of the 2005 Spring AIMS writing tests, the "target" is the trait, and each measurement was obtained by a randomly assigned rater to that trait. Therefore, ICC(1,1) was used to estimate intraclass correlation. ICC(1,1) is estimated as (Shrout & Fleiss, 1979)

$$ICC(1,1) = \frac{BMS - WMS}{BMS + (k-1)WMS},$$

where *BMS* = between-targets mean square, *WMS* = within-targets mean square, and *k*=the number of raters rating each target.

For the Grades 3-8 writing tests, each trait was scored by one rater. Ten percent of the student responses were randomly selected and scored by a second rater to reduce rater drift and allow measures of inter-rater reliability to be estimated. The inter-rater reliability statistics provided in Table 9.1.2.1 were calculated using the scores from both raters on each trait for the ten percent of the responses that were scored twice.

For the high school writing prompts, traits were scored by two independent raters for all students. The inter-rater reliability statistics for Prompt A and Prompt T are presented in Table 9.1.2.2 and were calculated using the scores from both raters on a given trait. The final two trait scores for each trait were used in the analyses to calculate rater agreement.

Table 9.1.2.1
2005 Spring AIMS Inter-rater Reliability
Grades 3-8

Trait	N	Max Points	Rater 1 M	Rater 1 SD	Rater 2 M	Rater 2 SD	% Agreement Perfect	% Agreement Adjacent	% Agreement Discrepant	Kappa	Intraclass Correlation
Grade 3											
1 Ideas and Content	7709	6	3.35	1.12	3.35	1.14	54.69	40.51	4.80	0.57	0.75
2 Organization	7709	6	3.35	1.13	3.37	1.13	56.44	40.11	3.45	0.60	0.78
3 Voice	7709	6	3.41	1.17	3.41	1.18	55.07	40.25	4.68	0.59	0.78
4 Word Choice	7709	6	3.25	1.10	3.25	1.10	55.16	39.56	5.28	0.55	0.73
5 Sentence Fluency	7709	6	3.31	1.19	3.31	1.19	53.43	41.16	5.41	0.58	0.77
6 Conventions	7709	6	3.23	1.13	3.24	1.13	56.01	40.69	3.29	0.60	0.79
Grade 4											
1 Ideas and Content	7653	6	3.11	1.14	3.12	1.15	52.50	41.96	5.54	0.56	0.74
2 Organization	7653	6	3.05	1.06	3.06	1.05	54.42	41.23	4.35	0.55	0.72
3 Voice	7653	6	3.08	1.17	3.09	1.17	51.39	42.43	6.18	0.56	0.74
4 Word Choice	7653	6	3.14	1.10	3.13	1.09	55.10	40.56	4.34	0.57	0.74
5 Sentence Fluency	7653	6	3.04	1.17	3.05	1.17	51.10	43.08	5.81	0.56	0.75
6 Conventions	7653	6	3.02	1.05	3.02	1.04	54.04	41.87	4.09	0.54	0.72
Grade 5											
1 Ideas and Content	7654	6	3.34	1.02	3.33	1.01	53.24	42.28	4.48	0.51	0.69
2 Organization	7654	6	3.45	1.02	3.45	1.03	57.49	38.69	3.83	0.54	0.71
3 Voice	7654	6	3.12	1.04	3.12	1.05	51.27	43.62	5.11	0.51	0.69
4 Word Choice	7654	6	3.26	1.00	3.25	1.01	52.94	41.96	5.10	0.49	0.67
5 Sentence Fluency	7654	6	3.05	1.05	3.04	1.06	50.74	44.26	4.99	0.51	0.70
6 Conventions	7654	6	3.42	1.04	3.42	1.05	57.09	39.18	3.72	0.55	0.73
Grade 6											
1 Ideas and Content	7559	6	3.22	0.92	3.22	0.92	53.18	42.85	3.97	0.47	0.64
2 Organization	7559	6	3.24	0.89	3.25	0.90	58.39	38.64	2.96	0.52	0.67
3 Voice	7559	6	3.12	0.98	3.12	0.97	52.67	43.14	4.19	0.50	0.67
4 Word Choice	7559	6	3.19	0.89	3.19	0.89	58.72	38.75	2.53	0.52	0.68
5 Sentence Fluency	7559	6	3.08	0.97	3.08	0.97	53.39	42.48	4.13	0.50	0.67
6 Conventions	7559	6	3.36	0.88	3.37	0.88	60.03	37.57	2.39	0.52	0.68
Grade 7											
1 Ideas and Content	7657	6	3.24	0.90	3.25	0.91	58.74	38.71	2.55	0.54	0.70
2 Organization	7657	6	3.30	0.90	3.31	0.90	59.17	38.27	2.56	0.54	0.70
3 Voice	7657	6	3.17	0.89	3.16	0.90	59.33	38.23	2.44	0.53	0.70
4 Word Choice	7657	6	3.19	0.84	3.19	0.83	61.12	37.02	1.85	0.51	0.68
5 Sentence Fluency	7657	6	3.14	0.89	3.12	0.89	59.11	38.41	2.48	0.53	0.69
6 Conventions	7657	6	3.23	0.90	3.23	0.90	55.20	41.77	3.03	0.49	0.66
Grade 8											
1 Ideas and Content	7688	6	3.59	0.92	3.59	0.92	58.81	38.35	2.85	0.53	0.70
2 Organization	7688	6	3.67	0.90	3.67	0.90	60.35	37.42	2.22	0.53	0.71
3 Voice	7688	6	3.54	0.95	3.55	0.94	59.70	37.67	2.63	0.55	0.72
4 Word Choice	7688	6	3.60	0.94	3.59	0.94	57.78	39.28	2.94	0.53	0.70
5 Sentence Fluency	7688	6	3.47	0.96	3.48	0.95	58.48	38.74	2.78	0.55	0.72
6 Conventions	7688	6	3.53	0.90	3.53	0.90	58.98	39.03	1.99	0.52	0.70

Note. Approximately 10% of the student responses were randomly assigned to be rated by a second rater.

Table 9.1.2.2
2005 Spring AIMS Inter-rater Reliability
High School

Trait	N	Max Points	Rater 1 M	Rater 1 SD	Rater 2 M	Rater 2 SD	% Agreement Perfect	% Agreement Adjacent	% Agreement Discrepant	Kappa	Intraclass Correlation
Prompt A											
1 Ideas and Content	65815	6	3.58	0.93	3.58	0.93	52.68	42.78	4.54	0.47	0.64
2 Organization	65815	6	3.73	0.96	3.73	0.96	53.10	41.51	5.39	0.47	0.65
3 Voice	65815	6	3.74	0.92	3.74	0.92	53.46	42.25	4.29	0.47	0.65
4 Word Choice	65815	6	3.61	0.86	3.61	0.86	54.12	41.99	3.89	0.43	0.61
5 Sentence Fluency	65815	6	3.63	0.94	3.63	0.93	52.40	42.92	4.67	0.46	0.64
6 Conventions	65815	6	3.69	0.96	3.69	0.96	51.31	43.14	5.55	0.45	0.63
Prompt T											
1 Ideas and Content	2418	6	3.22	1.15	3.21	1.15	72.33	25.43	2.23	0.76	0.87
2 Organization	2418	6	3.33	1.08	3.33	1.07	59.93	38.05	2.03	0.63	0.80
3 Voice	2418	6	3.35	1.03	3.35	1.04	61.37	36.64	1.99	0.63	0.79
4 Word Choice	2418	6	3.36	1.02	3.31	1.01	56.24	39.91	3.85	0.55	0.72
5 Sentence Fluency	2418	6	3.29	1.03	3.29	1.04	58.89	38.88	2.23	0.60	0.78
6 Conventions	2418	6	3.35	1.04	3.34	1.05	58.31	39.54	2.15	0.60	0.78

Note. All student responses were rated by two raters. Only students receiving scores and condition codes of B, C, and D are included in this analysis.

9.2 Validity

"Validity refers to the degree to which evidence and theory support the interpretations of test scores entailed by proposed users of tests. Validity is, therefore, the most fundamental consideration in developing and evaluating tests" (AERA/APA/NCME, 1999). The purpose of test score validation is not to validate the test itself, but to validate interpretations of the test scores for particular purposes or uses. Test score validation is not a quantifiable property but an ongoing process, beginning at initial conceptualization and continuing throughout the entire assessment process. Every aspect of an assessment provides evidence in support of its validity (or evidence to the contrary), including design, content specifications, item development, psychometric quality, and inferences made from the results. The 2005 Spring AIMS tests were designed and developed to provide fair and accurate ability scores that support appropriate, meaningful, and useful educational decisions.

In addition to the evidence provided in Part 2 (Involvement of Arizona Educators), Part 3 (Test Design), Part 4 (Test Development), Part 5 (Test Administration), Part 6 (Data for Operational Analysis), Part 7 (Calibration and Scaling), Part 9 (Reliability), and Part 10 (Classification), additional evidence to support the validity of the 2005 AIMS assessments is provided by the following:

- Identification of any items that displayed differential item functioning for subgroups of ethnicity and gender;
- Results of the context effects study examining the validity of the NRT scores provided by the AIMS Dual Purpose Assessment design; and
- Correlations between scores on the 2005 AIMS tests for each grade level.

9.2.1 Differential Item Functioning

Because test scores can have many sources of variation, the test publishers' task is to develop assessments that measure the intended abilities and skills without introducing extraneous elements or construct irrelevant variance. When tests measure something other than what they are intended to

measure, test scores will reflect these unintended skills and knowledge, as well as what is purportedly assessed by the test. If this occurs, these tests can be called biased (Angoff, 1993; Camilli & Shepard, 1994; Green, 1975). One of the factors that may render test scores to be biased is differing cultural and socioeconomic experiences.

The 2005 Spring AIMS tests were developed using procedures to minimize item and test bias. Expertise in this area is not, however, a substitute for statistical analyses of the items. Thus, an empirical differential item functioning (DIF) approach was used to examine potential item bias. DIF studies include systematic item analyses to determine if examinees with the same underlying level of ability have the same probability of correctly responding to the item. Items identified with DIF are examined to determine if item performance differences between identifiable subgroups of the population are due to extraneous or construct irrelevant information making the items unfairly difficult for one of the subgroups.

DIF of the 2005 Spring AIMS tests was conducted for ethnic subgroups and gender. In order to compute DIF, students must be matched on ability level using a conditioning variable. For these analyses, raw score on the CRT test in the content area of interest was used as the conditioning variable. Note that DIF analyses were conducted on reading and mathematics items only, as the writing single-prompt assessments do not have an appropriate conditioning variable for analysis.

The Mantel-Haenszel chi-square statistic was used to identify DIF in multiple choice items. The Mantel-Haenszel statistic was first recommended by Holland and Thayer (1988), is frequently used, and is efficient in terms of statistical power (Clauser & Mazor, 1998). The Mantel-Haenszel statistic is computed as (Zwick, Donoghue, & Grima, 1993)

$$\text{Mantel } \chi^2 = \frac{\left(\sum_k F_k - \sum_k E(F_k)\right)^2}{\sum_k \text{Var}(F_k)},$$

where F_k is the sum of scores for the focal group at the k^{th} level of the matching variable. Note that the Mantel-Haenszel statistic is sensitive to N such that larger sample sizes increase the value of chi square.

In addition to the Mantel-Haenszel chi-square statistic, the delta statistic (MH-D DIF) was computed for all items. Educational Testing Service (ETS) first developed the MH-D DIF statistic. To compute delta, alpha (the odds ratio) is first computed as

$$\alpha_{MH} = \frac{\sum_{k=1}^{K} N_{r1k} N_{f0k} / N_k}{\sum_{k=1}^{K} N_{f1k} N_{r0k} / N_k},$$

where N_{r1k} is the number of correct responses in the reference group at ability level k, N_{f0k} is the number of incorrect responses in the focal group at ability level k, N_k is the total number of responses, N_{f1k} is the number of correct responses in the focal group at ability level k, and N_{r0k} is the number of incorrect responses in the reference group at ability level k. MH-D DIF is then computed as

$$\text{MH-D DIF} = -2.35\ln(\alpha_{MH}) .$$

Positive values of MH-D DIF indicate items that favor the focal group, whereas negative values of MH-D DIF indicate items that favor the reference group.

The Mantel-Haenszel chi-square statistic and the delta statistic were used in combination to identify the 2005 Spring AIMS items that exhibit strong, weak, or no DIF (Zieky, 1993). Table 9.2.1.1 indicates the criteria for each category used for the 2005 AIMS DIF analysis. An alpha level of .01 was used for all Mantel-Haenszel statistics. Note that the criteria are very lenient given very large sample sizes and the number of DIF statistics computed. In other words, a large number of items will be placed in categories B and C given this critical value. For reference, the critical value for the chi-square statistic to be significant at $p<0.01$ is 6.635, at $p<0.001$ the critical value is 10.827, and at $p<0.0005$ the critical value is 12.116.

Table 9.2.1.1
Differential Item Functioning Flag Categories

Category	Description	Criterion
A	No DIF	Mantel-Haenzel chi-square not significantly different than zero
B	Weak DIF	Significant Mantel-Haenzel chi-square ($p<0.01$) and $\|\text{MH D-DIF}\| < 1.5$
C	Strong DIF	Significant Mantel-Haenzel chi-square ($p<0.01$) and $\|\text{MH D-DIF}\| \geq 1.5$

Another measure of DIF, also presented here for the 2005 Spring AIMS operational items, is the standardized mean difference (SMD; Zwick et al., 1993). The SMD is an effect size index of DIF which is relatively easy to interpret. The SMD compares the means of the reference and focus groups, adjusting for the distribution of reference and focal group members on the conditioning variable (Zwick et al., 1993). SMD is computed as (Zwick et al., 1993)

$$SMD = p_{Fk}(\sum_{k} m_{Fk} - \sum_{k} m_{Rk}) \quad ,$$

where p_{fk}= proportion of the focal group members at the kth level of the matching variable, $m_{Fk}=1/N_{F1k}$ and $m_{Rk}=1/N_{R1k}$. A negative SMD value indicates an item on which the focal group has a lower mean than the reference group. A positive SMD value indicates an item on which the reference group has a lower mean than the focal group.

Mantel-Haenszel shi-square statistic, MH-D DIF, SMD, and flag category results for all items in the 2005 Spring AIMS CRT tests are presented in tables 9.2.1.2 through 9.2.1.23. Again, a relatively large number of items may be flagged because of the very large numbers of students in each group and a relatively lenient criterion for chi-square significance. All items exhibiting strong DIF are investigated for possible sources of differential functioning by CTB Development staff.

Table 9.2.1.2
2005 Spring AIMS Differential Item Functioning Mathematics CRT Grade 3

	Reference: Male N = 39081 Focal: Female N = 37969				Reference: White N = 35048 Focal: African Am. N = 3891				Reference: White N = 35048 Focal: Hispanic N = 31611				Reference: White N = 35048 Focal: Native Am. N = 4794				Reference: White N = 35048 Focal: Asian N = 1882			
Item	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag
1	82.27	0.51	0.02	B>	6.13	-0.30	-0.02	A	66.69	0.53	0.02	B>	1.65	0.15	0.00	A	0.04	-0.05	0.00	A
2	15.25	0.19	0.01	B>	9.71	0.34	0.02	B>	78.56	0.49	0.03	B>	5.94	0.24	0.01	A	5.53	0.46	0.02	A
3	25.07	-0.21	-0.01	B<	7.38	-0.26	-0.02	B<	101.21	-0.47	-0.04	B<	23.19	-0.43	-0.04	B<	25.50	-0.75	-0.04	B<
4	99.34	0.58	0.02	B>	3.04	0.23	0.01	A	2.49	0.11	0.00	A	0.00	-0.01	0.00	A	3.68	0.52	0.01	A
5	51.05	-0.34	-0.02	B<	4.83	-0.24	-0.02	A	17.14	-0.23	-0.01	B<	12.16	-0.33	-0.02	B<	10.43	-0.61	-0.02	B<
6	25.31	0.73	0.00	B>	10.88	-0.99	-0.01	B<	9.41	-0.57	0.00	B<	0.04	0.07	0.00	A	0.26	-0.44	0.00	A
7	43.98	0.28	0.02	B>	15.55	0.38	0.03	B>	94.36	0.46	0.03	B>	5.01	0.20	0.01	A	4.47	0.33	0.02	A
8	358.99	0.89	0.05	B>	0.00	0.01	0.00	A	41.41	-0.34	-0.02	B<	29.80	-0.51	-0.04	B<	0.91	-0.18	-0.01	A
9	1087.60	-1.65	-0.08	C<	0.91	0.11	0.01	A	117.79	0.62	0.04	B>	52.20	0.73	0.05	B>	6.44	0.53	0.02	A
10	212.96	0.52	0.05	B>	7.11	0.23	0.02	B>	34.80	0.24	0.03	B>	8.47	0.23	0.02	B>	2.40	-0.19	-0.02	A
11	5.33	0.11	0.01	A	16.72	0.44	0.03	B>	118.36	0.58	0.04	B>	25.24	0.48	0.03	B>	39.15	1.28	0.05	B>
12	20.51	-0.21	-0.01	B<	11.43	-0.35	-0.02	B<	215.17	-0.76	-0.04	B<	45.20	-0.60	-0.04	B<	25.92	-0.86	-0.04	B<
13	13.51	-0.14	-0.01	B<	1.25	-0.10	-0.01	A	213.31	-0.61	-0.05	B<	116.78	-0.92	-0.08	B<	14.30	-0.47	-0.04	B<
14	8.72	-0.14	-0.01	B<	3.51	0.19	0.01	A	179.39	0.71	0.05	B>	55.85	0.73	0.05	B>	20.39	0.84	0.04	B>
15	43.95	0.52	0.01	B>	0.30	0.10	0.00	A	0.06	0.02	0.00	A	2.03	-0.22	-0.01	A	0.00	0.00	0.00	A
16	9.81	-0.14	-0.01	B<	9.01	0.31	0.02	B>	15.90	0.21	0.01	B>	10.20	0.29	0.02	B>	10.71	0.62	0.02	B>
17	161.06	-0.51	-0.04	B<	41.51	-0.59	-0.05	B<	0.86	0.04	0.00	A	12.73	0.30	0.03	B>	3.56	-0.28	-0.02	A
18	434.87	-0.95	-0.06	B<	49.51	-0.72	-0.05	B<	434.26	-1.04	-0.08	B<	289.60	-1.65	-0.11	C<	45.22	-1.08	-0.05	B<
19	0.37	-0.03	0.00	A	0.33	0.07	0.00	A	4.18	0.12	0.00	A	7.44	0.28	0.02	B>	1.02	0.23	0.01	A
20	25.61	0.19	0.02	B>	0.04	-0.02	0.00	A	33.23	0.25	0.02	B>	11.55	0.28	0.02	B>	0.01	0.02	0.00	A
21	8.36	0.12	0.01	B>	6.81	0.25	0.02	B>	137.76	-0.53	-0.04	B<	12.77	-0.30	-0.02	B<	6.98	-0.40	-0.02	B<
22	6.70	0.12	0.01	B>	20.93	-0.47	-0.03	B<	12.85	-0.19	-0.02	B<	35.27	-0.56	-0.05	B<	5.95	-0.44	-0.02	A
23	65.29	0.32	0.03	B>	4.58	0.20	0.02	A	23.29	0.22	0.02	B>	3.53	0.16	0.01	A	5.61	0.36	0.02	A
24	24.41	-0.39	-0.01	B<	1.41	0.21	0.01	A	3.61	0.18	0.00	A	3.81	0.31	0.01	A	1.42	0.47	0.00	A
25	2.64	0.08	0.00	A	0.05	-0.03	0.00	A	52.19	0.42	0.02	B>	3.18	0.18	0.01	A	0.28	-0.10	0.00	A
26	0.19	0.02	0.00	A	2.03	0.13	0.01	A	19.30	0.19	0.01	B>	14.12	0.31	0.03	B>	0.00	0.01	0.00	A
27	73.33	0.32	0.03	B>	0.00	0.00	0.00	A	29.52	-0.23	-0.02	B<	40.14	-0.51	-0.05	B<	5.41	-0.31	-0.02	A
28	39.21	0.30	0.02	B>	7.94	0.31	0.02	B>	92.30	0.54	0.03	B>	50.41	0.73	0.05	B>	0.84	0.17	0.01	A
29	13.55	-0.14	-0.01	B<	37.82	-0.58	-0.05	B<	0.01	0.00	0.00	A	5.98	0.21	0.02	A	12.59	-0.45	-0.04	B<
30	1.31	0.06	0.00	A	0.40	-0.07	0.00	A	0.84	0.05	0.01	A	8.75	-0.29	-0.02	B<	3.65	-0.38	-0.01	A

Note. African Am. = African American, Native Am.= Native American, MH $\chi 2$ = Mantel-Haenszel Chi-Square, ΔMH = Delta (MH-D DIF), SMD= Standardized Mean Difference, A= No DIF, B=Weak DIF, C=Strong DIF, < favors reference group, > favors focal group. Item number does not indicate test booklet location due to field test and NRT items.

(table continues)

Table 9.2.1.2 (continued)
2005 Spring AIMS Differential Item Functioning Mathematics CRT Grade 3

	Reference: Male N = 39081 Focal: Female N = 37969				Reference: White N = 35048 Focal: African Am. N = 3891				Reference: White N = 35048 Focal: Hispanic N = 31611				Reference: White N = 35048 Focal: Native Am. N = 4794				Reference: White N = 35048 Focal: Asian N = 1882			
Item	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag
31	111.70	-0.42	-0.03	B<	43.58	0.62	0.05	B>	124.75	0.51	0.04	B>	12.43	0.30	0.02	B>	17.95	0.63	0.04	B>
32	4.13	0.11	0.00	A	0.88	0.12	0.01	A	1.67	0.08	0.00	A	5.79	0.27	0.01	A	0.03	0.05	0.00	A
33	10.09	0.23	0.01	B>	2.67	0.25	0.01	A	145.05	1.01	0.03	B>	59.79	1.13	0.04	B>	5.49	0.76	0.01	A
34	853.15	-1.10	-0.10	B<	99.58	-0.90	-0.08	B<	158.56	-0.53	-0.05	B<	15.93	0.33	0.03	B>	15.18	-0.50	-0.04	B<
35	4.44	0.09	0.01	A	1.33	0.12	0.01	A	59.70	0.39	0.03	B>	25.49	0.47	0.04	B>	7.45	0.49	0.02	B>
36	4.69	0.11	0.01	A	2.99	0.20	0.01	A	48.17	-0.41	-0.03	B<	0.07	-0.03	0.00	A	7.63	0.64	0.02	B>
37	17.85	-0.18	-0.01	B<	3.49	-0.19	-0.01	A	67.26	-0.38	-0.03	B<	25.74	-0.45	-0.03	B<	3.17	0.28	0.02	A
38	22.55	-0.21	-0.01	B<	2.63	-0.16	-0.01	A	21.12	0.24	0.01	B>	128.05	1.09	0.08	B>	10.14	0.58	0.02	B>
39	109.14	0.37	0.04	B>	1.05	0.09	0.01	A	57.61	0.31	0.03	B>	40.78	0.50	0.05	B>	10.66	0.38	0.04	B>
40	174.13	0.50	0.04	B>	1.90	-0.13	-0.01	A	27.64	0.23	0.02	B>	5.83	-0.21	-0.02	A	3.72	0.25	0.02	A
41	299.33	-0.68	-0.05	B<	9.26	-0.28	-0.02	B<	143.98	-0.53	-0.04	B<	30.67	-0.49	-0.04	B<	3.24	-0.25	-0.02	A
42	0.01	0.01	0.00	A	7.76	0.37	0.02	B>	46.66	0.46	0.02	B>	8.66	0.33	0.02	B>	8.08	0.78	0.02	B>
43	57.75	0.34	0.02	B>	33.18	0.60	0.04	B>	167.79	0.67	0.05	B>	170.68	1.27	0.10	B>	6.81	0.47	0.02	B>
44	78.69	0.47	0.02	B>	1.35	0.14	0.01	A	58.26	0.47	0.02	B>	59.82	0.87	0.05	B>	2.54	-0.30	-0.01	A
45	18.70	-0.26	-0.01	B<	6.30	0.33	0.01	A	132.06	0.80	0.03	B>	22.54	0.55	0.03	B>	7.95	0.76	0.02	B>
46	3.82	-0.10	0.00	A	19.88	-0.54	-0.03	B<	571.73	-1.52	-0.08	C<	511.14	-2.18	-0.14	C<	62.39	-1.63	-0.04	C<
47	0.11	0.01	0.00	A	9.14	-0.27	-0.02	B<	22.65	-0.20	-0.02	B<	0.22	-0.04	0.00	A	8.07	-0.36	-0.03	B<
48	101.92	-0.41	-0.03	B<	24.77	0.47	0.04	B>	39.49	0.29	0.02	B>	0.05	-0.02	0.00	A	1.49	0.19	0.01	A
49	55.37	-0.30	-0.02	B<	14.04	0.36	0.03	B>	47.14	0.31	0.02	B>	3.68	-0.17	-0.01	A	14.76	0.57	0.04	B>
50	114.57	-0.43	-0.03	B<	3.95	-0.19	-0.01	A	5.79	0.11	0.01	A	8.61	0.25	0.02	B>	0.15	-0.06	0.00	A
51	11.80	-0.14	-0.01	B<	0.94	0.09	0.01	A	73.15	0.40	0.03	B>	94.29	0.84	0.07	B>	27.67	0.86	0.05	B>
52	15.33	0.14	0.01	B>	17.41	-0.36	-0.04	B<	0.13	0.02	0.00	A	26.48	-0.41	-0.04	B<	2.48	0.21	0.02	A
53	7.90	0.14	0.01	B>	0.11	0.04	0.00	A	137.28	0.65	0.04	B>	30.10	0.56	0.04	B>	3.53	0.35	0.01	A
54	185.22	0.54	0.04	B>	2.76	0.16	0.01	A	32.38	-0.25	-0.02	B<	47.82	-0.57	-0.05	B<	11.44	-0.47	-0.03	B<
55	113.53	0.75	0.02	B>	0.00	-0.01	0.00	A	7.45	0.23	0.01	B>	10.68	0.44	0.02	B>	0.97	0.38	0.00	A
56	146.53	-0.49	-0.04	B<	0.36	0.06	0.00	A	0.05	0.01	0.00	A	0.94	0.08	0.01	A	1.40	0.19	0.01	A
57	208.88	0.72	0.04	B>	20.59	0.52	0.03	B>	44.93	0.38	0.02	B>	24.61	0.50	0.04	B>	15.94	0.86	0.03	B>
58	31.88	0.21	0.02	B>	41.86	0.57	0.05	B>	64.41	0.35	0.03	B>	22.24	0.39	0.04	B>	35.60	0.82	0.06	B>
59	125.45	-0.58	-0.03	B<	0.00	0.01	0.00	A	86.86	0.55	0.03	B>	78.81	0.96	0.06	B>	6.43	0.55	0.02	A
60	32.93	-0.26	-0.02	B<	15.10	-0.40	-0.03	B<	150.43	-0.65	-0.04	B<	13.83	-0.35	-0.03	B<	11.79	-0.60	-0.02	B<

Note. African Am. = African American, Native Am.= Native American, MH $\chi 2$ = Mantel-Haenszel Chi-Square, ΔMH = Delta (MH-D DIF), SMD= Standardized Mean Difference, A= No DIF, B=Weak DIF, C=Strong DIF, < favors reference group, > favors focal group. Item number does not indicate test booklet location due to field test and NRT items.

(table continues)

Table 9.2.1.2 (continued)
2005 Spring AIMS Differential Item Functioning Mathematics CRT Grade 3

	Reference: Male N = 39081 Focal: Female N = 37969				Reference: White N = 35048 Focal: African Am. N = 3891				Reference: White N = 35048 Focal: Hispanic N = 31611				Reference: White N = 35048 Focal: Native Am. N = 4794				Reference: White N = 35048 Focal: Asian N = 1882			
Item	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag
61	67.89	-0.33	-0.03	B<	3.89	-0.19	-0.02	A	101.08	-0.45	-0.03	B<	134.86	-0.99	-0.08	B<	2.04	-0.21	-0.01	A
62	294.52	-0.74	-0.05	B<	37.43	-0.60	-0.04	B<	203.45	-0.68	-0.05	B<	41.56	-0.57	-0.04	B<	29.45	-0.86	-0.04	B<
63	190.95	0.80	0.03	B>	0.01	0.02	0.00	A	0.58	0.05	0.00	A	8.21	0.33	0.02	B>	0.24	-0.13	0.00	A
64	24.63	0.22	0.01	B>	5.63	-0.24	-0.02	A	25.39	-0.26	-0.02	B<	27.35	-0.47	-0.04	B<	1.57	-0.22	-0.01	A
65	34.33	0.23	0.02	B>	15.71	-0.37	-0.03	B<	219.43	-0.66	-0.05	B<	95.83	-0.91	-0.07	B<	3.06	-0.23	-0.02	A
66	20.45	0.18	0.01	B>	8.94	0.29	0.02	B>	7.71	-0.12	-0.01	B<	1.02	-0.09	0.00	A	1.02	0.13	0.01	A
67	82.73	0.74	0.01	B>	0.18	0.08	0.00	A	17.64	0.40	0.01	B>	0.35	0.10	0.00	A	0.20	0.19	0.00	A
68	11.86	-0.17	-0.01	B<	2.63	0.18	0.01	A	28.38	0.31	0.02	B>	19.53	-0.43	-0.03	B<	8.27	0.64	0.02	B>
69	97.90	0.37	0.03	B>	4.58	-0.20	-0.02	A	45.13	-0.28	-0.02	B<	0.10	-0.03	0.00	A	27.21	-0.65	-0.06	B<
70	54.46	0.30	0.02	B>	2.81	0.16	0.01	A	16.43	-0.19	-0.02	B<	6.27	-0.22	-0.02	A	0.00	0.01	0.00	A
71	2.87	-0.07	0.00	A	2.61	0.16	0.01	A	203.06	-0.67	-0.04	B<	64.37	-0.70	-0.05	B<	11.11	-0.53	-0.03	B<
72	86.01	0.33	0.03	B>	7.54	0.23	0.02	B>	5.73	0.10	0.02	A	10.23	0.25	0.03	B>	0.03	0.02	0.00	A

Note. African Am. = African American, Native Am.= Native American, MH $\chi 2$ = Mantel-Haenszel Chi-Square, ΔMH = Delta (MH-D DIF), SMD= Standardized Mean Difference, A= No DIF, B=Weak DIF, C=Strong DIF, < favors reference group, > favors focal group. Item number does not indicate test booklet location due to field test and NRT items.

Table 9.2.1.3
2005 Spring AIMS Differential Item Functioning Mathematics CRT Grade 4

	Reference: Male N = 38346 Focal: Female N = 37425				Reference: White N = 34822 Focal: African Am. N = 3777				Reference: White N = 34822 Focal: Hispanic N = 30697				Reference: White N = 34822 Focal: Native Am. N = 4727				Reference: White N = 34822 Focal: Asian N = 1936			
Item	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag
1	0.00	0.00	0.00	A	11.45	0.45	0.02	B>	114.02	0.74	0.03	B>	0.61	0.09	0.00	A	5.22	0.57	0.01	A
2	258.60	-0.72	-0.05	B<	7.00	-0.27	-0.02	B<	37.77	-0.31	-0.02	B<	176.59	-1.19	-0.10	B<	12.23	-0.57	-0.03	B<
3	225.64	0.85	0.03	B>	6.51	0.33	0.02	A	157.47	0.81	0.04	B>	31.59	0.66	0.03	B>	2.96	0.36	0.01	A
4	0.79	0.04	0.00	A	1.06	0.12	0.01	A	48.84	0.40	0.02	B>	0.50	0.07	0.00	A	12.44	0.75	0.02	B>
5	45.02	-0.27	-0.02	B<	0.01	0.01	0.00	A	171.02	-0.60	-0.06	B<	102.63	-0.85	-0.08	B<	16.35	-0.55	-0.04	B<
6	80.40	0.34	0.03	B>	0.63	-0.07	-0.01	A	68.37	-0.36	-0.04	B<	28.56	-0.44	-0.04	B<	13.56	-0.47	-0.04	B<
7	0.11	0.02	0.00	A	3.69	-0.24	-0.01	A	33.37	-0.36	-0.02	B<	33.79	-0.62	-0.04	B<	3.81	-0.39	-0.01	A
8	272.21	0.64	0.05	B>	1.98	-0.13	-0.01	A	0.68	-0.04	0.00	A	11.25	-0.28	-0.03	B<	0.01	0.02	0.00	A
9	14.71	0.23	0.01	B>	0.97	0.13	0.01	A	48.36	0.49	0.02	B>	91.11	1.21	0.06	B>	0.21	-0.12	0.00	A
10	19.21	0.23	0.01	B>	9.65	0.37	0.02	B>	114.07	0.65	0.04	B>	48.43	0.75	0.05	B>	7.88	0.60	0.02	B>
11	40.32	-0.25	-0.02	B<	3.80	-0.18	-0.01	A	7.78	-0.13	-0.01	B<	56.83	-0.63	-0.05	B<	0.27	0.08	0.01	A
12	105.17	-0.57	-0.02	B<	0.03	-0.03	0.00	A	41.69	0.41	0.02	B>	15.24	0.43	0.03	B>	0.04	0.05	0.00	A
13	61.48	-0.34	-0.02	B<	18.50	-0.42	-0.03	B<	20.13	-0.22	-0.01	B<	19.94	0.40	0.03	B>	0.84	-0.15	-0.01	A
14	28.92	-0.27	-0.01	B<	12.11	0.40	0.02	B>	124.00	0.66	0.04	B>	4.54	0.22	0.01	A	7.14	0.56	0.02	B>
15	3.28	-0.09	0.00	A	1.93	0.17	0.01	A	11.01	0.20	0.01	B>	0.74	0.09	0.00	A	0.32	0.12	0.00	A
16	66.42	0.32	0.03	B>	29.54	0.50	0.04	B>	1.74	0.06	0.01	A	7.08	-0.22	-0.02	B<	14.45	0.54	0.04	B>
17	77.85	-0.50	-0.02	B<	5.45	-0.30	-0.01	A	84.76	-0.61	-0.03	B<	15.81	-0.43	-0.02	B<	10.82	-0.80	-0.02	B<
18	29.43	-0.20	-0.02	B<	28.35	0.48	0.04	B>	58.89	-0.32	-0.04	B<	2.12	-0.12	-0.02	A	0.01	-0.01	0.00	A
19	23.48	-0.23	-0.01	B<	2.56	0.17	0.01	A	206.37	0.78	0.05	B>	113.32	1.10	0.07	B>	6.01	0.43	0.02	A
20	3.73	-0.11	0.00	A	3.10	0.23	0.01	A	8.63	0.19	0.01	B>	8.31	0.33	0.02	B>	5.38	0.57	0.01	A
21	7.85	0.11	0.01	B>	15.87	-0.36	-0.03	B<	334.03	-0.79	-0.06	B<	284.32	-1.38	-0.12	B<	77.28	-1.13	-0.08	B<
22	5.13	-0.08	-0.01	A	7.25	0.24	0.02	B>	7.97	0.12	0.01	B>	4.66	0.18	0.02	A	2.29	0.20	0.02	A
23	8.61	-0.14	-0.01	B<	1.69	-0.14	-0.01	A	76.60	-0.48	-0.03	B<	43.85	-0.63	-0.05	B<	0.50	-0.14	0.00	A
24	13.30	0.15	0.01	B>	45.07	-0.69	-0.05	B<	214.10	-0.68	-0.04	B<	17.68	-0.41	-0.03	B<	42.50	-0.84	-0.07	B<
25	5.38	-0.15	0.00	A	0.64	0.12	0.00	A	40.90	0.48	0.02	B>	43.62	0.90	0.04	B>	0.73	-0.21	0.00	A
26	6.45	-0.13	-0.01	A	0.45	0.08	0.00	A	84.24	0.54	0.03	B>	42.33	0.70	0.04	B>	4.01	0.40	0.01	A
27	1.03	0.04	0.00	A	21.47	0.41	0.04	B>	184.68	0.58	0.05	B>	47.21	0.57	0.05	B>	19.51	0.56	0.05	B>
28	49.90	-0.32	-0.02	B<	18.36	0.46	0.03	B>	0.49	-0.04	0.00	A	14.92	-0.35	-0.03	B<	1.67	0.25	0.01	A
29	0.15	0.02	0.00	A	23.78	-0.49	-0.04	B<	205.92	-0.68	-0.06	B<	206.56	-1.30	-0.10	B<	12.78	-0.53	-0.03	B<
30	283.41	0.96	0.04	B>	0.00	0.00	0.00	A	20.94	-0.31	-0.02	B<	38.62	-0.68	-0.04	B<	5.28	-0.51	-0.01	A

Note. African Am. = African American, Native Am.= Native American, MH χ^2 = Mantel-Haenszel Chi-Square, ΔMH = Delta (MH-D DIF), SMD= Standardized Mean Difference, A= No DIF, B=Weak DIF, C=Strong DIF, < favors reference group, > favors focal group. Item number does not indicate test booklet location due to field test and NRT items.

(table continues)

Table 9.2.1.3 (continued)
2005 Spring AIMS Differential Item Functioning Mathematics CRT Grade 4

	Reference: Male N = 38346 Focal: Female N = 37425				Reference: White N = 34822 Focal: African Am. N = 3777				Reference: White N = 34822 Focal: Hispanic N = 30697				Reference: White N = 34822 Focal: Native Am. N = 4727				Reference: White N = 34822 Focal: Asian N = 1936			
Item	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag
31	34.00	-0.23	-0.02	B<	2.59	0.15	0.01	A	49.63	-0.31	-0.03	B<	0.54	-0.06	-0.01	A	0.00	0.00	0.00	A
32	211.55	-0.64	-0.04	B<	5.44	-0.23	-0.02	A	0.00	0.00	0.00	A	26.61	0.47	0.04	B>	5.64	0.41	0.02	A
33	2.16	-0.07	0.00	A	14.44	-0.40	-0.03	B<	108.66	-0.55	-0.04	B<	8.38	-0.28	-0.03	B<	1.40	-0.22	-0.01	A
34	14.68	0.19	0.01	B>	0.10	-0.04	0.00	A	1.84	0.08	0.00	A	12.19	0.35	0.02	B>	0.25	0.10	0.00	A
35	16.79	0.22	0.01	B>	3.76	0.24	0.01	A	72.34	0.53	0.03	B>	81.76	1.09	0.05	B>	1.34	0.24	0.01	A
36	16.88	0.31	0.01	B>	6.54	-0.41	-0.01	A	0.92	0.09	0.00	A	15.92	0.62	0.02	B>	1.94	-0.43	-0.01	A
37	12.22	0.19	0.01	B>	0.02	0.02	0.00	A	5.96	0.16	0.01	A	20.83	0.50	0.03	B>	0.73	0.20	0.01	A
38	303.13	-0.72	-0.05	B<	2.74	-0.16	-0.01	A	0.70	0.04	0.00	A	22.05	-0.40	-0.03	B<	3.48	0.30	0.02	A
39	41.76	0.38	0.01	B>	0.10	0.05	0.00	A	13.39	-0.25	-0.01	B<	0.01	0.01	0.00	A	2.71	-0.38	-0.01	A
40	106.33	-0.38	-0.03	B<	1.99	0.13	0.01	A	45.44	0.29	0.02	B>	1.95	0.12	0.01	A	6.14	0.32	0.03	A
41	128.09	-0.44	-0.04	B<	2.20	-0.14	-0.01	A	15.94	0.18	0.01	B>	4.11	0.17	0.02	A	0.17	-0.06	0.00	A
42	4.70	0.10	0.01	A	3.48	-0.20	-0.01	A	7.15	-0.15	-0.01	B<	29.74	-0.51	-0.04	B<	12.91	-0.60	-0.03	B<
43	237.25	-0.56	-0.05	B<	0.58	0.07	0.01	A	0.96	0.04	0.00	A	0.80	0.08	0.00	A	0.62	0.10	0.01	A
44	24.42	0.21	0.01	B>	0.01	-0.01	0.00	A	49.83	0.34	0.03	B>	9.04	0.27	0.02	B>	17.80	0.68	0.04	B>
45	69.91	0.34	0.03	B>	5.24	-0.22	-0.02	A	1.17	-0.05	-0.01	A	50.16	-0.62	-0.05	B<	1.23	0.17	0.01	A
46	0.40	-0.03	0.00	A	3.73	0.20	0.01	A	2.54	0.08	0.01	A	139.01	1.09	0.09	B>	0.69	0.14	0.01	A
47	40.97	0.30	0.02	B>	1.76	-0.14	-0.01	A	1.91	0.08	0.00	A	15.31	0.38	0.03	B>	4.43	-0.38	-0.02	A
48	122.08	-0.48	-0.03	B<	1.94	-0.14	-0.01	A	4.11	-0.10	-0.01	A	6.00	-0.22	-0.02	A	1.45	0.20	0.01	A
49	67.25	0.35	0.02	B>	0.11	-0.04	0.00	A	0.12	-0.02	0.00	A	13.55	0.34	0.03	B>	0.66	0.13	0.01	A
50	70.17	0.32	0.03	B>	1.69	0.12	0.01	A	86.53	0.41	0.03	B>	0.01	-0.01	0.00	A	2.37	0.20	0.02	A
51	57.57	-0.32	-0.02	B<	62.64	-0.76	-0.06	B<	15.18	-0.19	-0.02	B<	1.12	0.10	0.01	A	4.62	-0.33	-0.02	A
52	295.49	-0.90	-0.04	B<	20.69	-0.52	-0.03	B<	423.73	-1.22	-0.07	B<	94.29	-0.98	-0.06	B<	18.27	-0.90	-0.03	B<
53	119.96	0.57	0.03	B>	0.00	0.00	0.00	A	69.10	-0.51	-0.03	B<	41.38	-0.63	-0.04	B<	4.48	-0.44	-0.01	A
54	253.62	0.60	0.05	B>	6.12	-0.23	-0.02	A	86.34	-0.40	-0.03	B<	1.28	-0.10	-0.01	A	5.98	-0.31	-0.03	A
55	3.19	0.10	0.00	A	4.00	-0.24	-0.01	A	26.51	-0.33	-0.01	B<	0.23	0.05	0.00	A	17.07	-0.83	-0.02	B<
56	42.67	0.28	0.02	B>	13.24	0.37	0.03	B>	63.99	0.40	0.03	B>	0.26	-0.05	0.00	A	29.64	0.93	0.04	B>
57	211.54	-0.69	-0.04	B<	1.25	-0.12	-0.01	A	18.02	-0.23	-0.01	B<	67.10	-0.74	-0.05	B<	2.73	-0.31	-0.01	A
58	36.58	-0.23	-0.02	B<	13.03	-0.32	-0.03	B<	2.03	0.06	0.00	A	0.72	0.07	0.00	A	0.52	-0.10	-0.01	A
59	17.96	-0.15	-0.02	B<	0.50	0.06	0.01	A	0.71	-0.03	0.00	A	23.41	0.39	0.04	B>	7.00	-0.32	-0.03	B<
60	22.73	0.28	0.01	B>	1.90	0.18	0.01	A	47.02	0.46	0.02	B>	20.54	0.52	0.03	B>	0.35	0.15	0.00	A

Note. African Am. = African American, Native Am.= Native American, MH χ^2 = Mantel-Haenszel Chi-Square, ΔMH = Delta (MH-D DIF), SMD= Standardized Mean Difference, A= No DIF, B=Weak DIF, C=Strong DIF, < favors reference group, > favors focal group. Item number does not indicate test booklet location due to field test and NRT items.

(table continues)

Table 9.2.1.3 (continued)
2005 Spring AIMS Differential Item Functioning Mathematics CRT Grade 4

	Reference: Male N = 38346 Focal: Female N = 37425				Reference: White N = 34822 Focal: African Am. N = 3777				Reference: White N = 34822 Focal: Hispanic N = 30697				Reference: White N = 34822 Focal: Native Am. N = 4727				Reference: White N = 34822 Focal: Asian N = 1936			
Item	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag
61	72.36	-0.35	-0.03	B<	6.27	0.25	0.02	A	15.99	0.19	0.01	B>	1.99	0.13	0.01	A	28.52	0.79	0.05	B>
62	6.74	0.12	0.01	B>	3.08	-0.18	-0.01	A	35.56	-0.31	-0.02	B<	23.17	-0.43	-0.03	B<	4.62	-0.36	-0.02	A
63	158.40	0.49	0.04	B>	3.47	0.17	0.02	A	9.46	-0.14	-0.01	B<	1.61	0.11	0.01	A	2.08	-0.20	-0.01	A
64	16.55	0.16	0.01	B>	0.02	-0.02	0.00	A	15.07	-0.17	-0.01	B<	0.94	0.09	0.01	A	1.28	-0.14	-0.01	A
65	66.63	0.33	0.03	B>	0.76	-0.08	-0.01	A	68.69	-0.37	-0.03	B<	42.13	-0.57	-0.05	B<	10.48	-0.44	-0.03	B<
66	2.75	0.07	0.00	A	9.79	0.32	0.02	B>	35.06	0.30	0.02	B>	14.03	0.34	0.03	B>	7.22	0.46	0.02	B>
67	1.68	0.07	0.00	A	0.21	0.05	0.00	A	152.63	0.72	0.05	B>	100.86	1.02	0.07	B>	17.87	0.89	0.03	B>
68	231.47	0.63	0.05	B>	19.28	0.42	0.03	B>	228.54	0.71	0.06	B>	50.96	0.61	0.06	B>	43.72	1.05	0.06	B>
69	118.89	0.65	0.02	B>	2.13	0.20	0.01	A	35.11	0.41	0.02	B>	30.53	0.65	0.03	B>	0.54	0.19	0.00	A
70	58.88	0.34	0.02	B>	10.88	0.34	0.02	B>	231.67	0.79	0.05	B>	127.23	1.10	0.08	B>	2.18	0.24	0.01	A

Note. African Am. = African American, Native Am.= Native American, MH $\chi 2$ = Mantel-Haenszel Chi-Square, ΔMH = Delta (MH-D DIF), SMD= Standardized Mean Difference, A= No DIF, B=Weak DIF, C=Strong DIF, < favors reference group, > favors focal group. Item number does not indicate test booklet location due to field test and NRT items.

Table 9.2.1.4
2005 Spring AIMS Differential Item Functioning Mathematics CRT Grade 5

	Reference: Male N = 38556 Focal: Female N = 37834				Reference: White N = 35128 Focal: African Am. N = 3891				Reference: White N = 35128 Focal: Hispanic N = 30617				Reference: White N = 35128 Focal: Native Am. N = 5113				Reference: White N = 35128 Focal: Asian N = 1804			
Item	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag
1	210.86	-0.57	-0.05	B<	39.96	-0.57	-0.05	B<	539.02	-1.03	-0.09	B<	108.52	-0.83	-0.08	B<	54.84	-1.00	-0.07	B<
2	14.56	0.15	0.01	B>	4.46	-0.19	-0.02	A	270.60	0.74	0.07	B>	347.83	1.64	0.14	C>	10.64	0.49	0.03	B>
3	0.05	0.01	0.00	A	5.91	0.21	0.02	A	30.70	0.23	0.02	B>	2.03	0.11	0.01	A	27.43	0.72	0.05	B>
4	172.04	0.70	0.03	B>	0.23	0.06	0.00	A	43.42	-0.41	-0.02	B<	5.66	-0.24	-0.01	A	5.09	-0.48	-0.01	A
5	45.91	-0.31	-0.02	B<	35.51	0.62	0.04	B>	105.08	0.53	0.04	B>	2.91	0.15	0.01	A	21.90	0.95	0.03	B>
6	283.92	0.98	0.04	B>	0.15	-0.05	0.00	A	57.88	-0.52	-0.03	B<	46.25	-0.73	-0.04	B<	2.88	-0.47	-0.01	A
7	70.49	0.34	0.03	B>	18.81	0.42	0.03	B>	138.85	0.54	0.04	B>	0.01	0.01	0.00	A	6.85	0.34	0.03	B>
8	14.59	0.20	0.01	B>	3.51	-0.21	-0.01	A	0.00	0.00	0.00	A	55.65	0.81	0.05	B>	0.11	0.08	0.00	A
9	109.22	0.42	0.03	B>	0.11	0.03	0.00	A	52.73	0.33	0.03	B>	3.11	0.15	0.01	A	10.88	0.53	0.03	B>
10	32.25	0.23	0.02	B>	6.22	0.23	0.02	A	116.71	0.49	0.04	B>	23.82	0.41	0.03	B>	11.42	0.52	0.03	B>
11	0.05	0.01	0.00	A	1.04	0.11	0.01	A	7.68	0.15	0.02	B>	81.43	0.89	0.06	B>	4.98	0.45	0.02	A
12	0.00	0.00	0.00	A	5.51	-0.24	-0.02	A	5.04	0.12	0.01	A	22.19	0.43	0.03	B>	0.58	-0.14	-0.01	A
13	2.88	0.08	0.00	A	0.13	-0.04	0.00	A	42.75	-0.35	-0.02	B<	1.23	-0.10	0.00	A	0.49	-0.14	-0.01	A
14	55.62	-0.29	-0.02	B<	0.06	-0.02	0.00	A	116.36	-0.47	-0.04	B<	3.29	-0.15	-0.01	A	1.53	-0.18	-0.01	A
15	160.67	-0.55	-0.04	B<	42.72	0.64	0.05	B>	103.24	0.50	0.04	B>	30.55	0.48	0.04	B>	26.93	0.97	0.04	B>
16	18.36	0.19	0.01	B>	2.78	-0.16	-0.01	A	29.82	-0.27	-0.02	B<	259.46	-1.45	-0.11	B<	0.51	-0.13	-0.01	A
17	0.93	0.06	0.00	A	0.26	0.07	0.00	A	127.27	0.81	0.03	B>	71.97	1.02	0.05	B>	3.08	0.53	0.01	A
18	100.86	0.43	0.03	B>	6.88	0.26	0.02	B>	72.88	0.42	0.03	B>	4.32	0.18	0.02	A	0.99	0.17	0.01	A
19	45.76	0.52	0.01	B>	0.16	0.07	0.00	A	36.60	0.54	0.02	B>	58.47	1.13	0.04	B>	4.64	0.90	0.01	A
20	103.08	0.40	0.03	B>	2.02	-0.13	-0.01	A	15.51	-0.18	-0.01	B<	1.05	-0.08	-0.01	A	13.95	-0.54	-0.03	B<
21	8.92	-0.16	-0.01	B<	9.41	-0.37	-0.02	B<	3.36	-0.12	-0.01	A	25.54	-0.51	-0.03	B<	0.15	0.11	0.00	A
22	10.99	-0.14	-0.01	B<	0.05	-0.02	0.00	A	10.57	0.16	0.01	B>	8.64	0.25	0.02	B>	0.02	0.03	0.00	A
23	3.98	0.09	0.01	A	7.99	-0.28	-0.02	B<	11.14	0.17	0.02	B>	25.48	0.46	0.04	B>	0.80	-0.16	-0.01	A
24	16.69	0.18	0.01	B>	0.25	-0.05	0.00	A	47.16	-0.35	-0.03	B<	353.59	-1.68	-0.12	C<	2.99	-0.32	-0.01	A
25	131.75	-0.47	-0.04	B<	21.04	-0.43	-0.04	B<	65.45	-0.37	-0.03	B<	5.73	-0.20	-0.02	A	3.39	-0.28	-0.02	A
26	1.69	-0.07	0.00	A	0.23	-0.06	0.00	A	286.51	-1.01	-0.06	B<	179.94	-1.26	-0.09	B<	25.35	-1.05	-0.03	B<
27	334.50	-0.95	-0.05	B<	34.94	-0.66	-0.04	B<	93.89	-0.58	-0.03	B<	66.30	-0.79	-0.05	B<	3.83	-0.43	-0.01	A
28	34.61	-0.31	-0.01	B<	0.17	0.05	0.00	A	37.17	0.37	0.02	B>	2.82	0.17	0.01	A	4.39	0.50	0.01	A
29	28.75	0.33	0.01	B>	0.34	0.08	0.00	A	56.20	0.53	0.02	B>	14.11	0.45	0.02	B>	0.54	0.20	0.00	A
30	261.82	-0.66	-0.05	B<	20.07	-0.41	-0.03	B<	224.23	-0.68	-0.05	B<	64.39	-0.65	-0.06	B<	12.06	-0.54	-0.03	B<

Note. African Am. = African American, Native Am.= Native American, MH $\chi 2$ = Mantel-Haenszel Chi-Square, ΔMH = Delta (MH-D DIF), SMD= Standardized Mean Difference, A= No DIF, B=Weak DIF, C=Strong DIF, < favors reference group, > favors focal group. Item number does not indicate test booklet location due to field test and NRT items.

(table continues)

Table 9.2.1.4 (continued)
2005 Spring AIMS Differential Item Functioning Mathematics CRT Grade 5

	Reference: Male N = 38556 Focal: Female N = 37834				Reference: White N = 35128 Focal: African Am. N = 3891				Reference: White N = 35128 Focal: Hispanic N = 30617				Reference: White N = 35128 Focal: Native Am. N = 5113				Reference: White N = 35128 Focal: Asian N = 1804			
Item	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag
31	28.09	0.20	0.02	B>	7.92	-0.25	-0.02	B<	22.74	-0.20	-0.01	B<	28.71	-0.43	-0.04	B<	4.46	-0.28	-0.02	A
32	13.72	0.15	0.01	B>	37.08	0.56	0.04	B>	17.06	0.19	0.01	B>	0.05	0.02	0.00	A	0.00	0.01	0.00	A
33	3.71	0.12	0.00	A	3.67	-0.27	-0.01	A	41.87	-0.48	-0.02	B<	134.00	-1.23	-0.06	B<	14.20	-0.99	-0.02	B<
34	4.66	-0.13	0.00	A	0.72	0.11	0.00	A	9.39	0.21	0.01	B>	15.65	0.45	0.02	B>	0.07	-0.08	0.00	A
35	13.32	0.14	0.01	B>	9.89	-0.28	-0.03	B<	23.66	-0.21	-0.02	B<	18.75	0.35	0.03	B>	1.89	-0.20	-0.01	A
36	73.27	0.52	0.02	B>	0.00	0.00	0.00	A	6.89	-0.19	-0.01	B<	10.32	0.37	0.02	B>	1.39	-0.35	-0.01	A
37	2.39	-0.08	0.00	A	0.09	0.04	0.00	A	7.52	-0.17	-0.02	B<	0.34	-0.06	-0.01	A	0.87	-0.21	-0.01	A
38	534.22	-1.01	-0.07	B<	11.96	-0.34	-0.02	B<	106.83	-0.51	-0.03	B<	25.71	-0.43	-0.04	B<	29.58	-0.97	-0.04	B<
39	95.80	-0.44	-0.03	B<	7.34	-0.28	-0.02	B<	27.35	-0.26	-0.02	B<	0.88	0.09	0.01	A	8.13	-0.51	-0.02	B<
40	16.88	-0.18	-0.01	B<	28.24	-0.51	-0.04	B<	32.71	-0.28	-0.02	B<	4.06	0.18	0.01	A	3.53	-0.32	-0.02	A
41	156.31	0.61	0.03	B>	77.97	0.98	0.06	B>	408.63	1.14	0.07	B>	166.12	1.25	0.09	B>	21.49	1.00	0.03	B>
42	819.43	-1.17	-0.09	B<	6.71	-0.24	-0.02	B<	2.54	-0.07	0.00	A	22.13	0.39	0.04	B>	0.61	-0.13	-0.01	A
43	18.51	-0.23	-0.01	B<	0.16	0.05	0.00	A	7.90	0.17	0.01	B>	41.64	0.69	0.04	B>	0.62	0.18	0.01	A
44	268.16	0.75	0.05	B>	0.00	0.00	0.00	A	230.68	-0.79	-0.05	B<	242.81	-1.33	-0.10	B<	45.79	-1.13	-0.05	B<
45	224.73	-0.67	-0.04	B<	11.40	0.34	0.03	B>	8.71	0.15	0.01	B>	2.08	0.13	0.01	A	0.01	0.03	0.00	A
46	48.18	0.32	0.02	B>	0.11	0.04	0.00	A	22.45	-0.24	-0.02	B<	210.35	-1.31	-0.10	B<	1.16	-0.20	-0.01	A
47	1.65	0.06	0.00	A	0.77	-0.09	-0.01	A	45.60	-0.34	-0.02	B<	6.07	-0.22	-0.02	A	4.02	-0.36	-0.02	A
48	154.88	0.47	0.04	B>	0.40	-0.06	-0.01	A	51.28	0.31	0.03	B>	7.57	0.22	0.02	B>	5.92	0.35	0.02	A
49	82.54	0.50	0.02	B>	0.07	-0.04	0.00	A	38.67	-0.41	-0.02	B<	17.67	-0.44	-0.03	B<	4.80	-0.51	-0.01	A
50	146.94	0.55	0.03	B>	0.06	-0.03	0.00	A	1.41	0.06	0.00	A	0.75	0.08	0.00	A	4.07	-0.37	-0.02	A
51	608.29	-1.14	-0.07	B<	10.34	0.34	0.02	B>	27.23	0.27	0.02	B>	0.70	-0.08	-0.01	A	19.31	0.83	0.03	B>
52	1.03	-0.04	0.00	A	7.75	0.25	0.02	B>	11.63	-0.15	-0.01	B<	51.53	-0.59	-0.05	B<	2.02	-0.20	-0.01	A
53	54.86	-0.32	-0.02	B<	40.52	-0.65	-0.05	B<	1.34	-0.06	-0.01	A	24.70	-0.46	-0.04	B<	2.72	0.28	0.01	A
54	3.33	-0.07	-0.01	A	2.47	-0.14	-0.01	A	1.69	0.06	0.01	A	14.70	0.31	0.03	B>	3.24	0.27	0.02	A
55	81.04	-0.37	-0.03	B<	15.43	-0.37	-0.03	B<	13.32	0.17	0.01	B>	30.81	0.46	0.04	B>	4.89	0.38	0.02	A
56	159.03	-0.74	-0.03	B<	25.55	-0.62	-0.03	B<	4.28	-0.14	-0.01	A	0.02	0.02	0.00	A	0.00	0.01	0.00	A
57	54.75	-0.36	-0.02	B<	24.51	0.54	0.03	B>	82.89	0.51	0.03	B>	3.12	0.16	0.01	A	8.49	0.64	0.02	B>
58	57.22	0.52	0.01	B>	7.36	0.40	0.01	B>	99.77	0.80	0.03	B>	74.58	1.14	0.05	B>	1.81	0.45	0.01	A
59	69.52	0.32	0.03	B>	34.07	0.53	0.04	B>	128.36	0.50	0.04	B>	0.59	0.07	0.01	A	17.57	0.61	0.04	B>
60	64.75	0.44	0.02	B>	2.36	0.19	0.01	A	0.09	-0.02	0.00	A	17.74	0.44	0.03	B>	6.38	-0.56	-0.01	A

Note. African Am. = African American, Native Am.= Native American, MH $\chi 2$ = Mantel-Haenszel Chi-Square, ΔMH = Delta (MH-D DIF), SMD= Standardized Mean Difference, A= No DIF, B=Weak DIF, C=Strong DIF, < favors reference group, > favors focal group. Item number does not indicate test booklet location due to field test and NRT items.

(table continues)

Table 9.2.1.4 (continued)
2005 Spring AIMS Differential Item Functioning Mathematics CRT Grade 5

	Reference: Male N = 38556 Focal: Female N = 37834				Reference: White N = 35128 Focal: African Am. N = 3891				Reference: White N = 35128 Focal: Hispanic N = 30617				Reference: White N = 35128 Focal: Native Am. N = 5113				Reference: White N = 35128 Focal: Asian N = 1804			
Item	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag
61	81.63	0.41	0.02	B>	1.87	-0.14	-0.01	A	18.83	-0.23	-0.02	B<	3.32	-0.16	-0.01	A	1.32	-0.22	-0.01	A
62	0.10	0.01	0.00	A	3.37	0.16	0.01	A	32.97	-0.24	-0.03	B<	85.22	-0.75	-0.07	B<	19.42	-0.57	-0.05	B<
63	165.24	0.49	0.04	B>	0.23	0.04	0.01	A	1.84	-0.06	0.00	A	26.26	0.42	0.04	B>	0.11	0.05	0.00	A
64	15.80	0.15	0.01	B>	9.27	0.29	0.02	B>	43.98	0.29	0.02	B>	1.70	-0.11	-0.01	A	15.88	0.54	0.04	B>
65	173.67	-0.48	-0.05	B<	1.09	-0.09	-0.01	A	4.68	0.09	0.01	A	42.58	0.51	0.05	B>	4.50	-0.27	-0.02	A
66	121.78	0.42	0.04	B>	19.65	0.40	0.04	B>	24.22	0.21	0.02	B>	19.18	0.35	0.03	B>	15.87	0.59	0.04	B>
67	54.09	0.28	0.02	B>	3.19	0.16	0.01	A	2.84	-0.07	0.00	A	12.94	0.29	0.03	B>	1.90	0.20	0.01	A
68	33.08	0.23	0.02	B>	0.00	-0.01	0.00	A	5.64	0.11	0.01	A	21.53	0.38	0.03	B>	0.56	-0.12	-0.01	A

Note. African Am. = African American, Native Am.= Native American, MH $\chi 2$ = Mantel-Haenszel Chi-Square, ΔMH = Delta (MH-D DIF), SMD= Standardized Mean Difference, A= No DIF, B=Weak DIF, C=Strong DIF, < favors reference group, > favors focal group. Item number does not indicate test booklet location due to field test and NRT items.

Table 9.2.1.5
2005 Spring AIMS Differential Item Functioning Mathematics CRT Grade 6

	Reference: Male N = 38049 Focal: Female N = 37433				Reference: White N = 35216 Focal: African Am. N = 3915				Reference: White N = 35216 Focal: Hispanic N = 29407				Reference: White N = 35216 Focal: Native Am. N = 5345				Reference: White N = 35216 Focal: Asian N = 1767			
Item	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag
1	16.76	-0.28	-0.01	B<	0.07	0.04	0.00	A	22.42	0.39	0.01	B>	11.28	0.44	0.02	B>	1.60	-0.37	-0.01	A
2	12.94	0.20	0.01	B>	8.19	-0.35	-0.02	B<	177.11	-0.87	-0.04	B<	42.02	-0.66	-0.04	B<	0.11	0.10	0.00	A
3	86.62	0.38	0.03	B>	0.98	0.09	0.01	A	35.61	0.28	0.02	B>	1.27	0.09	0.00	A	9.03	0.49	0.03	B>
4	57.20	0.27	0.03	B>	9.06	0.26	0.02	B>	80.65	0.38	0.04	B>	7.84	0.22	0.02	B>	10.56	0.41	0.04	B>
5	2.27	0.06	0.01	A	27.33	0.49	0.04	B>	22.61	0.22	0.02	B>	1.79	0.11	0.01	A	6.34	0.42	0.02	A
6	107.63	0.69	0.02	B>	12.93	-0.52	-0.02	B<	53.12	-0.59	-0.02	B<	1.72	-0.16	-0.01	A	0.18	-0.16	0.00	A
7	79.65	-0.51	-0.02	B<	6.79	-0.33	-0.02	B<	58.17	-0.52	-0.02	B<	31.01	-0.59	-0.03	B<	0.30	-0.15	0.00	A
8	54.46	-0.31	-0.02	B<	125.17	-1.07	-0.08	B<	188.26	-0.65	-0.06	B<	191.16	-1.18	-0.10	B<	67.33	-1.23	-0.07	B<
9	127.87	-0.48	-0.03	B<	0.27	-0.05	0.00	A	9.28	-0.15	-0.01	B<	41.93	-0.54	-0.05	B<	0.13	0.06	0.00	A
10	232.38	0.64	0.05	B>	0.16	0.04	0.00	A	10.03	-0.15	-0.02	B<	26.25	-0.51	-0.03	B<	4.47	-0.29	-0.02	A
11	89.59	-0.40	-0.03	B<	29.86	-0.51	-0.04	B<	49.63	-0.34	-0.02	B<	1.20	0.09	0.01	A	17.22	-0.65	-0.04	B<
12	0.54	0.03	0.00	A	3.94	0.21	0.01	A	1.68	-0.07	0.00	A	3.25	-0.16	-0.01	A	0.05	-0.05	0.00	A
13	36.59	-0.27	-0.02	B<	0.53	0.07	0.01	A	3.16	-0.09	-0.01	A	0.23	0.04	0.00	A	0.57	0.14	0.01	A
14	0.00	0.00	0.00	A	25.24	-0.48	-0.04	B<	4.44	-0.10	-0.01	A	2.99	-0.15	-0.01	A	7.65	-0.45	-0.02	B<
15	3.25	0.09	0.00	A	1.98	0.16	0.01	A	21.34	0.27	0.01	B>	0.06	-0.03	-0.01	A	0.01	-0.02	0.00	A
16	5.92	0.09	0.01	A	1.18	0.10	0.01	A	24.31	0.22	0.01	B>	8.32	0.23	0.02	B>	2.26	0.21	0.02	A
17	7.98	-0.15	-0.01	B<	43.46	-0.74	-0.04	B<	82.14	-0.55	-0.03	B<	44.06	-0.63	-0.04	B<	4.37	-0.48	-0.01	A
18	8.23	-0.12	-0.01	B<	0.02	0.02	0.00	A	22.20	-0.21	-0.02	B<	32.56	-0.48	-0.04	B<	0.37	-0.09	-0.01	A
19	15.80	0.16	0.01	B>	0.01	-0.01	0.00	A	9.78	-0.14	-0.01	B<	0.08	0.02	0.00	A	0.53	0.12	0.01	A
20	45.04	0.26	0.02	B>	9.54	-0.28	-0.02	B<	34.95	-0.26	-0.02	B<	47.11	-0.55	-0.04	B<	8.16	-0.41	-0.03	B<
21	80.78	0.44	0.02	B>	6.18	0.27	0.02	A	6.69	0.15	0.01	B>	1.65	-0.12	-0.01	A	0.00	0.00	0.00	A
22	3.06	0.14	0.00	A	0.00	0.00	0.00	A	2.70	0.16	0.00	A	0.00	-0.01	0.00	A	1.09	-0.38	0.00	A
23	70.68	-0.42	-0.02	B<	0.00	0.00	0.00	A	10.68	-0.19	-0.01	B<	4.30	0.20	0.01	A	0.50	0.16	0.01	A
24	3.12	-0.07	0.00	A	4.30	-0.20	-0.02	A	1.28	-0.05	-0.01	A	20.60	-0.38	-0.03	B<	3.03	-0.27	-0.02	A
25	63.71	-0.31	-0.03	B<	1.96	0.13	0.01	A	2.35	-0.07	0.00	A	5.33	0.18	0.02	A	5.37	0.36	0.02	A
26	14.74	-0.18	-0.01	B<	0.89	0.10	0.01	A	6.25	-0.13	-0.01	A	23.03	-0.43	-0.04	B<	8.15	-0.48	-0.02	B<
27	164.06	0.54	0.04	B>	2.27	0.15	0.01	A	26.01	0.25	0.02	B>	2.20	-0.12	-0.01	A	0.23	0.09	0.00	A
28	66.13	-0.34	-0.02	B<	29.07	-0.49	-0.04	B<	58.24	0.36	0.03	B>	86.21	0.80	0.07	B>	4.07	0.33	0.02	A
29	178.24	0.50	0.04	B>	4.87	0.20	0.02	A	38.80	0.27	0.02	B>	1.09	-0.08	0.00	A	13.96	0.53	0.04	B>
30	2.59	0.07	0.00	A	95.75	1.03	0.07	B>	67.39	0.42	0.03	B>	14.18	0.32	0.03	B>	14.47	0.74	0.03	B>

Note. African Am. = African American, Native Am.= Native American, MH χ^2 = Mantel-Haenszel Chi-Square, ΔMH = Delta (MH-D DIF), SMD= Standardized Mean Difference, A= No DIF, B=Weak DIF, C=Strong DIF, < favors reference group, > favors focal group. Item number does not indicate test booklet location due to field test and NRT items.

(table continues)

Table 9.2.1.5 (continued)
2005 Spring AIMS Differential Item Functioning Mathematics CRT Grade 6

	Reference: Male N = 38049 Focal: Female N = 37433				Reference: White N = 35216 Focal: African Am. N = 3915				Reference: White N = 35216 Focal: Hispanic N = 29407				Reference: White N = 35216 Focal: Native Am. N = 5345				Reference: White N = 35216 Focal: Asian N = 1767			
Item	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag
31	48.40	0.31	0.02	B>	9.71	0.33	0.02	B>	10.78	-0.17	-0.02	B<	16.86	-0.36	-0.03	B<	1.32	-0.19	-0.01	A
32	106.85	0.43	0.03	B>	3.79	0.19	0.01	A	167.27	-0.61	-0.05	B<	9.01	-0.25	-0.02	B<	17.21	-0.64	-0.04	B<
33	9.92	-0.15	-0.01	B<	0.15	0.04	0.00	A	28.48	0.30	0.02	B>	5.04	0.21	0.01	A	0.03	-0.04	0.00	A
34	3.20	-0.08	0.00	A	5.68	0.23	0.02	A	19.66	0.22	0.02	B>	14.66	0.33	0.03	B>	0.98	-0.17	-0.01	A
35	137.70	0.50	0.03	B>	13.66	0.37	0.03	B>	14.55	0.19	0.02	B>	0.09	-0.03	0.00	A	1.92	-0.23	-0.01	A
36	400.79	-0.76	-0.07	B<	0.00	0.00	0.00	A	0.71	-0.04	0.00	A	10.40	0.26	0.02	B>	1.15	-0.15	-0.01	A
37	135.70	-0.50	-0.03	B<	12.68	-0.34	-0.03	B<	22.66	-0.23	-0.01	B<	0.77	-0.08	-0.01	A	3.56	-0.32	-0.02	A
38	50.02	0.32	0.02	B>	30.72	-0.56	-0.04	B<	59.67	-0.41	-0.03	B<	27.93	-0.47	-0.04	B<	4.60	-0.39	-0.02	A
39	586.41	-0.90	-0.08	B<	22.41	-0.41	-0.04	B<	0.61	-0.03	0.00	A	75.39	0.68	0.07	B>	0.24	-0.07	-0.01	A
40	19.65	0.21	0.01	B>	17.36	-0.44	-0.03	B<	35.23	-0.33	-0.02	B<	37.02	0.58	0.04	B>	7.71	-0.53	-0.02	B<
41	213.60	0.75	0.04	B>	12.36	0.40	0.02	B>	88.59	0.55	0.03	B>	49.82	0.71	0.05	B>	20.67	1.07	0.03	B>
42	123.08	-0.49	-0.03	B<	14.60	0.39	0.03	B>	15.97	0.20	0.01	B>	0.60	-0.07	-0.01	A	1.10	0.19	0.01	A
43	82.75	-0.39	-0.03	B<	0.96	-0.09	-0.01	A	3.93	-0.10	-0.01	A	0.66	-0.07	-0.01	A	6.73	0.45	0.02	B>
44	0.54	-0.03	0.00	A	11.43	0.30	0.03	B>	17.57	0.19	0.01	B>	7.25	-0.21	-0.02	B<	3.36	0.26	0.02	A
45	29.93	0.24	0.02	B>	0.63	-0.08	-0.01	A	1.15	0.05	0.00	A	17.62	-0.40	-0.03	B<	16.87	0.62	0.04	B>
46	48.96	-0.28	-0.02	B<	3.84	0.18	0.01	A	68.30	0.38	0.03	B>	7.89	0.23	0.02	B>	1.33	0.17	0.01	A
47	4.84	-0.10	-0.01	A	8.76	0.32	0.02	B>	21.54	0.25	0.02	B>	21.56	0.43	0.03	B>	14.96	0.83	0.03	B>
48	132.83	0.45	0.04	B>	11.73	0.31	0.03	B>	4.44	0.09	0.00	A	0.02	0.01	0.00	A	13.82	0.53	0.04	B>
49	84.02	0.50	0.02	B>	0.33	0.07	0.00	A	48.85	0.45	0.02	B>	26.35	0.52	0.03	B>	0.19	0.11	0.00	A
50	270.82	0.60	0.06	B>	7.53	0.24	0.02	B>	0.10	0.01	-0.01	A	1.31	-0.09	-0.01	A	2.92	-0.22	-0.02	A
51	102.74	-0.42	-0.03	B<	6.13	-0.23	-0.02	A	5.18	-0.11	-0.01	A	10.48	0.27	0.02	B>	0.17	-0.07	0.00	A
52	0.00	0.00	0.00	A	2.65	0.18	0.01	A	13.20	-0.19	-0.01	B<	0.49	0.06	0.01	A	0.65	0.17	0.01	A
53	347.55	-0.74	-0.06	B<	25.37	-0.45	-0.04	B<	12.67	0.16	0.02	B>	87.14	0.76	0.07	B>	1.41	-0.18	-0.01	A
54	222.10	-0.59	-0.05	B<	2.21	-0.14	-0.01	A	3.32	0.08	0.01	A	86.67	0.75	0.07	B>	0.30	0.09	0.01	A
55	253.99	0.66	0.05	B>	0.27	0.05	0.00	A	30.90	0.26	0.02	B>	1.94	-0.12	-0.01	A	10.80	0.54	0.03	B>
56	242.00	0.81	0.04	B>	2.68	-0.18	-0.01	A	1.07	0.06	0.01	A	125.55	1.19	0.08	B>	0.01	0.03	0.00	A
57	9.57	0.14	0.01	B>	0.02	0.02	0.00	A	1.46	-0.06	0.00	A	16.21	-0.35	-0.02	B<	2.44	0.32	0.01	A
58	0.46	0.04	0.00	A	45.10	0.81	0.04	B>	69.84	0.52	0.03	B>	22.39	0.47	0.03	B>	32.00	1.47	0.03	B>
59	208.57	-0.58	-0.05	B<	0.43	0.06	0.01	A	44.62	-0.30	-0.02	B<	74.10	-0.71	-0.06	B<	58.85	-1.08	-0.07	B<
60	1.77	-0.05	0.00	A	4.52	-0.20	-0.02	A	0.72	-0.04	-0.01	A	2.36	0.13	0.00	A	6.65	-0.39	-0.02	B<

Note. African Am. = African American, Native Am.= Native American, MH $\chi 2$ = Mantel-Haenszel Chi-Square, ΔMH = Delta (MH-D DIF), SMD= Standardized Mean Difference, A= No DIF, B=Weak DIF, C=Strong DIF, < favors reference group, > favors focal group. Item number does not indicate test booklet location due to field test and NRT items.

(table continues)

Table 9.2.1.5 (continued)
2005 Spring AIMS Differential Item Functioning Mathematics CRT Grade 6

	Reference: Male N = 38049 Focal: Female N = 37433				Reference: White N = 35216 Focal: African Am. N = 3915				Reference: White N = 35216 Focal: Hispanic N = 29407				Reference: White N = 35216 Focal: Native Am. N = 5345				Reference: White N = 35216 Focal: Asian N = 1767			
Item	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag
61	689.23	1.09	0.08	B>	8.20	0.27	0.02	B>	6.81	0.12	0.01	B>	37.13	0.51	0.04	B>	10.01	0.54	0.03	B>
62	98.01	-0.41	-0.03	B<	10.17	-0.31	-0.02	B<	14.13	-0.18	-0.01	B<	2.80	-0.15	-0.01	A	6.11	0.36	0.02	A
63	51.34	-0.34	-0.02	B<	0.51	0.08	0.01	A	11.50	0.18	0.01	B>	30.81	0.51	0.03	B>	0.02	0.04	0.00	A
64	154.96	-0.49	-0.04	B<	0.35	-0.06	-0.01	A	24.65	-0.22	-0.02	B<	41.33	-0.54	-0.04	B<	4.30	-0.29	-0.02	A
65	7.60	0.11	0.01	B>	40.71	0.60	0.05	B>	168.12	0.61	0.05	B>	32.53	0.46	0.04	B>	15.81	0.67	0.04	B>
66	24.10	0.21	0.01	B>	0.62	-0.08	-0.01	A	0.12	0.02	0.01	A	25.32	-0.41	-0.03	B<	3.16	-0.29	-0.02	A
67	69.44	0.42	0.02	B>	0.76	0.10	0.01	A	7.82	-0.16	-0.01	B<	7.52	-0.26	-0.02	B<	1.56	-0.27	-0.01	A
68	1.27	-0.04	0.00	A	17.02	-0.37	-0.03	B<	53.88	-0.32	-0.03	B<	34.25	-0.47	-0.04	B<	17.12	-0.56	-0.04	B<

Note. African Am. = African American, Native Am.= Native American, MH $\chi 2$ = Mantel-Haenszel Chi-Square, ΔMH = Delta (MH-D DIF), SMD= Standardized Mean Difference, A= No DIF, B=Weak DIF, C=Strong DIF, < favors reference group, > favors focal group. Item number does not indicate test booklet location due to field test and NRT items.

Table 9.2.1.6
2005 Spring AIMS Differential Item Functioning Mathematics CRT Grade 7

	Reference: Male N = 38608 Focal: Female N = 37967				Reference: White N = 36219 Focal: African Am. N = 3897				Reference: White N = 36219 Focal: Hispanic N = 29593				Reference: White N = 36219 Focal: Native Am. N = 5467				Reference: White N = 36219 Focal: Asian N = 1640			
Item	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag
1	92.45	0.75	0.01	B>	0.21	0.08	0.00	A	4.89	-0.21	-0.01	A	2.74	-0.23	-0.01	A	3.64	-0.66	-0.01	A
2	163.79	-0.47	-0.04	B<	18.66	-0.37	-0.04	B<	120.59	-0.46	-0.05	B<	121.85	-0.86	-0.08	B<	1.84	-0.19	-0.02	A
3	50.87	-0.29	-0.02	B<	100.15	-0.89	-0.08	B<	0.05	0.01	0.00	A	134.86	-0.90	-0.08	B<	9.78	-0.48	-0.03	B<
4	10.32	-0.13	-0.01	B<	2.60	-0.15	-0.01	A	12.30	-0.16	-0.01	B<	0.13	-0.03	0.00	A	11.26	-0.52	-0.03	B<
5	2.43	0.07	0.00	A	0.18	-0.04	0.00	A	0.03	0.01	0.00	A	11.11	-0.28	-0.03	B<	8.89	0.59	0.03	B>
6	50.13	-0.31	-0.02	B<	17.42	-0.40	-0.03	B<	109.38	-0.51	-0.04	B<	29.44	-0.45	-0.04	B<	1.06	-0.19	-0.01	A
7	21.33	0.19	0.01	B>	5.13	0.21	0.02	A	122.32	0.51	0.04	B>	77.68	0.72	0.06	B>	17.88	0.71	0.04	B>
8	255.32	-0.86	-0.04	B<	14.06	-0.44	-0.02	B<	110.86	-0.66	-0.04	B<	4.17	0.22	0.01	A	5.48	-0.56	-0.01	A
9	33.85	-0.24	-0.02	B<	0.14	-0.04	0.00	A	122.17	0.53	0.04	B>	17.03	0.34	0.03	B>	6.00	0.42	0.02	A
10	268.58	-0.65	-0.05	B<	16.74	-0.37	-0.03	B<	2.25	0.07	0.00	A	24.77	-0.40	-0.04	B<	0.32	-0.09	-0.01	A
11	17.14	0.22	0.01	B>	0.22	0.06	0.00	A	101.61	-0.62	-0.03	B<	96.86	-0.94	-0.06	B<	46.66	-1.37	-0.04	B<
12	317.84	0.66	0.06	B>	19.97	0.39	0.04	B>	83.83	0.39	0.04	B>	38.09	0.48	0.04	B>	3.77	0.27	0.02	A
13	37.68	-0.24	-0.02	B<	3.43	-0.17	-0.01	A	13.76	0.17	0.02	B>	51.23	0.57	0.05	B>	0.01	0.02	0.00	A
14	21.96	-0.17	-0.02	B<	1.95	-0.12	-0.01	A	2.96	0.07	0.00	A	13.78	0.29	0.02	B>	0.13	-0.05	0.00	A
15	71.84	0.43	0.02	B>	4.85	0.26	0.01	A	58.95	0.46	0.03	B>	16.45	0.40	0.03	B>	5.44	0.54	0.02	A
16	46.89	0.30	0.02	B>	1.59	-0.13	-0.01	A	144.98	-0.60	-0.05	B<	230.43	-1.27	-0.10	B<	8.47	-0.51	-0.02	B<
17	4.44	0.08	0.01	A	0.13	-0.03	0.00	A	7.78	-0.12	-0.01	B<	5.08	-0.19	-0.02	A	0.48	-0.10	-0.01	A
18	909.84	-1.18	-0.10	B<	9.84	-0.28	-0.03	B<	179.51	-0.58	-0.05	B<	87.96	-0.75	-0.07	B<	14.70	-0.55	-0.04	B<
19	49.64	-0.40	-0.02	B<	0.67	-0.10	-0.01	A	5.19	0.15	0.01	A	45.99	0.75	0.04	B>	0.02	-0.05	0.00	A
20	9.70	-0.13	-0.01	B<	17.35	0.42	0.03	B>	36.82	-0.30	-0.02	B<	9.84	-0.27	-0.02	B<	0.00	-0.02	0.00	A
21	4.98	0.09	0.01	A	4.64	0.19	0.02	A	0.00	0.00	0.00	A	28.41	0.42	0.04	B>	0.10	-0.05	0.00	A
22	34.72	0.28	0.02	B>	34.60	-0.61	-0.04	B<	247.27	-0.84	-0.05	B<	67.52	-0.71	-0.05	B<	38.16	-1.18	-0.04	B<
23	114.40	-0.69	-0.02	B<	47.46	-0.96	-0.03	B<	231.46	-1.20	-0.05	B<	76.26	-1.02	-0.05	B<	15.18	-1.12	-0.02	B<
24	19.81	0.18	0.01	B>	4.14	0.19	0.01	A	57.44	0.35	0.03	B>	124.99	0.93	0.08	B>	2.16	0.24	0.01	A
25	66.61	-0.31	-0.03	B<	6.58	0.23	0.02	A	10.33	0.14	0.01	B>	19.52	-0.36	-0.03	B<	17.15	0.61	0.04	B>
26	73.32	0.47	0.02	B>	3.84	-0.25	-0.01	A	29.74	-0.36	-0.02	B<	179.45	-1.29	-0.08	B<	6.05	-0.57	-0.02	A
27	70.03	0.37	0.02	B>	14.60	0.39	0.03	B>	0.22	0.02	0.01	A	8.32	0.25	0.02	B>	0.30	0.11	0.00	A
28	19.41	0.21	0.01	B>	0.00	0.01	0.00	A	34.43	-0.32	-0.02	B<	30.01	-0.49	-0.03	B<	10.20	-0.61	-0.02	B<
29	22.93	0.42	0.01	B>	1.23	0.20	0.01	A	20.53	0.46	0.01	B>	66.52	1.32	0.04	B>	4.51	1.09	0.01	A
30	27.02	-0.22	-0.02	B<	14.42	-0.36	-0.03	B<	30.36	-0.26	-0.02	B<	12.86	-0.30	-0.02	B<	1.18	0.19	0.01	A

Note. African Am. = African American, Native Am.= Native American, MH χ^2 = Mantel-Haenszel Chi-Square, ΔMH = Delta (MH-D DIF), SMD= Standardized Mean Difference, A= No DIF, B=Weak DIF, C=Strong DIF, < favors reference group, > favors focal group. Item number does not indicate test booklet location due to field test and NRT items.

(table continues)

Table 9.2.1.6 (continued)
2005 Spring AIMS Differential Item Functioning Mathematics CRT Grade 7

	Reference: Male N = 38608 Focal: Female N = 37967				Reference: White N = 36219 Focal: African Am. N = 3897				Reference: White N = 36219 Focal: Hispanic N = 29593				Reference: White N = 36219 Focal: Native Am. N = 5467				Reference: White N = 36219 Focal: Asian N = 1640			
Item	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag
31	218.17	0.62	0.04	B>	0.76	0.09	0.01	A	100.31	-0.48	-0.04	B<	129.62	-0.91	-0.07	B<	2.28	-0.26	-0.01	A
32	76.67	-0.35	-0.03	B<	9.85	0.29	0.02	B>	0.03	-0.01	0.00	A	1.43	-0.10	-0.01	A	13.42	0.62	0.03	B>
33	13.17	0.17	0.01	B>	46.96	0.74	0.05	B>	17.48	0.23	0.02	B>	17.62	-0.36	-0.03	B<	20.93	1.00	0.03	B>
34	4.07	-0.12	-0.01	A	7.44	-0.33	-0.02	B<	22.83	0.32	0.02	B>	82.12	1.02	0.05	B>	1.10	-0.26	-0.01	A
35	93.45	-0.47	-0.03	B<	2.24	-0.16	-0.01	A	1.82	0.08	0.00	A	0.58	-0.07	-0.01	A	1.36	-0.24	-0.01	A
36	33.25	0.24	0.02	B>	5.40	0.22	0.02	A	227.58	0.73	0.05	B>	50.96	0.59	0.05	B>	9.61	0.54	0.03	B>
37	44.29	-0.29	-0.02	B<	0.78	-0.09	0.00	A	39.57	-0.31	-0.02	B<	0.85	-0.08	0.00	A	4.26	-0.37	-0.02	A
38	48.11	0.37	0.02	B>	0.07	0.03	0.00	A	30.55	-0.34	-0.02	B<	3.08	-0.17	-0.01	A	2.31	-0.36	-0.01	A
39	18.28	0.18	0.01	B>	1.80	0.13	0.01	A	7.73	0.13	0.01	B>	3.62	0.15	0.02	A	1.74	0.23	0.01	A
40	2.95	-0.07	-0.01	A	24.97	0.49	0.03	B>	81.14	0.42	0.03	B>	26.69	0.46	0.03	B>	25.65	0.71	0.05	B>
41	460.34	0.99	0.06	B>	3.63	0.20	0.01	A	3.53	0.10	0.01	A	7.97	-0.25	-0.02	B<	3.25	0.38	0.01	A
42	165.70	0.50	0.04	B>	0.02	0.01	0.00	A	81.62	0.40	0.03	B>	107.56	0.83	0.07	B>	0.02	-0.02	0.00	A
43	293.47	-0.79	-0.05	B<	9.28	-0.31	-0.02	B<	35.49	-0.31	-0.02	B<	1.56	-0.11	-0.01	A	0.87	-0.19	-0.01	A
44	140.46	-0.45	-0.04	B<	13.91	-0.35	-0.03	B<	6.55	0.11	0.01	A	13.34	0.30	0.02	B>	2.60	-0.21	-0.02	A
45	47.76	-0.25	-0.02	B<	22.19	-0.41	-0.04	B<	16.82	0.17	0.01	B>	22.51	0.36	0.03	B>	11.05	-0.45	-0.04	B<
46	349.49	0.73	0.06	B>	28.53	0.49	0.04	B>	2.63	0.07	0.00	A	10.58	0.26	0.02	B>	0.05	-0.04	0.00	A
47	59.39	0.33	0.02	B>	1.74	0.13	0.01	A	3.16	0.09	0.01	A	0.09	0.03	0.00	A	0.67	0.15	0.01	A
48	54.33	-0.29	-0.02	B<	0.09	0.03	0.00	A	0.22	0.02	0.00	A	41.00	0.52	0.04	B>	5.12	0.35	0.02	A
49	5.30	0.15	0.00	A	18.68	0.60	0.02	B>	72.72	0.62	0.03	B>	17.73	0.48	0.02	B>	9.02	1.03	0.02	B>
50	47.26	0.31	0.02	B>	49.88	0.73	0.05	B>	21.35	0.24	0.02	B>	0.56	-0.07	0.00	A	6.21	0.49	0.02	A
51	0.10	-0.01	0.00	A	8.43	0.26	0.02	B>	9.72	0.14	0.01	B>	16.10	0.32	0.03	B>	6.05	0.35	0.03	A
52	20.74	-0.19	-0.01	B<	13.57	-0.34	-0.03	B<	228.37	-0.70	-0.05	B<	65.75	-0.64	-0.05	B<	1.08	0.19	0.01	A
53	28.95	0.30	0.01	B>	13.38	0.46	0.02	B>	23.38	0.31	0.02	B>	1.80	0.14	0.01	A	1.12	-0.25	-0.01	A
54	21.65	0.22	0.01	B>	6.20	0.27	0.02	A	16.23	-0.21	-0.01	B<	10.42	-0.28	-0.02	B<	0.92	0.20	0.01	A
55	45.08	0.38	0.01	B>	1.01	0.13	0.01	A	130.37	0.76	0.04	B>	116.50	1.20	0.07	B>	1.31	0.31	0.01	A
56	0.07	0.01	0.00	A	3.04	0.20	0.01	A	38.35	-0.36	-0.02	B<	51.37	-0.66	-0.04	B<	0.18	0.11	0.00	A
57	1.78	0.06	0.00	A	2.69	-0.16	-0.01	A	14.04	-0.19	-0.01	B<	2.50	-0.14	-0.01	A	15.67	-0.65	-0.03	B<
58	68.41	-0.30	-0.03	B<	9.89	-0.27	-0.02	B<	120.92	-0.46	-0.04	B<	37.89	-0.48	-0.04	B<	10.75	-0.43	-0.04	B<
59	4.06	0.07	0.01	A	18.60	0.37	0.04	B>	92.29	0.40	0.04	B>	28.21	0.40	0.04	B>	7.30	0.36	0.03	B>
60	22.10	0.21	0.01	B>	0.11	0.04	0.00	A	82.10	0.47	0.03	B>	21.78	0.40	0.03	B>	3.69	0.37	0.02	A

Note. African Am. = African American, Native Am.= Native American, MH $\chi 2$ = Mantel-Haenszel Chi-Square, ΔMH = Delta (MH-D DIF), SMD= Standardized Mean Difference, A= No DIF, B=Weak DIF, C=Strong DIF, < favors reference group, > favors focal group. Item number does not indicate test booklet location due to field test and NRT items.

(table continues)

Table 9.2.1.6 (continued)
2005 Spring AIMS Differential Item Functioning Mathematics CRT Grade 7

	Reference: Male N = 38608 Focal: Female N = 37967				Reference: White N = 36219 Focal: African Am. N = 3897				Reference: White N = 36219 Focal: Hispanic N = 29593				Reference: White N = 36219 Focal: Native Am. N = 5467				Reference: White N = 36219 Focal: Asian N = 1640			
Item	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag
61	3.28	0.07	0.01	A	4.25	-0.19	-0.02	A	34.37	-0.27	-0.02	B<	3.58	-0.15	-0.01	A	12.35	-0.55	-0.03	B<
62	63.78	0.30	0.03	B>	1.31	-0.10	-0.01	A	79.08	0.38	0.04	B>	135.67	0.91	0.08	B>	0.73	-0.12	-0.01	A
63	4.26	-0.08	-0.01	A	5.21	0.22	0.02	A	12.99	-0.17	-0.02	B<	42.08	-0.55	-0.05	B<	3.53	0.30	0.02	A
64	157.78	-0.53	-0.04	B<	8.61	-0.28	-0.02	B<	115.96	-0.52	-0.04	B<	40.55	-0.53	-0.04	B<	17.12	-0.69	-0.04	B<
65	31.57	-0.28	-0.01	B<	2.08	-0.16	-0.01	A	13.46	0.21	0.01	B>	1.92	0.13	0.01	A	1.69	0.29	0.01	A
66	288.46	0.93	0.04	B>	0.00	-0.01	0.00	A	54.61	0.46	0.03	B>	89.46	0.97	0.06	B>	5.03	0.59	0.01	A
67	0.98	0.05	0.00	A	4.68	0.23	0.02	A	25.06	0.27	0.02	B>	12.51	0.31	0.03	B>	2.46	0.32	0.01	A
68	165.17	0.47	0.04	B>	2.94	0.15	0.01	A	143.27	0.51	0.05	B>	66.35	0.64	0.05	B>	0.74	0.12	0.01	A

Note. African Am. = African American, Native Am.= Native American, MH $\chi 2$ = Mantel-Haenszel Chi-Square, ΔMH = Delta (MH-D DIF), SMD= Standardized Mean Difference, A= No DIF, B=Weak DIF, C=Strong DIF, < favors reference group, > favors focal group. Item number does not indicate test booklet location due to field test and NRT items.

Table 9.2.1.7
2005 Spring AIMS Differential Item Functioning Mathematics CRT Grade 8

	Reference: Male N = 38070 Focal: Female N = 36973				Reference: White N = 36720 Focal: African Am. N = 3825				Reference: White N = 36720 Focal: Hispanic N = 27737				Reference: White N = 36270 Focal: Native Am. N = 5379				Reference: White N = 36720 Focal: Asian N = 1694			
Item	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag
1	0.35	-0.02	0.00	A	31.19	-0.51	-0.04	B<	128.91	-0.50	-0.04	B<	0.29	0.04	0.00	A	3.44	-0.26	-0.02	A
2	507.59	-0.90	-0.07	B<	1.56	-0.12	-0.01	A	10.59	0.15	0.02	B>	40.30	0.50	0.05	B>	1.82	0.22	0.01	A
3	19.05	0.18	0.01	B>	5.46	0.23	0.02	A	54.18	0.36	0.02	B>	136.55	0.99	0.08	B>	10.03	0.57	0.03	B>
4	14.09	-0.16	-0.01	B<	5.41	-0.23	-0.02	A	61.36	-0.38	-0.04	B<	81.46	-0.74	-0.06	B<	3.75	-0.34	-0.02	A
5	208.42	0.56	0.05	B>	1.22	0.10	0.01	A	33.06	0.25	0.02	B>	19.78	0.35	0.03	B>	11.68	0.50	0.04	B>
6	99.90	0.52	0.02	B>	0.14	-0.05	0.00	A	0.86	0.06	0.00	A	3.27	0.18	0.01	A	6.21	0.62	0.02	A
7	5.01	-0.09	-0.01	A	0.83	0.09	0.01	A	2.90	0.08	0.00	A	11.27	0.28	0.02	B>	1.95	0.20	0.02	A
8	283.52	-0.67	-0.05	B<	9.94	-0.28	-0.03	B<	15.52	-0.18	-0.02	B<	1.27	0.09	0.01	A	24.52	-0.76	-0.05	B<
9	38.56	0.34	0.01	B>	27.61	0.65	0.03	B>	31.25	0.35	0.02	B>	8.01	0.29	0.02	B>	15.30	1.12	0.02	B>
10	62.53	-0.34	-0.02	B<	0.05	0.02	0.00	A	22.30	-0.23	-0.02	B<	9.32	-0.25	-0.02	B<	0.98	-0.17	-0.01	A
11	0.37	0.02	0.00	A	2.73	0.15	0.01	A	0.48	0.03	0.00	A	28.74	-0.44	-0.04	B<	5.12	0.34	0.02	A
12	63.58	0.32	0.03	B>	11.89	0.32	0.03	B>	3.64	0.09	0.01	A	6.63	-0.21	-0.02	A	0.85	0.15	0.01	A
13	4.15	-0.10	-0.01	A	0.00	0.00	0.00	A	54.97	0.41	0.03	B>	0.67	0.08	0.01	A	9.41	0.70	0.02	B>
14	118.52	0.51	0.03	B>	10.01	0.34	0.02	B>	20.94	-0.25	-0.01	B<	10.41	-0.29	-0.02	B<	8.09	-0.54	-0.02	B<
15	211.20	-0.56	-0.05	B<	7.86	-0.25	-0.02	B<	20.17	0.20	0.02	B>	63.63	0.63	0.05	B>	0.11	-0.05	0.00	A
16	458.64	-1.03	-0.06	B<	28.23	-0.54	-0.03	B<	91.34	-0.52	-0.03	B<	23.17	0.46	0.03	B>	14.05	-0.72	-0.03	B<
17	40.59	0.27	0.02	B>	4.00	-0.19	-0.01	A	53.02	-0.35	-0.03	B<	73.45	-0.69	-0.06	B<	11.73	-0.53	-0.03	B<
18	0.29	0.03	0.00	A	0.36	-0.08	0.00	A	99.94	-0.63	-0.03	B<	18.54	-0.44	-0.03	B<	0.80	-0.24	-0.01	A
19	65.32	0.38	0.02	B>	1.16	-0.11	-0.01	A	97.20	-0.53	-0.04	B<	215.57	-1.28	-0.10	B<	5.35	-0.45	-0.02	A
20	45.69	0.29	0.02	B>	57.85	0.75	0.06	B>	47.84	0.34	0.02	B>	0.10	-0.03	0.00	A	17.76	0.76	0.04	B>
21	190.82	-0.61	-0.04	B<	82.80	-0.87	-0.07	B<	35.16	-0.30	-0.02	B<	39.57	0.55	0.04	B>	3.26	-0.32	-0.01	A
22	33.50	-0.25	-0.02	B<	11.30	-0.32	-0.02	B<	2.29	-0.08	-0.01	A	32.16	0.49	0.04	B>	4.54	-0.37	-0.02	A
23	241.89	0.74	0.04	B>	1.32	0.12	0.01	A	0.99	0.05	0.00	A	7.79	-0.25	-0.02	B<	3.72	0.42	0.01	A
24	55.66	0.37	0.02	B>	0.05	0.03	0.00	A	22.82	-0.27	-0.02	B<	100.32	-0.88	-0.06	B<	2.90	0.38	0.01	A
25	8.91	0.12	0.01	B>	28.74	0.49	0.04	B>	1.18	-0.05	0.00	A	8.05	-0.22	-0.02	B<	0.44	-0.10	-0.01	A
26	552.09	-1.08	-0.07	B<	40.97	-0.64	-0.05	B<	111.12	-0.54	-0.04	B<	82.35	-0.77	-0.06	B<	2.17	-0.30	-0.01	A
27	1.54	-0.05	0.00	A	1.25	-0.11	-0.01	A	11.66	-0.16	-0.01	B<	0.59	0.06	0.00	A	3.25	-0.31	-0.02	A
28	22.52	0.27	0.01	B>	19.04	0.57	0.03	B>	51.21	0.48	0.03	B>	0.95	0.11	0.01	A	0.03	0.06	0.00	A
29	68.13	0.30	0.03	B>	61.74	0.69	0.06	B>	235.70	0.66	0.06	B>	103.32	0.78	0.07	B>	9.97	0.41	0.04	B>
30	229.74	-0.61	-0.05	B<	17.29	-0.41	-0.03	B<	16.65	-0.19	-0.02	B<	8.52	-0.25	-0.02	B<	0.07	-0.04	0.00	A

Note. African Am. = African American, Native Am.= Native American, MH χ^2 = Mantel-Haenszel Chi-Square, ΔMH = Delta (MH-D DIF), SMD= Standardized Mean Difference, A= No DIF, B=Weak DIF, C=Strong DIF, < favors reference group, > favors focal group. Item number does not indicate test booklet location due to field test and NRT items.

(table continues)

Table 9.2.1.7 (continued)
2005 Spring AIMS Differential Item Functioning Mathematics CRT Grade 8

	Reference: Male N = 38070 Focal: Female N = 36973				Reference: White N = 36720 Focal: African Am. N = 3825				Reference: White N = 36720 Focal: Hispanic N = 27737				Reference: White N = 36270 Focal: Native Am. N = 5379				Reference: White N = 36720 Focal: Asian N = 1694			
Item	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag
31	7.92	0.10	0.01	B>	33.52	0.50	0.05	B>	70.09	0.35	0.04	B>	37.57	0.47	0.04	B>	0.27	0.07	0.01	A
32	33.50	0.27	0.02	B>	0.20	-0.05	0.00	A	20.42	0.24	0.02	B>	0.19	0.04	0.00	A	0.09	0.07	0.00	A
33	0.18	-0.02	0.00	A	1.34	0.11	0.01	A	12.69	0.15	0.01	B>	15.00	0.30	0.02	B>	6.80	0.36	0.03	B>
34	2.90	0.08	0.00	A	24.54	0.53	0.04	B>	4.46	0.11	0.01	A	3.02	0.16	0.01	A	0.66	0.17	0.01	A
35	1.83	0.05	0.01	A	0.19	0.04	0.00	A	3.86	-0.09	-0.01	A	2.53	-0.13	-0.01	A	6.19	-0.32	-0.03	A
36	154.64	-0.54	-0.04	B<	2.28	-0.16	-0.01	A	64.86	-0.40	-0.02	B<	28.59	-0.52	-0.03	B<	27.02	-0.75	-0.05	B<
37	47.88	0.30	0.02	B>	0.22	-0.05	0.00	A	16.31	0.21	0.02	B>	4.91	0.19	0.02	A	2.10	0.25	0.01	A
38	74.93	-0.34	-0.03	B<	3.22	-0.16	-0.01	A	39.16	-0.28	-0.02	B<	0.49	0.06	0.00	A	1.56	-0.19	-0.01	A
39	9.99	-0.13	-0.01	B<	2.13	0.14	0.01	A	20.31	-0.22	-0.02	B<	47.70	0.60	0.05	B>	0.78	-0.15	-0.01	A
40	157.73	0.68	0.03	B>	2.47	0.19	0.01	A	29.08	0.34	0.02	B>	30.57	0.57	0.03	B>	4.39	0.56	0.01	A
41	87.14	0.40	0.03	B>	25.26	0.49	0.04	B>	493.60	1.13	0.08	B>	3.80	-0.16	-0.01	A	16.57	0.71	0.04	B>
42	143.68	0.46	0.04	B>	2.44	0.14	0.01	A	44.22	0.30	0.02	B>	10.96	0.27	0.02	B>	15.17	0.55	0.04	B>
43	175.26	-0.87	-0.03	B<	26.79	-0.70	-0.03	B<	26.26	-0.40	-0.01	B<	63.37	-0.91	-0.04	B<	7.13	-0.79	-0.01	B<
44	12.47	0.13	0.01	B>	0.83	0.08	0.01	A	0.00	0.00	0.00	A	24.29	-0.37	-0.03	B<	0.82	0.13	0.01	A
45	369.80	-0.77	-0.06	B<	78.83	-0.81	-0.07	B<	190.81	-0.62	-0.05	B<	73.82	-0.68	-0.06	B<	2.99	-0.27	-0.02	A
46	2.32	0.07	0.00	A	14.79	0.39	0.03	B>	0.14	0.02	0.00	A	43.15	-0.57	-0.04	B<	11.76	0.66	0.03	B>
47	147.18	0.52	0.04	B>	7.96	0.29	0.02	B>	131.37	-0.57	-0.05	B<	333.96	-1.47	-0.12	B<	39.52	-0.98	-0.05	B<
48	1.04	-0.04	0.00	A	0.04	0.02	0.00	A	106.41	0.48	0.04	B>	1.62	0.10	0.01	A	2.20	0.24	0.01	A
49	111.95	0.53	0.03	B>	17.24	0.46	0.03	B>	164.34	0.74	0.05	B>	16.91	0.38	0.03	B>	3.77	0.45	0.01	A
50	4.62	0.11	0.01	A	2.99	-0.20	-0.01	A	4.81	0.13	0.01	A	53.60	0.75	0.05	B>	0.00	-0.01	0.00	A
51	162.77	0.75	0.03	B>	19.77	0.58	0.03	B>	36.61	0.41	0.02	B>	30.52	-0.57	-0.03	B<	25.06	1.61	0.03	C>
52	12.01	-0.16	-0.01	B<	1.49	0.13	0.01	A	3.56	-0.10	-0.01	A	19.80	-0.38	-0.03	B<	4.15	0.41	0.02	A
53	595.11	-0.96	-0.08	B<	16.91	-0.39	-0.03	B<	69.11	-0.37	-0.03	B<	1.19	-0.09	-0.01	A	13.00	-0.47	-0.04	B<
54	422.20	-0.99	-0.05	B<	21.93	-0.49	-0.03	B<	26.71	-0.28	-0.02	B<	48.09	0.65	0.05	B>	0.00	-0.01	0.00	A
55	43.37	0.27	0.02	B>	6.61	0.24	0.02	A	143.97	0.57	0.05	B>	77.55	0.72	0.06	B>	5.38	0.38	0.02	A
56	60.78	0.37	0.02	B>	17.71	0.45	0.03	B>	41.31	0.35	0.02	B>	2.54	-0.14	-0.01	A	20.42	0.97	0.03	B>
57	0.48	-0.03	0.00	A	16.62	-0.37	-0.03	B<	280.86	-0.74	-0.07	B<	267.55	-1.27	-0.12	B<	18.67	-0.63	-0.04	B<
58	68.26	0.36	0.02	B>	4.95	-0.21	-0.01	A	37.26	0.30	0.02	B>	61.43	0.67	0.06	B>	9.64	-0.52	-0.03	B<
59	69.18	-0.35	-0.03	B<	5.43	-0.22	-0.02	A	1.86	0.06	0.01	A	59.94	0.64	0.05	B>	1.40	0.20	0.01	A
60	196.49	0.69	0.04	B>	0.45	-0.07	0.00	A	0.25	0.03	0.00	A	43.56	0.61	0.04	B>	0.14	0.09	0.00	A

Note. African Am. = African American, Native Am.= Native American, MH $\chi 2$ = Mantel-Haenszel Chi-Square, ΔMH = Delta (MH-D DIF), SMD= Standardized Mean Difference, A= No DIF, B=Weak DIF, C=Strong DIF, < favors reference group, > favors focal group. Item number does not indicate test booklet location due to field test and NRT items.

(table continues)

Table 9.2.1.7 (continued)
2005 Spring AIMS Differential Item Functioning Mathematics CRT Grade 8

	Reference: Male N = 38070 Focal: Female N = 36973				Reference: White N = 36720 Focal: African Am. N = 3825				Reference: White N = 36720 Focal: Hispanic N = 27737				Reference: White N = 36270 Focal: Native Am. N = 5379				Reference: White N = 36720 Focal: Asian N = 1694			
Item	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag
61	56.02	0.30	0.02	B>	0.20	-0.04	0.00	A	0.72	0.04	0.01	A	4.30	0.17	0.02	A	0.35	-0.10	-0.01	A
62	0.00	0.00	0.00	A	0.42	-0.06	-0.01	A	40.54	-0.28	-0.02	B<	1.34	-0.09	-0.01	A	2.79	-0.24	-0.02	A
63	22.51	0.19	0.02	B>	22.98	-0.48	-0.04	B<	0.41	-0.03	-0.01	A	39.37	-0.56	-0.04	B<	19.19	-0.58	-0.05	B<
64	17.35	0.20	0.01	B>	0.43	0.07	0.00	A	91.73	-0.53	-0.03	B<	13.76	-0.34	-0.02	B<	0.46	-0.16	0.00	A
65	195.29	0.52	0.05	B>	28.51	0.47	0.04	B>	141.67	0.51	0.05	B>	61.74	0.60	0.06	B>	13.46	0.51	0.04	B>
66	0.06	0.01	0.00	A	20.73	-0.44	-0.03	B<	1.71	0.07	0.01	A	51.02	0.61	0.05	B>	1.43	-0.21	-0.01	A

Note. African Am. = African American, Native Am.= Native American, MH $\chi 2$ = Mantel-Haenszel Chi-Square, ΔMH = Delta (MH-D DIF), SMD= Standardized Mean Difference, A= No DIF, B=Weak DIF, C=Strong DIF, < favors reference group, > favors focal group. Item number does not indicate test booklet location due to field test and NRT items.

Table 9.2.1.8
2005 Spring AIMS Differential Item Functioning Mathematics CRT High School

	Reference: Male N = 32990 Focal: Female N = 33150				Reference: White N = 34360 Focal: African Am. N = 3263				Reference: White N = 34360 Focal: Hispanic N = 22303				Reference: White N = 34360 Focal: Native Am. N = 4762				Reference: White N = 34360 Focal: Asian N = 1761			
Item	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag
1	42.73	-0.29	-0.02	B<	5.13	0.23	0.02	A	17.53	0.22	0.01	B>	14.15	0.33	0.03	B>	9.02	0.53	0.03	B>
2	5.15	-0.13	-0.01	A	4.66	-0.26	-0.02	A	7.70	0.18	0.01	B>	16.51	0.43	0.03	B>	1.62	0.30	0.01	A
3	35.20	-0.29	-0.02	B<	1.21	-0.12	-0.01	A	7.50	0.15	0.01	B>	0.62	0.07	0.00	A	3.14	0.34	0.01	A
4	133.63	-0.80	-0.02	B<	19.25	-0.63	-0.03	B<	0.37	-0.05	0.00	A	0.01	0.01	0.00	A	0.35	-0.17	0.00	A
5	7.45	0.20	0.00	B>	0.01	0.02	0.00	A	21.39	0.38	0.02	B>	21.83	0.61	0.03	B>	4.07	-0.57	-0.01	A
6	5.33	0.11	0.01	A	1.47	0.13	0.01	A	41.79	0.36	0.02	B>	0.95	-0.09	-0.01	A	17.45	0.81	0.03	B>
7	162.41	0.64	0.04	B>	18.13	0.49	0.03	B>	6.91	0.15	0.01	B>	6.80	0.25	0.02	B>	15.12	0.83	0.03	B>
8	20.91	0.46	0.01	B>	0.13	-0.09	0.00	A	0.84	0.11	0.00	A	9.91	0.62	0.01	B>	0.74	0.37	0.00	A
9	67.57	-0.34	-0.03	B<	38.68	-0.61	-0.05	B<	159.72	-0.61	-0.06	B<	11.15	-0.28	-0.03	B<	1.50	-0.18	-0.01	A
10	1.24	0.05	0.00	A	20.45	0.49	0.04	B>	91.11	0.53	0.04	B>	76.39	0.81	0.06	B>	17.26	0.81	0.03	B>
11	85.16	0.39	0.03	B>	24.55	0.49	0.04	B>	53.48	0.36	0.02	B>	15.92	0.35	0.02	B>	16.30	0.59	0.04	B>
12	286.16	-0.76	-0.06	B<	29.01	-0.55	-0.04	B<	188.55	-0.70	-0.06	B<	107.42	-0.90	-0.07	B<	44.40	-1.01	-0.06	B<
13	39.75	0.25	0.02	B>	25.26	0.46	0.05	B>	1.30	0.05	0.01	A	1.54	0.10	0.01	A	11.16	0.44	0.04	B>
14	38.73	0.36	0.02	B>	3.83	-0.25	-0.01	A	0.25	-0.03	-0.01	A	5.06	0.25	0.01	A	0.19	0.11	0.00	A
15	82.20	-0.39	-0.03	B<	20.63	-0.44	-0.04	B<	64.81	-0.39	-0.04	B<	24.59	-0.42	-0.04	B<	0.05	-0.04	0.00	A
16	99.06	0.63	0.02	B>	0.03	0.03	0.00	A	11.21	-0.25	-0.01	B<	3.58	-0.22	-0.01	A	9.23	-0.73	-0.02	B<
17	350.37	-0.87	-0.06	B<	129.97	-1.14	-0.09	B<	265.13	-0.86	-0.07	B<	75.32	-0.75	-0.06	B<	73.55	-1.31	-0.07	B<
18	45.11	0.27	0.02	B>	20.88	0.44	0.04	B>	39.97	0.30	0.02	B>	3.37	0.15	0.01	A	7.36	0.38	0.03	B>
19	1.13	0.05	0.00	A	6.35	-0.26	-0.02	A	46.26	-0.35	-0.02	B<	127.63	-0.96	-0.08	B<	7.44	-0.46	-0.02	B<
20	4.40	0.09	0.01	A	6.39	0.26	0.02	A	2.24	0.08	0.00	A	0.00	0.00	0.00	A	11.16	0.52	0.03	B>
21	41.41	0.31	0.02	B>	33.52	0.63	0.05	B>	134.58	0.64	0.05	B>	2.75	0.15	0.01	A	18.19	0.80	0.03	B>
22	1.07	-0.05	0.00	A	20.63	-0.48	-0.03	B<	16.44	0.22	0.01	B>	23.74	0.45	0.03	B>	0.51	-0.12	-0.01	A
23	96.32	0.44	0.03	B>	0.03	-0.02	0.00	A	2.64	0.09	0.01	A	0.51	0.06	0.00	A	0.27	-0.09	0.00	A
24	10.59	-0.13	-0.01	B<	0.00	0.00	0.00	A	2.96	0.08	0.01	A	1.95	0.12	0.01	A	1.47	0.17	0.01	A
25	8.53	-0.21	-0.01	B<	18.55	-0.59	-0.02	B<	28.27	0.43	0.02	B>	103.42	1.39	0.06	B>	10.84	-0.84	-0.02	B<
26	85.79	-0.55	-0.02	B<	50.53	-0.87	-0.05	B<	59.33	-0.52	-0.03	B<	2.52	-0.17	-0.01	A	17.63	-0.92	-0.02	B<
27	104.66	0.48	0.03	B>	1.04	0.11	0.01	A	2.75	0.09	0.00	A	1.02	0.10	0.00	A	15.48	0.68	0.03	B>
28	33.84	-0.32	-0.02	B<	4.15	0.24	0.02	A	2.49	0.10	0.01	A	1.80	-0.13	-0.01	A	2.25	-0.33	-0.01	A
29	31.56	0.28	0.02	B>	1.89	0.16	0.01	A	40.47	-0.36	-0.03	B<	46.77	-0.64	-0.05	B<	0.79	-0.19	-0.01	A
30	7.54	0.11	0.01	B>	2.57	0.15	0.01	A	52.21	0.35	0.03	B>	98.07	0.83	0.07	B>	26.51	0.80	0.05	B>

Note. African Am. = African American, Native Am.= Native American, MH $\chi 2$ = Mantel-Haenszel Chi-Square, ΔMH = Delta (MH-D DIF), SMD= Standardized Mean Difference, A= No DIF, B=Weak DIF, C=Strong DIF, < favors reference group, > favors focal group. Item number does not indicate test booklet location due to field test and NRT items.

(table continues)

Table 9.2.1.8 (continued)
2005 Spring AIMS Differential Item Functioning Mathematics CRT High School

	Reference: Male N = 32990 Focal: Female N = 33150				Reference: White N = 34360 Focal: African Am. N = 3263				Reference: White N = 34360 Focal: Hispanic N = 22303				Reference: White N = 34360 Focal: Native Am. N = 4762				Reference: White N = 34360 Focal: Asian N = 1761			
Item	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag
31	63.69	0.36	0.03	B>	10.96	0.34	0.03	B>	146.00	0.63	0.06	B>	65.18	0.71	0.06	B>	0.81	0.15	0.01	A
32	7.29	-0.12	-0.01	B<	10.99	0.33	0.03	B>	93.41	0.48	0.05	B>	34.85	0.50	0.05	B>	4.98	0.36	0.02	A
33	9.75	-0.23	-0.01	B<	5.19	-0.34	-0.01	A	73.47	0.72	0.03	B>	60.05	1.05	0.04	B>	1.31	-0.34	-0.01	A
34	16.28	-0.24	-0.01	B<	4.68	-0.27	-0.01	A	0.00	0.00	0.00	A	0.16	-0.04	0.00	A	6.27	-0.61	-0.01	A
35	63.05	0.34	0.03	B>	1.48	-0.12	-0.01	A	89.75	-0.46	-0.04	B<	0.00	0.01	0.00	A	74.94	-1.16	-0.08	B<
36	4.33	0.09	0.01	A	2.32	0.15	0.01	A	0.78	-0.04	-0.01	A	0.29	-0.05	0.00	A	0.05	0.03	0.00	A
37	0.26	0.02	0.00	A	0.15	-0.04	0.00	A	3.59	0.09	0.01	A	20.66	0.37	0.04	B>	0.10	0.05	0.00	A
38	11.79	0.14	0.01	B>	0.07	-0.03	0.00	A	0.52	0.04	0.00	A	12.58	-0.30	-0.03	B<	2.25	0.22	0.02	A
39	23.48	0.22	0.02	B>	2.34	0.16	0.01	A	5.62	0.12	0.01	A	1.35	-0.10	-0.01	A	4.91	0.37	0.02	A
40	14.22	-0.21	-0.01	B<	0.81	-0.11	-0.01	A	14.08	-0.24	-0.02	B<	2.04	-0.15	-0.01	A	8.92	-0.61	-0.02	B<
41	55.00	-0.31	-0.03	B<	18.31	-0.41	-0.04	B<	45.94	-0.32	-0.03	B<	83.21	-0.76	-0.07	B<	4.05	-0.29	-0.02	A
42	1.63	0.06	0.01	A	1.50	0.12	0.01	A	171.75	0.66	0.05	B>	212.34	1.27	0.10	B>	18.40	0.69	0.04	B>
43	68.41	-0.33	-0.03	B<	3.56	-0.18	-0.02	A	24.13	-0.23	-0.02	B<	51.12	-0.61	-0.05	B<	0.45	-0.09	-0.01	A
44	14.72	0.15	0.01	B>	9.20	0.29	0.03	B>	62.16	0.37	0.03	B>	3.56	0.16	0.01	A	9.02	0.41	0.03	B>
45	170.24	0.84	0.03	B>	4.13	0.29	0.01	A	18.30	0.31	0.02	B>	0.64	0.09	0.01	A	2.88	0.47	0.01	A
46	12.82	-0.15	-0.01	B<	0.13	-0.04	0.00	A	0.92	-0.05	0.00	A	0.99	0.08	0.01	A	1.38	-0.17	-0.01	A
47	439.71	0.91	0.07	B>	16.70	0.42	0.03	B>	39.83	0.32	0.03	B>	45.94	0.59	0.05	B>	0.11	0.05	0.00	A
48	215.78	-0.87	-0.04	B<	71.72	-1.01	-0.06	B<	34.49	-0.40	-0.02	B<	9.74	0.35	0.02	B>	4.09	-0.47	-0.01	A
49	837.19	-1.56	-0.08	C<	253.54	-1.72	-0.11	C<	310.64	-1.06	-0.07	B<	20.72	-0.45	-0.03	B<	37.94	-1.18	-0.04	B<
50	64.07	-0.36	-0.03	B<	4.20	-0.21	-0.02	A	2.92	-0.09	-0.01	A	7.82	-0.24	-0.02	B<	11.59	-0.54	-0.03	B<
51	86.85	0.40	0.03	B>	9.88	0.31	0.03	B>	26.99	-0.26	-0.02	B<	48.34	-0.59	-0.05	B<	7.40	-0.41	-0.02	B<
52	4.82	0.10	0.01	A	19.65	0.46	0.03	B>	19.31	-0.23	-0.02	B<	38.02	-0.62	-0.04	B<	1.00	0.14	0.01	A
53	2.67	-0.08	-0.01	A	0.07	-0.03	0.00	A	2.14	-0.08	-0.01	A	16.22	0.38	0.03	B>	0.32	-0.11	0.00	A
54	15.27	-0.18	-0.01	B<	0.06	-0.03	0.00	A	6.34	-0.13	-0.01	A	20.76	-0.39	-0.04	B<	7.04	-0.44	-0.02	B<
55	58.28	0.37	0.02	B>	46.62	0.77	0.05	B>	55.00	0.42	0.02	B>	19.84	0.46	0.02	B>	33.22	1.00	0.05	B>
56	48.88	0.33	0.02	B>	0.78	-0.09	-0.01	A	4.67	-0.12	0.00	A	16.48	-0.36	-0.03	B<	7.60	-0.47	-0.02	B<
57	63.03	-0.32	-0.03	B<	4.30	-0.20	-0.02	A	8.67	-0.14	-0.01	B<	17.24	-0.34	-0.03	B<	11.25	-0.46	-0.03	B<
58	0.14	0.02	0.00	A	3.35	-0.22	-0.01	A	9.19	0.20	0.01	B>	3.38	0.19	0.01	A	14.90	-0.77	-0.03	B<
59	48.35	0.32	0.02	B>	16.73	0.43	0.03	B>	61.87	0.42	0.03	B>	9.44	0.27	0.02	B>	3.55	0.36	0.02	A
60	251.40	1.18	0.03	B>	3.30	0.28	0.01	A	116.71	0.92	0.03	B>	96.58	1.32	0.06	B>	0.03	-0.07	0.00	A

Note. African Am. = African American, Native Am.= Native American, MH $\chi 2$ = Mantel-Haenszel Chi-Square, ΔMH = Delta (MH-D DIF), SMD= Standardized Mean Difference, A= No DIF, B=Weak DIF, C=Strong DIF, < favors reference group, > favors focal group. Item number does not indicate test booklet location due to field test and NRT items.

(table continues)

Table 9.2.1.8 (continued)
2005 Spring AIMS Differential Item Functioning Mathematics CRT High School

	Reference: Male N = 32990 Focal: Female N = 33150				Reference: White N = 34360 Focal: African Am. N = 3263				Reference: White N = 34360 Focal: Hispanic N = 22303				Reference: White N = 34360 Focal: Native Am. N = 4762				Reference: White N = 34360 Focal: Asian N = 1761			
Item	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag
61	204.24	-0.74	-0.04	B<	50.56	-0.80	-0.05	B<	395.37	-1.15	-0.08	B<	220.32	-1.38	-0.10	B<	17.29	-0.82	-0.03	B<
62	1.63	0.06	0.00	A	0.21	0.05	0.00	A	26.17	-0.27	-0.02	B<	8.55	-0.25	-0.02	B<	1.44	-0.20	-0.01	A
63	2.43	-0.06	-0.01	A	1.74	-0.13	-0.01	A	49.57	-0.33	-0.02	B<	9.48	-0.25	-0.02	B<	27.02	-0.69	-0.05	B<
64	74.17	0.48	0.02	B>	0.91	0.12	0.01	A	0.92	-0.06	0.00	A	0.04	0.02	0.00	A	2.28	0.38	0.01	A
65	0.05	-0.01	0.00	A	12.21	0.34	0.03	B>	42.76	0.32	0.03	B>	9.05	0.26	0.02	B>	16.49	0.63	0.04	B>
66	150.44	-0.51	-0.04	B<	3.59	0.18	0.02	A	30.85	-0.27	-0.02	B<	0.08	-0.02	0.00	A	3.09	-0.25	-0.02	A
67	195.98	-0.60	-0.05	B<	9.98	0.32	0.02	B>	2.82	0.09	0.00	A	13.77	-0.35	-0.02	B<	0.23	0.07	0.01	A
68	10.88	-0.19	-0.01	B<	0.69	0.11	0.01	A	22.00	-0.31	-0.01	B<	0.24	-0.05	0.00	A	0.24	-0.11	0.00	A
69	57.36	-0.30	-0.03	B<	0.59	-0.07	-0.01	A	62.92	-0.37	-0.03	B<	42.97	-0.54	-0.05	B<	11.67	-0.46	-0.04	B<
70	3.81	0.09	0.01	A	0.73	-0.09	-0.01	A	8.60	-0.16	-0.01	B<	0.00	0.00	0.00	A	5.78	-0.42	-0.02	A
71	2.64	-0.08	-0.01	A	4.09	-0.23	-0.01	A	35.00	-0.35	-0.02	B<	6.53	-0.24	-0.01	A	7.23	-0.50	-0.02	B<
72	321.27	-0.85	-0.06	B<	57.49	-0.79	-0.06	B<	12.27	-0.19	-0.02	B<	2.06	0.13	0.01	A	1.19	-0.19	-0.01	A
73	105.04	-0.49	-0.03	B<	10.12	-0.34	-0.02	B<	116.02	-0.59	-0.04	B<	40.55	-0.56	-0.04	B<	22.78	-0.79	-0.04	B<
74	35.04	0.26	0.02	B>	14.89	0.41	0.03	B>	12.14	0.18	0.01	B>	1.22	0.11	0.00	A	63.46	1.16	0.08	B>
75	16.52	0.19	0.01	B>	6.95	-0.27	-0.02	B<	10.51	0.17	0.02	B>	18.19	0.37	0.03	B>	1.21	0.20	0.01	A
76	126.97	0.54	0.03	B>	0.06	-0.03	0.00	A	53.91	-0.40	-0.03	B<	0.02	-0.02	0.00	A	0.69	-0.15	-0.01	A
77	120.81	0.56	0.03	B>	69.28	0.96	0.06	B>	122.07	0.65	0.04	B>	2.05	0.14	0.01	A	20.63	0.97	0.03	B>
78	16.16	0.18	0.01	B>	0.88	0.10	0.01	A	82.01	0.46	0.04	B>	214.97	1.31	0.11	B>	1.52	0.20	0.01	A
79	178.96	0.62	0.04	B>	41.60	-0.67	-0.05	B<	361.21	-0.99	-0.07	B<	179.12	-1.15	-0.09	B<	69.91	-1.28	-0.07	B<
80	9.31	-0.12	-0.01	B<	32.57	0.54	0.05	B>	43.67	0.31	0.03	B>	11.49	0.28	0.02	B>	1.38	0.16	0.01	A
81	1.03	-0.04	0.00	A	0.01	-0.01	0.00	A	29.80	0.27	0.02	B>	2.98	-0.14	-0.01	A	2.14	0.22	0.01	A
82	4.11	-0.08	-0.01	A	14.81	0.38	0.03	B>	133.59	0.56	0.04	B>	22.56	0.40	0.03	B>	9.81	0.49	0.03	B>
83	61.40	0.33	0.03	B>	9.12	0.29	0.03	B>	0.11	-0.02	0.00	A	5.03	-0.19	-0.02	A	12.37	0.54	0.03	B>
84	0.00	0.00	0.00	A	2.27	0.16	0.01	A	0.26	0.03	0.00	A	51.61	-0.65	-0.05	B<	3.58	-0.30	-0.02	A
85	53.88	0.31	0.03	B>	10.18	0.31	0.03	B>	67.41	0.40	0.03	B>	8.26	0.24	0.02	B>	21.42	0.69	0.05	B>

Note. African Am. = African American, Native Am.= Native American, MH $\chi 2$ = Mantel-Haenszel Chi-Square, ΔMH = Delta (MH-D DIF), SMD= Standardized Mean Difference, A= No DIF, B=Weak DIF, C=Strong DIF, < favors reference group, > favors focal group. Item number does not indicate test booklet location due to field test and NRT items.

Table 9.2.1.9
2005 Spring AIMS Differential Item Functioning Reading CRT Grade 3

	Reference: Male N = 38756 Focal: Female N = 37890				Reference: White N = 34863 Focal: African Am. N = 3881				Reference: White N = 34863 Focal: Hispanic N = 31458				Reference: White N = 34863 Focal: Native Am. N = 4758				Reference: White N = 34863 Focal: Asian N = 1874			
Item	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag
1	24.60	0.37	0.01	B>	5.77	-0.40	-0.01	A	4.30	0.19	0.00	A	1.89	0.21	0.01	A	0.27	0.19	0.00	A
2	58.03	0.40	0.02	B>	2.55	0.20	0.01	A	2.43	-0.10	-0.01	A	3.64	-0.20	-0.01	A	10.41	-0.61	-0.02	B<
3	29.86	0.43	0.01	B>	0.06	0.05	0.00	A	0.10	-0.03	-0.01	A	9.07	0.49	0.01	B>	2.66	0.65	0.01	A
4	51.23	0.35	0.02	B>	28.12	-0.57	-0.03	B<	0.00	0.00	0.00	A	66.69	-0.77	-0.06	B<	2.77	-0.31	-0.01	A
5	80.39	0.38	0.03	B>	12.44	0.35	0.03	B>	0.39	-0.03	-0.01	A	28.55	-0.47	-0.04	B<	7.12	0.43	0.02	B>
6	21.27	-0.24	-0.01	B<	0.94	0.12	0.01	A	4.43	-0.13	-0.01	A	2.43	0.16	0.01	A	0.03	0.04	0.00	A
7	57.30	0.49	0.01	B>	4.99	0.33	0.01	A	15.89	0.31	0.01	B>	29.57	0.71	0.03	B>	0.98	0.29	0.01	A
8	5.00	-0.11	-0.01	A	2.47	0.18	0.01	A	0.13	0.02	0.00	A	20.27	0.45	0.03	B>	0.88	0.18	0.01	A
9	34.35	0.28	0.01	B>	8.77	0.33	0.02	B>	65.70	0.45	0.03	B>	3.78	-0.19	-0.02	A	1.03	0.20	0.01	A
10	29.57	-0.22	-0.02	B<	27.05	0.50	0.04	B>	53.46	0.34	0.02	B>	65.28	0.71	0.06	B>	34.83	0.91	0.06	B>
11	80.52	0.36	0.03	B>	1.33	0.11	0.01	A	0.96	-0.05	0.00	A	1.57	0.12	0.01	A	0.18	0.06	0.00	A
12	132.10	0.41	0.04	B>	30.15	0.47	0.05	B>	29.99	0.23	0.01	B>	8.49	0.24	0.02	B>	0.07	-0.03	0.00	A
13	12.47	0.15	0.01	B>	11.47	0.33	0.03	B>	8.95	0.15	0.01	B>	3.39	0.17	0.01	A	16.59	0.64	0.04	B>
14	21.34	0.18	0.02	B>	10.96	0.30	0.03	B>	31.69	-0.25	-0.02	B<	25.41	-0.42	-0.03	B<	0.00	-0.01	0.00	A
15	87.58	-0.46	-0.02	B<	6.05	-0.28	-0.01	A	38.08	-0.35	-0.02	B<	66.38	-0.78	-0.05	B<	1.41	-0.23	-0.01	A
16	102.86	0.36	0.04	B>	0.09	-0.03	0.00	A	0.51	0.03	0.00	A	49.14	0.57	0.05	B>	1.35	-0.14	-0.01	A
17	0.09	0.01	0.00	A	8.91	0.32	0.02	B>	83.67	0.50	0.03	B>	59.71	0.77	0.05	B>	40.49	1.26	0.05	B>
18	536.10	-0.90	-0.07	B<	44.46	-0.60	-0.05	B<	733.77	-1.19	-0.10	B<	68.79	-0.69	-0.06	B<	88.28	-1.17	-0.09	B<
19	25.18	0.20	0.02	B>	1.89	-0.13	-0.01	A	24.64	-0.22	-0.01	B<	4.14	-0.17	-0.01	A	0.32	-0.08	-0.01	A
20	1.10	0.04	0.00	A	0.70	0.08	0.00	A	19.80	0.20	0.01	B>	0.17	-0.04	0.00	A	1.18	0.15	0.01	A
21	3.73	0.11	0.00	A	5.33	0.31	0.01	A	0.04	-0.02	0.00	A	37.68	0.73	0.04	B>	8.48	0.78	0.02	B>
22	3.15	0.07	0.01	A	1.59	-0.11	-0.01	A	38.24	0.27	0.03	B>	22.82	0.40	0.04	B>	0.81	0.11	0.01	A
23	73.30	0.35	0.03	B>	0.80	0.09	0.01	A	30.17	0.26	0.02	B>	6.69	0.23	0.02	B>	0.53	0.11	0.01	A
24	0.36	0.03	0.00	A	1.76	0.13	0.01	A	0.02	-0.01	0.00	A	36.98	0.55	0.04	B>	0.56	0.12	0.01	A
25	14.50	-0.15	-0.01	B<	4.83	-0.20	-0.02	A	5.04	0.10	0.02	A	4.77	0.19	0.02	A	0.30	0.08	0.01	A
26	42.85	-0.31	-0.02	B<	5.33	-0.24	-0.02	A	11.27	0.18	0.01	B>	238.95	1.57	0.11	C>	0.03	0.03	0.00	A
27	163.48	-0.58	-0.03	B<	15.58	-0.42	-0.03	B<	755.13	-1.42	-0.10	B<	145.38	-1.11	-0.08	B<	14.65	-0.65	-0.03	B<
28	8.96	0.13	0.01	B>	8.93	-0.29	-0.02	B<	14.50	0.19	0.02	B>	65.23	0.73	0.06	B>	0.19	0.08	0.00	A
29	56.87	0.56	0.01	B>	2.30	0.26	0.01	A	2.50	0.14	0.00	A	0.19	0.07	0.00	A	0.18	-0.16	0.00	A
30	8.95	0.14	0.01	B>	2.95	-0.19	-0.01	A	84.97	-0.52	-0.03	B<	18.39	-0.41	-0.03	B<	4.74	-0.42	-0.02	A

Note. African Am. = African American, Native Am.= Native American, MH $\chi 2$ = Mantel-Haenszel Chi-Square, ΔMH = Delta (MH-D DIF), SMD= Standardized Mean Difference, A= No DIF, B=Weak DIF, C=Strong DIF, < favors reference group, > favors focal group. Item number does not indicate test booklet location due to field test and NRT items.

(table continues)

Table 9.2.1.9 (continued)
2005 Spring AIMS Differential Item Functioning Reading CRT Grade 3

	Reference: Male N = 38756 Focal: Female N = 37890				Reference: White N = 34863 Focal: African Am. N = 3881				Reference: White N = 34863 Focal: Hispanic N = 31458				Reference: White N = 34863 Focal: Native Am. N = 4758				Reference: White N = 34863 Focal: Asian N = 1874			
Item	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag
31	6.14	0.10	0.01	A	0.16	0.04	0.00	A	28.83	-0.24	-0.02	B<	48.50	-0.58	-0.05	B<	2.53	-0.21	-0.02	A
32	3.37	0.10	0.00	A	0.73	-0.11	0.00	A	8.41	0.19	0.01	B>	19.07	-0.47	-0.03	B<	4.32	0.51	0.01	A
33	1.19	-0.05	0.00	A	0.20	-0.04	0.00	A	9.82	0.15	0.01	B>	4.35	-0.18	-0.02	A	14.97	0.61	0.04	B>
34	113.68	0.59	0.02	B>	5.10	-0.28	-0.01	A	7.91	0.19	0.01	B>	7.94	-0.30	-0.02	B<	0.15	0.10	0.00	A
35	11.07	0.12	0.01	B>	14.65	0.34	0.03	B>	0.57	-0.03	0.00	A	31.34	-0.47	-0.04	B<	25.86	-0.62	-0.06	B<
36	10.98	-0.12	-0.01	B<	0.42	-0.06	0.00	A	4.69	0.09	0.01	A	0.93	0.08	0.01	A	0.15	0.05	0.00	A
37	80.18	-0.35	-0.03	B<	3.13	0.16	0.01	A	1.95	-0.06	-0.01	A	33.54	-0.53	-0.04	B<	0.04	0.03	0.00	A
38	7.68	0.11	0.01	B>	3.66	-0.18	-0.01	A	48.60	-0.33	-0.02	B<	113.24	-0.90	-0.07	B<	10.96	-0.48	-0.03	B<
39	128.04	-0.49	-0.03	B<	2.12	-0.15	-0.01	A	48.11	-0.34	-0.03	B<	38.94	-0.56	-0.05	B<	0.76	-0.14	-0.01	A
40	171.16	0.54	0.04	B>	7.99	0.28	0.02	B>	66.24	0.38	0.03	B>	14.06	0.35	0.02	B>	6.06	-0.34	-0.02	A
41	213.76	0.56	0.05	B>	17.25	0.38	0.03	B>	132.36	0.51	0.05	B>	130.49	0.95	0.09	B>	0.20	0.06	0.00	A
42	39.07	-0.28	-0.02	B<	11.30	-0.34	-0.02	B<	26.58	-0.26	-0.01	B<	45.55	-0.58	-0.04	B<	23.95	-0.80	-0.04	B<
43	101.04	-0.42	-0.03	B<	45.44	-0.64	-0.05	B<	41.37	-0.31	-0.03	B<	66.02	0.76	0.06	B>	17.98	-0.59	-0.04	B<
44	1.25	-0.04	0.00	A	0.82	0.08	0.01	A	18.43	0.19	0.01	B>	17.00	0.35	0.03	B>	15.17	0.47	0.04	B>
45	431.19	-0.80	-0.07	B<	1.45	0.11	0.01	A	0.02	-0.01	0.00	A	57.50	-0.62	-0.06	B<	16.79	-0.52	-0.04	B<
46	11.13	-0.14	-0.01	B<	2.97	-0.17	-0.01	A	7.69	0.13	0.01	B>	0.33	-0.05	0.00	A	6.65	0.36	0.03	B>
47	30.35	0.23	0.02	B>	13.99	-0.37	-0.03	B<	23.43	-0.23	-0.01	B<	65.27	-0.70	-0.05	B<	0.62	-0.13	-0.01	A
48	44.04	-0.38	-0.01	B<	9.46	-0.40	-0.02	B<	0.20	-0.03	0.00	A	0.01	0.01	0.00	A	2.47	-0.38	-0.01	A
49	71.03	-0.33	-0.03	B<	10.85	0.31	0.03	B>	82.52	0.42	0.03	B>	50.41	0.61	0.05	B>	1.75	0.18	0.01	A
50	44.91	-0.30	-0.02	B<	1.24	-0.11	-0.01	A	32.65	-0.29	-0.02	B<	28.31	-0.49	-0.04	B<	2.07	0.24	0.01	A
51	25.05	-0.19	-0.02	B<	24.09	-0.43	-0.04	B<	7.02	-0.11	-0.01	B<	0.48	-0.06	-0.01	A	1.24	-0.14	-0.01	A
52	3.02	0.07	0.01	A	6.98	0.26	0.02	B>	4.35	0.10	0.01	A	0.60	0.07	0.01	A	0.23	0.07	0.00	A
53	0.66	-0.04	0.00	A	7.76	-0.30	-0.02	B<	18.35	0.24	0.01	B>	8.73	0.29	0.02	B>	12.06	0.68	0.03	B>
54	13.07	-0.16	-0.01	B<	4.71	0.22	0.01	A	190.82	0.71	0.05	B>	6.86	0.24	0.02	B>	16.00	0.68	0.03	B>

Note. African Am. = African American, Native Am.= Native American, MH $\chi 2$ = Mantel-Haenszel Chi-Square, ΔMH = Delta (MH-D DIF), SMD= Standardized Mean Difference, A= No DIF, B=Weak DIF, C=Strong DIF, < favors reference group, > favors focal group. Item number does not indicate test booklet location due to field test and NRT items.

Table 9.2.1.10
2005 Spring AIMS Differential Item Functioning Reading CRT Grade 4

	Reference: Male N = 38002 Focal: Female N = 37308				Reference: White N = 34685 Focal: African Am. N = 3749				Reference: White N = 34685 Focal: Hispanic N = 30427				Reference: White N = 34685 Focal: Native Am. N = 4703				Reference: White N = 34685 Focal: Asian N = 1930			
Item	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag
1	15.20	-0.22	-0.01	B<	1.01	0.13	0.00	A	13.99	-0.25	-0.02	B<	11.97	-0.38	-0.03	B<	3.83	-0.42	-0.01	A
2	10.35	-0.13	-0.01	B<	3.96	0.19	0.02	A	94.97	0.45	0.04	B>	61.62	0.68	0.06	B>	24.36	0.71	0.05	B>
3	106.17	-0.43	-0.03	B<	3.41	0.18	0.01	A	0.44	0.03	0.01	A	4.39	-0.18	-0.01	A	14.03	0.58	0.03	B>
4	8.87	-0.11	-0.01	B<	1.80	0.12	0.01	A	306.12	0.75	0.07	B>	38.06	-0.52	-0.05	B<	14.20	-0.45	-0.04	B<
5	91.00	-0.47	-0.02	B<	0.19	0.05	0.00	A	81.05	0.52	0.03	B>	53.45	0.73	0.05	B>	10.25	0.65	0.02	B>
6	36.89	0.24	0.02	B>	8.73	0.28	0.02	B>	6.81	0.12	0.01	B>	0.84	0.08	0.01	A	0.94	0.14	0.01	A
7	84.29	-0.54	-0.02	B<	24.44	-0.68	-0.03	B<	570.55	-1.72	-0.09	C<	96.98	-1.13	-0.06	B<	12.33	-0.83	-0.02	B<
8	2.00	-0.07	0.00	A	0.71	-0.09	-0.01	A	11.61	-0.19	-0.01	B<	1.30	0.11	0.01	A	2.92	-0.29	-0.01	A
9	3.43	0.07	0.01	A	61.23	0.71	0.06	B>	70.25	0.37	0.02	B>	20.10	-0.38	-0.04	B<	18.59	0.55	0.04	B>
10	3.36	0.07	0.01	A	0.41	0.06	0.01	A	28.79	-0.24	-0.02	B<	36.49	-0.51	-0.05	B<	2.17	0.19	0.01	A
11	0.26	0.02	0.00	A	0.21	-0.05	0.00	A	7.73	0.15	0.01	B>	13.72	-0.34	-0.02	B<	1.02	0.19	0.01	A
12	42.13	0.30	0.02	B>	0.42	0.07	0.00	A	0.44	-0.04	0.00	A	14.31	-0.35	-0.03	B<	2.48	-0.26	-0.01	A
13	37.69	0.42	0.01	B>	0.74	-0.13	0.00	A	25.40	0.42	0.02	B>	3.61	0.25	0.01	A	6.19	0.76	0.01	A
14	313.88	-0.72	-0.06	B<	0.63	0.08	0.01	A	135.99	-0.53	-0.05	B<	53.51	-0.63	-0.05	B<	0.34	0.08	0.01	A
15	197.36	0.63	0.04	B>	1.96	0.15	0.01	A	2.38	0.08	0.00	A	37.33	0.57	0.04	B>	0.72	0.14	0.01	A
16	79.47	0.49	0.02	B>	19.36	0.56	0.03	B>	89.70	0.60	0.03	B>	59.05	0.84	0.05	B>	0.51	0.16	0.00	A
17	3.81	0.09	0.01	A	0.32	-0.07	0.00	A	257.36	-0.89	-0.06	B<	223.39	-1.36	-0.10	B<	14.92	-0.65	-0.03	B<
18	342.82	0.71	0.06	B>	4.56	0.20	0.02	A	50.28	-0.31	-0.03	B<	11.06	-0.28	-0.03	B<	14.08	-0.46	-0.04	B<
19	67.29	0.33	0.03	B>	19.46	0.42	0.03	B>	2.87	0.08	0.00	A	2.58	0.14	0.01	A	0.03	0.03	0.00	A
20	0.04	0.01	0.00	A	2.54	0.17	0.01	A	91.07	-0.49	-0.03	B<	27.25	-0.48	-0.04	B<	36.51	-0.89	-0.05	B<
21	457.89	1.06	0.05	B>	1.67	0.15	0.01	A	98.52	0.57	0.03	B>	11.98	0.34	0.02	B>	0.31	0.11	0.00	A
22	65.99	0.37	0.02	B>	0.79	0.09	0.01	A	47.48	0.36	0.03	B>	72.73	0.83	0.06	B>	0.96	-0.16	-0.01	A
23	3.68	-0.09	0.00	A	2.22	-0.16	-0.01	A	1.63	0.07	0.00	A	35.38	0.57	0.04	B>	1.98	-0.24	-0.01	A
24	65.09	0.36	0.02	B>	1.44	-0.12	-0.01	A	0.00	0.00	0.00	A	153.62	1.16	0.09	B>	3.49	-0.29	-0.02	A
25	4.99	-0.09	-0.01	A	3.45	-0.18	-0.01	A	5.96	-0.11	-0.01	A	54.11	-0.62	-0.05	B<	5.82	0.34	0.02	A
26	41.69	-0.25	-0.02	B<	4.47	-0.19	-0.02	A	22.56	-0.21	-0.01	B<	9.60	-0.26	-0.02	B<	17.65	-0.52	-0.04	B<
27	130.07	0.66	0.02	B>	0.50	0.09	0.00	A	18.04	0.29	0.01	B>	88.12	1.07	0.06	B>	0.99	0.24	0.01	A
28	18.68	0.21	0.01	B>	2.06	-0.16	-0.01	A	9.91	0.18	0.01	B>	11.39	-0.32	-0.03	B<	0.00	0.01	0.00	A
29	0.98	0.05	0.00	A	1.25	0.12	0.01	A	21.82	0.25	0.01	B>	5.57	0.22	0.01	A	7.09	0.46	0.02	B>
30	31.52	-0.25	-0.02	B<	9.02	-0.34	-0.02	B<	0.10	0.02	0.00	A	0.99	0.11	0.00	A	2.05	0.19	0.01	A

Note. African Am. = African American, Native Am.= Native American, MH $\chi 2$ = Mantel-Haenszel Chi-Square, ΔMH = Delta (MH-D DIF), SMD= Standardized Mean Difference, A= No DIF, B=Weak DIF, C=Strong DIF, < favors reference group, > favors focal group. Item number does not indicate test booklet location due to field test and NRT items.

(table continues)

Table 9.2.1.10 (continued)
2005 Spring AIMS Differential Item Functioning Reading CRT Grade 4

	Reference: Male N = 38002 Focal: Female N = 37308				Reference: White N = 34685 Focal: African Am. N = 3749				Reference: White N = 34685 Focal: Hispanic N = 30427				Reference: White N = 34685 Focal: Native Am. N = 4703				Reference: White N = 34685 Focal: Asian N = 1930			
Item	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag
31	35.07	0.27	0.02	B>	0.20	0.05	0.00	A	8.33	0.15	0.01	B>	1.16	-0.10	-0.01	A	1.11	-0.17	-0.01	A
32	39.61	0.32	0.02	B>	0.00	0.00	0.00	A	7.96	0.17	0.01	B>	47.52	-0.66	-0.05	B<	3.24	-0.33	-0.01	A
33	2.32	-0.08	0.00	A	0.12	-0.05	0.00	A	40.48	-0.40	-0.02	B<	37.70	-0.63	-0.04	B<	27.88	-0.96	-0.03	B<
34	95.83	0.37	0.03	B>	11.73	0.31	0.03	B>	25.64	0.22	0.03	B>	8.32	0.24	0.02	B>	0.22	-0.06	-0.01	A
35	64.03	-0.34	-0.02	B<	17.76	-0.42	-0.03	B<	86.60	-0.45	-0.03	B<	94.76	-0.88	-0.06	B<	4.20	-0.30	-0.02	A
36	0.83	-0.05	0.00	A	0.01	-0.02	0.00	A	0.02	-0.01	0.00	A	28.53	-0.51	-0.04	B<	1.30	-0.21	-0.01	A
37	263.84	-0.65	-0.05	B<	17.42	-0.38	-0.03	B<	175.93	-0.61	-0.05	B<	72.26	-0.71	-0.07	B<	0.78	-0.13	-0.01	A
38	347.37	-0.88	-0.05	B<	58.84	-0.80	-0.05	B<	520.50	-1.23	-0.08	B<	146.17	-1.10	-0.08	B<	31.63	-0.96	-0.04	B<
39	150.27	-0.52	-0.04	B<	10.38	-0.32	-0.03	B<	19.67	-0.21	-0.02	B<	24.42	-0.45	-0.04	B<	1.51	0.18	0.01	A
40	248.73	-0.68	-0.05	B<	20.00	-0.44	-0.03	B<	94.34	-0.48	-0.03	B<	44.47	-0.59	-0.05	B<	11.37	-0.51	-0.03	B<
41	8.08	0.12	0.01	B>	1.63	0.13	0.01	A	36.95	0.30	0.02	B>	24.38	0.45	0.03	B>	14.19	0.58	0.03	B>
42	130.78	0.43	0.04	B>	0.62	0.07	0.01	A	0.09	0.01	0.00	A	2.48	0.13	0.01	A	18.29	0.52	0.05	B>
43	5.69	0.12	0.01	A	12.82	0.40	0.03	B>	147.03	0.69	0.04	B>	114.34	1.08	0.07	B>	22.75	0.90	0.04	B>
44	4.77	0.10	0.01	A	16.25	0.44	0.03	B>	267.65	0.91	0.06	B>	120.05	1.06	0.08	B>	35.67	1.09	0.05	B>
45	10.10	0.16	0.01	B>	2.37	0.18	0.01	A	179.86	0.78	0.05	B>	97.03	0.99	0.07	B>	28.00	1.06	0.04	B>
46	4.53	-0.10	0.00	A	2.65	-0.17	-0.01	A	39.42	-0.33	-0.02	B<	7.42	-0.25	-0.02	B<	13.23	-0.58	-0.03	B<
47	51.92	0.30	0.02	B>	9.32	-0.30	-0.02	B<	7.39	-0.13	-0.01	B<	28.00	0.47	0.04	B>	1.85	-0.19	-0.01	A
48	19.97	-0.17	-0.02	B<	2.08	-0.13	-0.01	A	3.94	0.09	0.01	A	6.83	-0.23	-0.02	B<	12.41	-0.43	-0.04	B<
49	33.39	-0.24	-0.02	B<	16.31	-0.39	-0.03	B<	47.44	-0.33	-0.02	B<	23.66	-0.41	-0.03	B<	8.30	-0.43	-0.02	B<
50	0.01	0.01	0.00	A	0.83	0.12	0.01	A	139.70	0.81	0.04	B>	127.53	1.34	0.07	B>	18.77	1.08	0.03	B>
51	29.72	-0.27	-0.01	B<	11.78	-0.39	-0.02	B<	0.23	0.03	0.01	A	13.27	0.38	0.03	B>	0.02	0.04	0.00	A
52	1.76	-0.08	0.00	A	0.60	-0.11	0.00	A	6.68	0.19	0.01	B>	56.76	0.94	0.04	B>	4.41	0.60	0.01	A
53	75.50	-0.52	-0.02	B<	2.97	0.23	0.01	A	5.09	-0.16	-0.01	A	60.75	0.95	0.05	B>	4.85	0.58	0.01	A
54	5.71	-0.11	-0.01	A	0.60	-0.08	0.00	A	1.01	0.05	0.00	A	82.18	0.88	0.06	B>	4.08	0.36	0.02	A

Note. African Am. = African American, Native Am.= Native American, MH $\chi 2$ = Mantel-Haenszel Chi-Square, ΔMH = Delta (MH-D DIF), SMD= Standardized Mean Difference, A= No DIF, B=Weak DIF, C=Strong DIF, < favors reference group, > favors focal group. Item number does not indicate test booklet location due to field test and NRT items.

Table 9.2.1.12
2005 Spring AIMS Differential Item Functioning Reading CRT Grade 5

	Reference: Male N = 38304 Focal: Female N = 37746				Reference: White N = 35031 Focal: African Am. N = 3874				Reference: White N = 35031 Focal: Hispanic N = 30417				Reference: White N = 35031 Focal: Native Am. N = 5088				Reference: White N = 35031 Focal: Asian N = 1804			
Item	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag
1	25.71	0.24	0.01	B>	29.03	-0.59	-0.04	B<	468.78	-1.18	-0.08	B<	255.05	-1.42	-0.11	B<	67.20	-1.35	-0.06	B<
2	38.07	0.43	0.01	B>	9.27	-0.49	-0.01	B<	106.71	-0.88	-0.03	B<	0.14	-0.06	0.00	A	6.53	-0.73	-0.01	A
3	91.62	-0.46	-0.02	B<	15.87	-0.43	-0.03	B<	25.78	-0.29	-0.02	B<	93.46	-0.88	-0.07	B<	0.56	-0.15	-0.01	A
4	2.83	-0.06	-0.01	A	2.73	-0.14	-0.01	A	7.11	-0.11	-0.02	B<	26.02	0.40	0.04	B>	0.85	0.11	0.01	A
5	9.61	-0.16	-0.01	B<	0.07	0.04	0.00	A	2.96	0.11	0.00	A	0.95	0.10	0.00	A	2.87	0.36	0.01	A
6	197.72	0.60	0.04	B>	0.19	0.04	0.00	A	51.69	0.36	0.02	B>	16.52	-0.35	-0.04	B<	0.66	0.13	0.01	A
7	23.60	0.19	0.02	B>	33.43	-0.51	-0.04	B<	41.37	-0.28	-0.02	B<	4.35	0.17	0.01	A	1.68	-0.18	-0.01	A
8	146.17	-0.50	-0.04	B<	44.93	-0.63	-0.05	B<	724.10	-1.27	-0.09	B<	242.18	-1.26	-0.11	B<	52.57	-1.06	-0.06	B<
9	3.01	-0.10	0.00	A	17.64	-0.52	-0.02	B<	181.03	-0.90	-0.05	B<	73.09	-0.89	-0.05	B<	8.71	-0.67	-0.02	B<
10	146.56	0.55	0.03	B>	5.00	0.24	0.02	A	11.96	0.18	0.01	B>	14.21	0.34	0.03	B>	4.26	0.38	0.02	A
11	0.03	0.01	0.00	A	8.81	0.28	0.02	B>	150.88	0.57	0.06	B>	120.54	0.91	0.09	B>	25.22	0.77	0.05	B>
12	180.94	0.56	0.04	B>	5.37	0.23	0.02	A	57.24	0.36	0.03	B>	16.01	0.34	0.03	B>	9.80	0.49	0.03	B>
13	65.34	0.36	0.02	B>	0.11	0.04	0.00	A	97.42	-0.51	-0.03	B<	31.01	-0.49	-0.04	B<	21.21	-0.77	-0.04	B<
14	16.27	0.15	0.01	B>	7.35	0.24	0.02	B>	207.51	0.63	0.05	B>	120.96	0.88	0.08	B>	7.68	0.36	0.03	B>
15	80.32	0.35	0.03	B>	1.76	0.12	0.01	A	86.14	0.42	0.03	B>	7.57	0.23	0.02	B>	10.94	0.45	0.03	B>
16	91.46	0.35	0.03	B>	10.86	0.29	0.03	B>	32.91	0.25	0.02	B>	55.32	0.60	0.06	B>	0.49	0.09	0.01	A
17	97.73	0.40	0.03	B>	9.10	-0.28	-0.02	B<	20.60	-0.21	-0.01	B<	69.47	-0.68	-0.05	B<	6.30	-0.36	-0.02	A
18	115.81	-0.45	-0.03	B<	0.33	0.06	0.00	A	106.00	0.50	0.03	B>	26.71	0.45	0.03	B>	26.87	0.83	0.05	B>
19	345.64	-0.76	-0.06	B<	24.31	-0.46	-0.04	B<	0.02	-0.01	0.00	A	7.35	-0.23	-0.02	B<	4.20	0.31	0.02	A
20	189.02	-0.72	-0.03	B<	13.22	-0.44	-0.02	B<	63.82	-0.50	-0.03	B<	189.07	-1.30	-0.09	B<	0.68	-0.18	-0.01	A
21	121.42	-0.39	-0.04	B<	5.03	0.19	0.02	A	114.64	-0.44	-0.05	B<	33.88	-0.45	-0.05	B<	0.61	0.10	0.01	A
22	3.37	0.07	0.01	A	1.69	0.12	0.01	A	275.75	0.72	0.07	B>	8.20	-0.23	-0.02	B<	4.16	-0.26	-0.02	A
23	66.85	0.44	0.02	B>	26.34	0.63	0.03	B>	275.82	1.05	0.06	B>	194.30	1.54	0.09	C>	19.38	0.95	0.03	B>
24	16.18	-0.16	-0.01	B<	6.80	0.24	0.02	B>	80.95	0.41	0.03	B>	51.24	0.60	0.05	B>	11.76	0.49	0.03	B>
25	1.48	-0.05	0.00	A	18.99	0.42	0.03	B>	140.67	0.57	0.05	B>	115.24	0.92	0.07	B>	18.89	0.67	0.04	B>
26	34.45	0.23	0.02	B>	25.20	0.45	0.04	B>	203.10	0.64	0.05	B>	89.10	0.78	0.07	B>	4.61	0.29	0.02	A
27	4.93	0.09	0.01	A	8.97	0.28	0.02	B>	18.94	0.20	0.02	B>	6.54	0.21	0.02	A	24.55	0.74	0.05	B>

Note. African Am. = African American, Native Am.= Native American, MH $\chi 2$ = Mantel-Haenszel Chi-Square, ΔMH = Delta (MH-D DIF), SMD= Standardized Mean Difference, A= No DIF, B=Weak DIF, C=Strong DIF, < favors reference group, > favors focal group. Item number does not indicate test booklet location due to field test and NRT items.

(table continues)

Table 9.2.1.12 (continued)
2005 Spring AIMS Differential Item Functioning Reading CRT Grade 5

	Reference: Male N = 38304 Focal: Female N = 37746				Reference: White N = 35031 Focal: African Am. N = 3874				Reference: White N = 35031 Focal: Hispanic N = 30417				Reference: White N = 35031 Focal: Native Am. N = 5088				Reference: White N = 35031 Focal: Asian N = 1804			
Item	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag
28	229.35	-0.72	-0.04	B<	13.84	-0.40	-0.02	B<	600.62	-1.32	-0.08	B<	101.30	-0.93	-0.07	B<	33.27	-1.03	-0.04	B<
29	2.05	-0.05	-0.01	A	6.87	-0.22	-0.02	B<	104.73	0.44	0.05	B>	25.26	0.39	0.05	B>	1.98	0.18	0.02	A
30	227.31	-0.61	-0.05	B<	5.20	-0.21	-0.02	A	36.88	-0.28	-0.02	B<	24.48	0.42	0.04	B>	0.72	-0.12	-0.01	A
31	36.14	-0.23	-0.02	B<	0.08	-0.03	0.00	A	64.40	-0.35	-0.03	B<	10.95	-0.28	-0.03	B<	24.40	-0.63	-0.06	B<
32	5.21	0.10	0.01	A	16.31	-0.40	-0.03	B<	1.16	0.05	0.00	A	3.00	-0.15	-0.01	A	3.51	0.32	0.02	A
33	134.42	-0.43	-0.04	B<	42.15	-0.56	-0.05	B<	228.51	-0.64	-0.06	B<	0.07	0.02	0.00	A	51.74	-0.90	-0.08	B<
34	33.06	0.21	0.02	B>	92.00	0.86	0.08	B>	114.99	0.46	0.04	B>	70.42	0.67	0.06	B>	0.00	0.00	0.00	A
35	10.51	0.12	0.01	B>	37.83	0.55	0.05	B>	50.24	0.31	0.03	B>	7.26	0.22	0.02	B>	0.01	-0.01	0.00	A
36	108.11	-0.57	-0.02	B<	0.53	-0.09	0.00	A	0.01	-0.01	0.00	A	3.91	0.21	0.01	A	0.06	-0.06	0.00	A
37	17.14	0.15	0.02	B>	0.04	0.02	0.00	A	0.28	-0.02	-0.01	A	1.57	-0.10	-0.01	A	10.52	-0.41	-0.04	B<
38	238.16	0.77	0.04	B>	17.01	0.47	0.03	B>	89.34	0.55	0.04	B>	15.36	0.37	0.03	B>	0.31	-0.11	0.00	A
39	0.57	0.03	0.00	A	5.78	-0.22	-0.02	A	1.33	-0.05	0.00	A	45.34	-0.56	-0.05	B<	3.05	-0.26	-0.02	A
40	0.76	-0.04	0.00	A	6.16	0.28	0.02	A	71.87	0.48	0.03	B>	45.84	0.65	0.05	B>	6.62	0.52	0.02	A
41	3.26	-0.09	0.00	A	2.57	0.20	0.01	A	17.04	-0.25	-0.01	B<	73.99	-0.80	-0.05	B<	17.06	-0.79	-0.03	B<
42	9.45	-0.13	-0.01	B<	5.11	-0.23	-0.02	A	82.37	-0.45	-0.03	B<	53.01	-0.62	-0.05	B<	14.98	-0.61	-0.03	B<
43	49.08	-0.29	-0.02	B<	11.40	-0.32	-0.02	B<	125.64	-0.54	-0.04	B<	12.16	-0.29	-0.02	B<	0.18	-0.07	0.00	A
44	41.96	-0.28	-0.02	B<	7.37	0.28	0.02	B>	49.99	0.36	0.02	B>	1.86	0.12	0.01	A	7.01	0.45	0.02	B>
45	21.85	0.21	0.01	B>	1.49	0.13	0.01	A	0.09	0.02	0.01	A	37.39	0.55	0.05	B>	15.57	0.70	0.03	B>
46	64.86	0.35	0.02	B>	0.46	-0.07	0.00	A	15.89	0.20	0.01	B>	33.68	0.52	0.04	B>	5.63	0.40	0.02	A
47	0.67	0.05	0.00	A	0.34	0.08	0.00	A	0.23	-0.03	0.00	A	7.91	-0.29	-0.02	B<	5.01	-0.51	-0.01	A
48	45.71	-0.32	-0.02	B<	24.13	-0.52	-0.03	B<	102.20	-0.55	-0.03	B<	69.69	-0.76	-0.06	B<	1.02	-0.19	-0.01	A
49	0.35	-0.03	0.00	A	0.71	-0.10	0.00	A	25.32	0.32	0.02	B>	54.09	0.76	0.05	B>	0.45	0.15	0.00	A
50	14.08	0.18	0.01	B>	0.75	0.10	0.01	A	0.17	0.02	0.00	A	3.07	0.17	0.01	A	0.60	-0.15	-0.01	A
51	30.73	0.23	0.02	B>	0.00	-0.01	0.00	A	14.39	0.18	0.02	B>	12.00	0.29	0.03	B>	16.69	0.65	0.04	B>
52	26.04	0.24	0.01	B>	0.67	0.09	0.01	A	5.72	-0.13	-0.01	A	7.23	-0.25	-0.02	B<	0.56	0.15	0.01	A
53	4.52	-0.08	-0.01	A	0.00	0.01	0.00	A	126.66	-0.50	-0.05	B<	102.08	-0.83	-0.08	B<	0.60	-0.11	-0.01	A
54	4.77	0.09	0.01	A	1.08	0.10	0.01	A	8.06	-0.13	-0.01	B<	36.84	-0.51	-0.04	B<	5.84	-0.33	-0.02	A

Note. African Am. = African American, Native Am.= Native American, MH $\chi 2$ = Mantel-Haenszel Chi-Square, ΔMH = Delta (MH-D DIF), SMD= Standardized Mean Difference, A= No DIF, B=Weak DIF, C=Strong DIF, < favors reference group, > favors focal group. Item number does not indicate test booklet location due to field test and NRT items.

Table 9.2.1.13
2005 Spring AIMS Differential Item Functioning Reading CRT Grade 6

	Reference: Male N = 38028 Focal: Female N = 37509				Reference: White N = 35272 Focal: African Am. N = 3936				Reference: White N = 35272 Focal: Hispanic N = 29377				Reference: White N = 35272 Focal: Native Am. N = 5356				Reference: White N = 35272 Focal: Asian N = 1762			
Item	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag
1	17.01	0.17	0.01	B>	0.56	-0.07	-0.01	A	38.79	-0.30	-0.03	B<	118.46	-0.88	-0.08	B<	16.52	-0.59	-0.04	B<
2	20.80	0.33	0.01	B>	2.18	-0.24	-0.01	A	0.00	0.00	0.00	A	3.90	0.26	0.01	A	0.75	0.33	0.00	A
3	311.94	-0.89	-0.04	B<	7.00	-0.30	-0.02	B<	107.93	-0.60	-0.04	B<	19.15	-0.42	-0.03	B<	0.96	-0.21	-0.01	A
4	239.28	-0.89	-0.03	B<	1.34	-0.15	-0.01	A	58.08	-0.51	-0.03	B<	31.65	0.63	0.03	B>	0.24	-0.13	0.00	A
5	2.67	-0.07	0.00	A	3.71	-0.18	-0.02	A	159.66	-0.59	-0.06	B<	37.24	-0.49	-0.04	B<	7.79	-0.40	-0.03	B<
6	3.21	-0.10	0.00	A	4.84	-0.28	-0.01	A	2.13	-0.10	0.00	A	1.10	-0.11	-0.01	A	2.38	0.38	0.01	A
7	203.62	-0.61	-0.04	B<	0.87	0.09	0.01	A	3.31	0.09	0.01	A	40.89	0.55	0.05	B>	1.99	-0.22	-0.01	A
8	176.47	-0.67	-0.03	B<	2.24	0.17	0.01	A	9.85	0.18	0.01	B>	84.56	0.91	0.06	B>	1.63	0.26	0.01	A
9	142.31	-0.66	-0.03	B<	0.17	0.05	0.00	A	49.16	0.46	0.02	B>	40.62	0.70	0.04	B>	1.09	0.24	0.01	A
10	120.19	0.49	0.03	B>	3.24	0.19	0.01	A	22.81	0.25	0.02	B>	37.44	0.56	0.04	B>	3.97	-0.32	-0.02	A
11	0.82	0.06	0.00	A	0.32	0.09	0.00	A	23.74	0.41	0.02	B>	32.44	0.76	0.03	B>	0.00	0.03	0.00	A
12	1.25	0.07	0.00	A	0.47	0.09	0.00	A	5.75	-0.17	-0.01	A	3.56	-0.20	-0.01	A	0.34	-0.15	0.00	A
13	17.30	-0.16	-0.02	B<	5.15	0.21	0.02	A	7.69	0.13	0.02	B>	5.93	0.19	0.02	A	1.34	0.17	0.01	A
14	26.60	0.30	0.01	B>	0.06	0.04	0.00	A	12.40	0.24	0.01	B>	19.08	0.47	0.03	B>	9.70	0.84	0.02	B>
15	3.72	0.09	0.00	A	0.74	-0.09	-0.01	A	42.41	0.37	0.02	B>	65.64	0.76	0.05	B>	8.20	0.60	0.02	B>
16	58.55	0.38	0.02	B>	6.68	-0.29	-0.02	B<	7.86	-0.16	-0.01	B<	8.76	-0.27	-0.02	B<	1.93	0.29	0.01	A
17	1.39	-0.05	0.00	A	76.75	0.80	0.07	B>	112.65	0.48	0.02	B>	0.17	-0.03	0.00	A	11.77	0.46	0.04	B>
18	26.68	-0.24	-0.01	B<	1.20	-0.11	-0.01	A	34.30	-0.31	-0.02	B<	2.39	0.14	0.01	A	0.74	-0.15	-0.01	A
19	123.55	0.64	0.02	B>	13.79	-0.45	-0.02	B<	6.83	0.18	0.01	B>	26.49	0.57	0.03	B>	10.54	-0.69	-0.02	B<
20	0.43	0.03	0.00	A	207.00	-1.50	-0.09	C<	737.09	-1.55	-0.08	C<	63.71	-0.75	-0.05	B<	91.19	-1.70	-0.06	C<
21	68.46	0.35	0.02	B>	0.00	-0.01	0.00	A	0.00	0.00	0.00	A	0.96	-0.09	-0.01	A	10.80	-0.49	-0.03	B<
22	21.20	0.17	0.02	B>	10.85	0.29	0.03	B>	141.95	0.52	0.05	B>	4.10	0.16	0.01	A	0.10	-0.04	0.00	A
23	26.23	0.20	0.02	B>	1.41	0.11	0.01	A	0.91	0.04	0.00	A	6.98	-0.23	-0.02	B<	0.46	-0.10	-0.01	A
24	303.64	-0.68	-0.06	B<	6.26	0.22	0.02	A	8.72	-0.13	-0.01	B<	10.24	-0.26	-0.02	B<	9.42	-0.42	-0.03	B<
25	10.66	0.13	0.01	B>	1.70	-0.12	-0.01	A	8.93	0.13	0.02	B>	3.87	-0.16	-0.01	A	1.56	-0.17	-0.01	A
26	8.04	-0.11	-0.01	B<	6.05	-0.22	-0.02	A	0.12	0.02	0.00	A	5.09	-0.18	-0.02	A	1.16	-0.14	-0.01	A
27	100.32	-0.41	-0.03	B<	0.01	-0.01	0.00	A	30.21	0.26	0.02	B>	23.00	0.41	0.03	B>	3.45	0.28	0.02	A
28	353.44	-0.71	-0.06	B<	0.05	-0.02	0.00	A	0.53	-0.03	0.00	A	4.86	0.18	0.01	A	9.70	0.40	0.03	B>
29	1330.34	-1.57	-0.11	C<	10.51	0.31	0.02	B>	13.90	0.18	0.01	B>	9.12	-0.25	-0.02	B<	2.00	0.23	0.01	A
30	0.12	0.01	0.00	A	1.74	0.12	0.01	A	0.38	-0.03	0.00	A	4.09	-0.16	-0.01	A	0.10	0.04	0.00	A

Note. African Am. = African American, Native Am.= Native American, MH χ^2 = Mantel-Haenszel Chi-Square, ΔMH = Delta (MH-D DIF), SMD= Standardized Mean Difference, A= No DIF, B=Weak DIF, C=Strong DIF, < favors reference group, > favors focal group. Item number does not indicate test booklet location due to field test and NRT items.

(table continues)

Table 9.2.1.13 (continued)
2005 Spring AIMS Differential Item Functioning Reading CRT Grade 6

	Reference: Male N = 38028 Focal: Female N = 37509				Reference: White N = 35272 Focal: African Am. N = 3936				Reference: White N = 35272 Focal: Hispanic N = 29377				Reference: White N = 35272 Focal: Native Am. N = 5356				Reference: White N = 35272 Focal: Asian N = 1762			
Item	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag
31	141.79	0.45	0.04	B>	10.36	0.29	0.02	B>	7.81	-0.12	-0.01	B<	2.84	0.14	0.01	A	0.09	-0.04	0.00	A
32	93.66	0.46	0.03	B>	4.92	0.24	0.02	A	2.04	-0.08	-0.01	A	32.46	-0.50	-0.04	B<	0.02	0.03	0.00	A
33	49.21	0.45	0.01	B>	0.02	0.02	0.00	A	15.51	-0.31	-0.01	B<	45.52	-0.76	-0.04	B<	0.00	-0.02	0.00	A
34	0.00	0.00	0.00	A	15.67	-0.38	-0.03	B<	547.35	-1.10	-0.08	B<	20.55	-0.38	-0.03	B<	2.52	-0.26	-0.01	A
35	67.15	0.34	0.02	B>	4.79	0.21	0.02	A	0.03	0.01	0.00	A	0.51	-0.06	-0.01	A	7.02	-0.40	-0.02	B<
36	271.25	0.65	0.05	B>	6.62	0.24	0.02	A	9.90	0.14	0.02	B>	41.18	0.52	0.05	B>	0.24	0.07	0.01	A
37	24.07	0.18	0.02	B>	4.07	0.17	0.02	A	39.56	0.27	0.02	B>	1.37	-0.09	-0.01	A	8.92	0.38	0.03	B>
38	11.97	0.14	0.01	B>	0.08	-0.03	0.00	A	0.16	0.02	0.00	A	29.01	-0.44	-0.04	B<	0.28	0.08	0.01	A
39	72.42	-0.36	-0.03	B<	0.50	-0.07	0.00	A	175.28	-0.64	-0.04	B<	36.11	-0.56	-0.03	B<	23.98	-0.70	-0.05	B<
40	8.95	0.13	0.01	B>	1.65	0.13	0.01	A	87.89	0.47	0.03	B>	39.98	0.54	0.04	B>	0.07	-0.05	0.00	A
41	69.88	-0.34	-0.03	B<	8.95	0.28	0.02	B>	59.09	0.36	0.03	B>	0.01	-0.01	0.00	A	15.39	0.60	0.04	B>
42	24.83	0.20	0.02	B>	0.12	0.03	0.00	A	12.73	0.17	0.02	B>	35.52	0.49	0.04	B>	0.29	0.08	0.01	A
43	14.37	0.15	0.01	B>	3.97	-0.18	-0.01	A	1.16	0.05	0.01	A	0.08	-0.02	0.00	A	0.10	-0.05	0.00	A
44	11.73	0.13	0.01	B>	28.02	0.47	0.04	B>	0.47	0.03	0.01	A	49.75	0.56	0.05	B>	3.06	0.23	0.02	A
45	0.40	0.02	0.00	A	3.11	0.16	0.01	A	4.21	-0.09	-0.01	A	2.84	0.14	0.01	A	5.15	-0.29	-0.03	A
46	25.35	0.19	0.02	B>	0.17	0.04	0.00	A	18.20	0.19	0.02	B>	95.05	0.77	0.07	B>	55.02	0.96	0.08	B>
47	16.87	0.18	0.01	B>	8.85	-0.29	-0.02	B<	5.50	0.12	0.01	A	30.72	0.48	0.04	B>	5.40	0.40	0.02	A
48	5.46	-0.11	-0.01	A	37.93	-0.63	-0.04	B<	26.22	-0.28	-0.02	B<	33.78	-0.51	-0.04	B<	9.90	-0.57	-0.02	B<
49	280.72	0.68	0.05	B>	1.95	-0.13	-0.01	A	44.19	0.31	0.03	B>	34.35	0.48	0.04	B>	12.57	0.55	0.03	B>
50	99.60	0.44	0.03	B>	1.17	-0.11	-0.01	A	28.00	-0.26	-0.02	B<	135.22	-0.95	-0.08	B<	1.41	-0.20	-0.01	A
51	149.69	-0.46	-0.04	B<	0.19	0.04	0.00	A	5.41	-0.10	-0.01	A	7.01	-0.22	-0.02	B<	0.03	0.02	0.00	A
52	13.59	0.14	0.01	B>	0.19	0.04	0.00	A	98.40	0.45	0.04	B>	55.75	-0.60	-0.05	B<	0.47	-0.09	-0.01	A
53	97.79	0.48	0.03	B>	27.67	-0.57	-0.03	B<	35.42	-0.33	-0.02	B<	226.74	-1.32	-0.09	B<	5.70	-0.47	-0.02	A
54	37.73	0.22	0.02	B>	4.49	-0.18	-0.02	A	43.89	0.28	0.03	B>	18.37	0.34	0.03	B>	6.72	0.32	0.03	B>

Note. African Am. = African American, Native Am.= Native American, MH $\chi 2$ = Mantel-Haenszel Chi-Square, ΔMH = Delta (MH-D DIF), SMD= Standardized Mean Difference, A= No DIF, B=Weak DIF, C=Strong DIF, < favors reference group, > favors focal group. Item number does not indicate test booklet location due to field test and NRT items.

Table 9.2.1.14
2005 Spring AIMS Differential Item Functioning Reading CRT Grade 7

	Reference: Male N = 38871 Focal: Female N = 38151				Reference: White N = 36483 Focal: African Am. N = 3937				Reference: White N = 36483 Focal: Hispanic N = 29693				Reference: White N = 36483 Focal: Native Am. N = 5505				Reference: White N = 36483 Focal: Asian N = 1645			
Item	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag
1	4.95	0.14	0.00	A	0.35	-0.09	0.00	A	0.71	-0.06	-0.01	A	0.00	0.00	0.00	A	0.11	0.10	0.00	A
2	203.39	0.53	0.05	B>	0.04	0.02	0.00	A	42.14	-0.28	-0.03	B<	6.57	-0.19	-0.02	A	5.99	-0.33	-0.03	A
3	611.21	-1.29	-0.05	B<	29.17	-0.63	-0.03	B<	450.02	-1.30	-0.08	B<	274.47	-1.54	-0.10	C<	26.25	-1.06	-0.03	B<
4	264.72	-0.70	-0.05	B<	27.53	-0.51	-0.04	B<	351.47	-0.92	-0.08	B<	448.05	-1.71	-0.14	C<	30.01	-0.90	-0.05	B<
5	2.04	0.06	0.00	A	0.13	0.04	0.00	A	28.45	0.27	0.02	B>	9.46	0.26	0.02	B>	3.51	0.33	0.02	A
6	45.35	-0.34	-0.02	B<	15.58	-0.44	-0.02	B<	29.08	-0.32	-0.02	B<	52.04	-0.68	-0.04	B<	0.17	-0.09	0.00	A
7	23.30	-0.20	-0.01	B<	6.04	0.23	0.02	A	2.17	-0.07	-0.01	A	8.79	-0.24	-0.02	B<	0.01	-0.02	0.00	A
8	0.17	0.02	0.00	A	3.63	0.25	0.01	A	9.89	-0.20	-0.01	B<	67.94	-0.82	-0.05	B<	3.06	-0.41	-0.01	A
9	64.27	0.31	0.03	B>	0.45	-0.06	0.00	A	7.89	-0.13	-0.01	B<	74.16	-0.67	-0.06	B<	0.02	-0.03	0.00	A
10	20.30	-0.20	-0.01	B<	3.98	0.21	0.01	A	18.90	-0.22	-0.01	B<	31.64	-0.47	-0.03	B<	0.27	-0.10	0.00	A
11	132.59	-0.54	-0.03	B<	23.35	-0.49	-0.03	B<	3.19	-0.10	-0.02	A	12.54	-0.32	-0.03	B<	0.00	-0.02	0.00	A
12	151.05	-0.56	-0.03	B<	31.12	-0.57	-0.04	B<	210.92	-0.75	-0.05	B<	228.59	-1.27	-0.10	B<	0.92	-0.17	-0.01	A
13	27.52	-0.28	-0.01	B<	8.60	-0.36	-0.02	B<	16.25	-0.26	-0.01	B<	75.74	-0.85	-0.05	B<	0.06	-0.07	0.00	A
14	21.44	0.21	0.01	B>	0.13	0.04	0.00	A	6.38	0.13	0.01	A	3.72	0.17	0.01	A	0.32	-0.10	-0.01	A
15	3.36	0.10	0.00	A	0.13	-0.04	0.00	A	13.23	0.22	0.01	B>	5.75	-0.23	-0.01	A	1.00	0.22	0.01	A
16	9.66	-0.12	-0.01	B<	47.83	-0.59	-0.05	B<	792.44	-1.19	-0.10	B<	311.89	-1.36	-0.12	B<	36.50	-0.79	-0.07	B<
17	10.06	-0.11	-0.01	B<	36.71	0.52	0.05	B>	4.65	0.09	0.01	A	31.89	-0.43	-0.04	B<	0.07	-0.04	0.00	A
18	5.12	0.10	0.01	A	7.60	-0.27	-0.02	B<	17.43	0.22	0.01	B>	10.55	0.29	0.02	B>	6.70	0.45	0.02	B>
19	296.39	-0.65	-0.06	B<	31.00	-0.49	-0.04	B<	32.63	-0.25	-0.02	B<	65.61	-0.62	-0.05	B<	11.69	0.48	0.04	B>
20	184.05	0.56	0.04	B>	25.78	0.51	0.04	B>	230.67	0.74	0.06	B>	45.83	0.57	0.05	B>	0.00	-0.01	0.00	A
21	19.36	-0.19	-0.01	B<	2.01	-0.14	-0.01	A	8.02	0.14	0.02	B>	4.22	-0.17	-0.01	A	9.06	-0.48	-0.03	B<
22	328.43	0.78	0.05	B>	1.41	-0.12	-0.01	A	0.58	0.04	0.00	A	2.68	0.14	0.01	A	3.81	-0.31	-0.02	A
23	89.62	0.34	0.03	B>	22.91	0.40	0.04	B>	139.56	0.49	0.05	B>	99.23	0.75	0.07	B>	4.41	0.28	0.02	A
24	51.16	-0.30	-0.02	B<	53.60	-0.69	-0.05	B<	191.92	-0.66	-0.05	B<	75.99	-0.69	-0.05	B<	15.18	-0.62	-0.04	B<
25	601.58	-0.89	-0.09	B<	67.17	-0.69	-0.07	B<	200.98	-0.59	-0.06	B<	35.18	-0.44	-0.04	B<	2.54	-0.21	-0.02	A
26	128.24	0.49	0.03	B>	0.64	0.08	0.01	A	0.13	-0.02	0.00	A	20.67	-0.37	-0.03	B<	4.71	0.39	0.02	A
27	5.35	0.10	0.01	A	1.77	0.14	0.01	A	8.70	0.15	0.01	B>	14.59	0.33	0.03	B>	0.01	0.03	0.00	A
28	103.61	0.38	0.04	B>	15.22	0.34	0.03	B>	122.61	0.48	0.03	B>	79.04	0.69	0.06	B>	20.31	0.62	0.05	B>
29	108.84	0.44	0.03	B>	6.58	0.25	0.02	A	0.27	0.03	0.00	A	15.44	-0.32	-0.03	B<	2.21	-0.24	-0.01	A
30	54.01	0.30	0.02	B>	1.82	0.13	0.01	A	11.10	0.16	0.01	B>	13.25	0.29	0.02	B>	0.56	0.12	0.01	A

Note. African Am. = African American, Native Am.= Native American, MH χ^2 = Mantel-Haenszel Chi-Square, ΔMH = Delta (MH-D DIF), SMD= Standardized Mean Difference, A= No DIF, B=Weak DIF, C=Strong DIF, < favors reference group, > favors focal group. Item number does not indicate test booklet location due to field test and NRT items.

(table continues)

Table 9.2.1.14 (continued)
2005 Spring AIMS Differential Item Functioning Reading CRT Grade 7

	Reference: Male N = 38871 Focal: Female N = 38151				Reference: White N = 36483 Focal: African Am. N = 3937				Reference: White N = 36483 Focal: Hispanic N = 29693				Reference: White N = 36483 Focal: Native Am. N = 5505				Reference: White N = 36483 Focal: Asian N = 1645			
Item	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag
31	136.09	0.54	0.03	B>	10.74	-0.34	-0.02	B<	6.94	-0.14	-0.01	B<	0.23	-0.04	0.00	A	5.89	-0.43	-0.02	A
32	93.51	0.43	0.03	B>	1.13	0.11	0.01	A	1.91	0.07	0.01	A	0.29	0.05	0.01	A	21.17	0.83	0.04	B>
33	127.79	0.51	0.03	B>	0.01	-0.01	0.00	A	8.31	0.15	0.01	B>	0.27	0.05	0.00	A	1.10	0.20	0.01	A
34	211.84	0.71	0.04	B>	0.23	-0.05	0.00	A	19.20	0.25	0.01	B>	47.17	0.64	0.04	B>	1.13	0.22	0.01	A
35	110.53	0.44	0.03	B>	3.12	0.17	0.01	A	85.10	0.44	0.04	B>	15.87	0.33	0.02	B>	8.19	0.46	0.03	B>
36	884.68	-1.20	-0.10	B<	2.66	-0.16	-0.01	A	96.74	-0.46	-0.03	B<	24.81	-0.43	-0.03	B<	15.91	-0.55	-0.04	B<
37	115.15	-0.38	-0.04	B<	9.97	0.27	0.03	B>	0.32	0.02	0.01	A	109.99	0.78	0.08	B>	0.03	-0.03	0.00	A
38	15.00	-0.17	-0.01	B<	14.46	0.39	0.03	B>	17.78	0.21	0.03	B>	561.40	2.39	0.15	C>	18.98	0.81	0.04	B>
39	6.57	0.11	0.01	A	0.48	-0.07	0.00	A	98.67	0.49	0.04	B>	363.38	1.74	0.13	C>	4.65	0.36	0.02	A
40	5.77	0.09	0.01	A	1.77	-0.12	-0.01	A	1.75	0.06	0.00	A	27.03	0.41	0.04	B>	4.76	0.33	0.02	A
41	40.13	-0.24	-0.02	B<	0.27	0.05	0.01	A	44.16	-0.29	-0.02	B<	0.50	-0.06	0.00	A	1.44	-0.17	-0.01	A
42	148.72	0.54	0.03	B>	26.00	0.52	0.04	B>	86.44	0.47	0.04	B>	156.45	1.12	0.08	B>	7.99	0.50	0.03	B>
43	69.42	0.33	0.03	B>	8.73	0.27	0.02	B>	11.35	0.15	0.02	B>	6.26	0.20	0.02	A	0.82	-0.13	-0.01	A
44	78.20	-0.32	-0.03	B<	0.32	-0.05	-0.01	A	6.51	0.11	0.01	A	0.69	-0.06	-0.01	A	0.74	-0.11	-0.01	A
45	0.00	0.00	0.00	A	4.33	0.21	0.01	A	28.38	-0.27	-0.02	B<	65.84	-0.67	-0.05	B<	31.24	-0.87	-0.05	B<
46	126.04	0.44	0.04	B>	2.99	0.16	0.01	A	58.69	0.35	0.03	B>	1.92	-0.11	-0.01	A	1.87	-0.20	-0.01	A
47	4.20	-0.08	-0.01	A	19.16	0.40	0.03	B>	304.43	0.82	0.06	B>	90.24	0.76	0.06	B>	11.21	0.51	0.03	B>
48	3.59	0.09	0.01	A	3.86	0.22	0.01	A	5.43	-0.13	-0.01	A	3.92	0.18	0.01	A	2.12	0.31	0.01	A
49	56.35	-0.29	-0.02	B<	59.92	0.70	0.06	B>	40.85	0.28	0.02	B>	0.01	0.01	0.00	A	24.77	0.69	0.06	B>
50	44.93	0.28	0.02	B>	2.67	0.16	0.01	A	31.34	0.27	0.03	B>	25.14	0.40	0.04	B>	1.20	0.17	0.01	A
51	22.31	0.20	0.01	B>	0.00	0.01	0.00	A	0.10	0.02	0.01	A	8.98	0.25	0.02	B>	1.76	-0.22	-0.01	A
52	22.05	0.21	0.01	B>	0.61	-0.08	-0.01	A	87.95	0.48	0.03	B>	110.07	0.93	0.07	B>	9.62	0.57	0.03	B>
53	4.76	-0.09	-0.01	A	1.22	-0.11	-0.01	A	11.29	0.17	0.02	B>	20.87	0.38	0.03	B>	2.95	-0.28	-0.02	A
54	62.10	-0.30	-0.03	B<	3.80	-0.17	-0.01	A	12.57	0.16	0.01	B>	41.30	0.50	0.04	B>	0.12	0.05	0.00	A

Note. African Am. = African American, Native Am.= Native American, MH $\chi 2$ = Mantel-Haenszel Chi-Square, ΔMH = Delta (MH-D DIF), SMD= Standardized Mean Difference, A= No DIF, B=Weak DIF, C=Strong DIF, < favors reference group, > favors focal group. Item number does not indicate test booklet location due to field test and NRT items.

Table 9.2.1.15
2005 Spring AIMS Differential Item Functioning Reading CRT Grade 8

	Reference: Male N = 38523 Focal: Female N = 37272				Reference: White N = 37129 Focal: African Am. N = 3890				Reference: White N = 37129 Focal: Hispanic N = 27931				Reference: White N = 37129 Focal: Native Am. N = 5464				Reference: White N = 37129 Focal: Asian N = 1694			
Item	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag
1	80.29	0.49	0.02	B>	21.26	-0.56	-0.03	B<	125.57	-0.72	-0.04	B<	1.17	0.12	0.01	A	59.33	-1.44	-0.05	B<
2	50.54	0.26	0.03	B>	38.00	0.53	0.05	B>	79.72	0.38	0.03	B>	120.87	0.83	0.08	B>	30.06	0.73	0.06	B>
3	0.04	-0.01	0.00	A	6.38	-0.27	-0.02	A	109.57	-0.57	-0.04	B<	250.07	-1.33	-0.10	B<	1.00	-0.20	-0.01	A
4	89.40	-0.34	-0.03	B<	6.89	-0.22	-0.02	B<	0.09	-0.01	0.00	A	20.06	0.33	0.04	B>	1.08	0.14	0.01	A
5	42.86	-0.33	-0.02	B<	0.00	-0.01	0.00	A	0.94	-0.06	0.00	A	512.60	-1.92	-0.14	C<	19.66	-0.84	-0.03	B<
6	0.68	-0.05	0.00	A	18.41	0.62	0.02	B>	4.90	0.16	0.01	A	92.64	1.18	0.05	B>	1.65	0.37	0.01	A
7	0.40	-0.03	0.00	A	3.39	0.20	0.01	A	44.52	0.36	0.03	B>	23.79	0.44	0.04	B>	0.10	0.06	0.00	A
8	0.80	-0.03	0.00	A	0.36	0.05	0.01	A	1.46	0.05	0.01	A	39.69	0.46	0.05	B>	1.62	0.16	0.02	A
9	233.76	-0.61	-0.05	B<	45.11	-0.60	-0.05	B<	400.73	-0.90	-0.08	B<	113.01	-0.81	-0.07	B<	37.76	-0.86	-0.06	B<
10	46.11	-0.30	-0.02	B<	18.26	-0.41	-0.03	B<	3.90	-0.10	0.00	A	1.35	0.10	0.01	A	0.01	-0.02	0.00	A
11	20.61	-0.18	-0.01	B<	0.37	0.06	0.01	A	15.54	-0.18	-0.01	B<	77.47	0.71	0.06	B>	2.24	0.24	0.01	A
12	5.22	0.09	0.01	A	5.14	-0.20	-0.02	A	8.16	-0.13	-0.02	B<	42.20	-0.51	-0.05	B<	34.91	-0.79	-0.06	B<
13	0.61	0.03	0.00	A	18.21	0.38	0.03	B>	10.63	0.14	0.01	B>	46.41	0.53	0.05	B>	19.27	0.65	0.05	B>
14	3.82	0.10	0.00	A	0.12	-0.04	0.00	A	54.70	-0.43	-0.02	B<	107.42	-0.90	-0.06	B<	0.77	-0.20	-0.01	A
15	24.13	0.20	0.02	B>	68.68	-0.76	-0.06	B<	220.83	-0.69	-0.06	B<	330.15	-1.39	-0.12	B<	84.53	-1.32	-0.08	B<
16	142.94	0.73	0.02	B>	8.21	-0.38	-0.02	B<	0.80	0.06	0.00	A	86.30	-0.94	-0.05	B<	0.15	-0.11	0.00	A
17	31.38	-0.21	-0.02	B<	49.25	0.62	0.05	B>	109.36	0.46	0.04	B>	0.00	0.00	0.00	A	9.29	-0.40	-0.04	B<
18	8.16	-0.11	-0.01	B<	6.10	-0.22	-0.02	A	35.22	-0.26	-0.02	B<	17.59	-0.33	-0.03	B<	0.17	0.06	0.01	A
19	269.53	-0.88	-0.04	B<	27.48	-0.61	-0.03	B<	43.15	-0.41	-0.02	B<	84.17	-0.88	-0.05	B<	18.44	-0.87	-0.03	B<
20	841.57	-1.08	-0.10	B<	56.11	-0.64	-0.06	B<	69.81	-0.35	-0.04	B<	0.05	0.02	0.00	A	45.40	-0.86	-0.08	B<
21	11.24	0.13	0.01	B>	12.71	-0.33	-0.03	B<	201.55	-0.65	-0.05	B<	60.01	-0.60	-0.05	B<	0.02	0.03	0.00	A
22	11.15	-0.14	-0.01	B<	2.22	0.15	0.01	A	17.93	0.21	0.01	B>	0.10	0.03	0.00	A	4.46	0.37	0.02	A
23	502.79	-0.86	-0.08	B<	3.49	-0.17	-0.02	A	5.27	0.10	0.00	A	27.75	0.41	0.03	B>	0.15	-0.05	0.00	A
24	31.04	-0.26	-0.01	B<	0.73	-0.09	-0.01	A	10.85	-0.18	-0.02	B<	4.39	0.19	0.01	A	0.42	0.13	0.01	A
25	175.48	-0.61	-0.04	B<	6.85	-0.27	-0.02	B<	7.24	-0.14	-0.01	B<	17.54	0.37	0.03	B>	0.28	-0.10	0.00	A
26	35.48	0.23	0.02	B>	1.23	0.10	0.01	A	78.22	0.40	0.03	B>	18.29	0.33	0.03	B>	2.15	-0.20	-0.02	A
27	165.71	-0.59	-0.03	B<	20.54	-0.47	-0.03	B<	372.84	-0.98	-0.07	B<	10.20	0.28	0.02	B>	45.89	-1.17	-0.05	B<
28	179.86	0.55	0.04	B>	0.24	0.05	0.01	A	17.31	-0.20	-0.01	B<	21.51	0.38	0.03	B>	0.07	-0.05	0.00	A
29	42.93	0.25	0.02	B>	2.11	-0.13	-0.01	A	39.27	-0.28	-0.02	B<	73.35	-0.67	-0.06	B<	0.06	0.04	0.00	A
30	7.34	-0.10	-0.01	B<	4.51	-0.18	-0.01	A	26.20	-0.22	-0.01	B<	1.27	-0.09	0.00	A	0.83	-0.12	-0.01	A

Note. African Am. = African American, Native Am.= Native American, MH χ^2 = Mantel-Haenszel Chi-Square, ΔMH = Delta (MH-D DIF), SMD= Standardized Mean Difference, A= No DIF, B=Weak DIF, C=Strong DIF, < favors reference group, > favors focal group. Item number does not indicate test booklet location due to field test and NRT items.

(table continues)

Table 9.2.1.15 (continued)
2005 Spring AIMS Differential Item Functioning Reading CRT Grade 8

	Reference: Male N = 38523 Focal: Female N = 37272				Reference: White N = 37129 Focal: African Am. N = 3890				Reference: White N = 37129 Focal: Hispanic N = 27931				Reference: White N = 37129 Focal: Native Am. N = 5464				Reference: White N = 37129 Focal: Asian N = 1694			
Item	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag
31	61.75	0.31	0.02	B>	30.08	-0.49	-0.04	B<	1.69	-0.06	-0.01	A	1.33	-0.09	-0.01	A	13.39	-0.50	-0.04	B<
32	24.43	0.18	0.02	B>	132.79	0.98	0.09	B>	23.23	0.21	0.01	B>	44.03	0.51	0.04	B>	16.49	0.49	0.05	B>
33	36.27	0.24	0.02	B>	0.33	-0.05	0.00	A	7.18	0.12	0.01	B>	12.65	0.28	0.03	B>	3.67	0.29	0.02	A
34	41.72	0.25	0.02	B>	20.89	0.42	0.03	B>	331.73	0.85	0.07	B>	19.30	0.35	0.03	B>	8.79	0.42	0.03	B>
35	415.86	-0.80	-0.07	B<	10.82	-0.30	-0.03	B<	4.28	-0.09	-0.01	A	56.93	-0.59	-0.05	B<	8.20	-0.39	-0.03	B<
36	1.73	-0.05	0.00	A	5.55	0.22	0.02	A	0.04	0.01	0.00	A	2.48	0.13	0.01	A	0.36	0.10	0.01	A
37	82.98	0.34	0.03	B>	2.88	0.15	0.01	A	1.40	0.05	0.00	A	65.98	-0.66	-0.06	B<	12.49	0.46	0.04	B>
38	5.03	-0.09	-0.01	A	29.78	-0.48	-0.04	B<	259.73	-0.70	-0.05	B<	142.02	-0.88	-0.08	B<	7.11	-0.37	-0.03	B<
39	41.69	0.26	0.02	B>	7.76	0.26	0.02	B>	28.39	0.25	0.02	B>	11.40	0.27	0.02	B>	3.85	0.30	0.02	A
40	178.05	0.58	0.04	B>	0.00	0.00	0.00	A	3.77	0.10	0.01	A	21.90	0.40	0.03	B>	0.12	0.07	0.00	A
41	116.04	-0.42	-0.04	B<	10.98	-0.30	-0.02	B<	1.69	0.06	0.00	A	28.75	-0.43	-0.04	B<	1.10	-0.15	-0.01	A
42	2.83	0.08	0.00	A	4.07	0.23	0.01	A	48.29	0.40	0.03	B>	2.85	0.16	0.01	A	0.39	-0.13	0.00	A
43	74.84	-0.33	-0.03	B<	15.34	0.35	0.03	B>	0.35	0.03	0.00	A	0.23	-0.04	0.00	A	1.37	-0.16	-0.01	A
44	0.41	0.02	0.00	A	2.32	0.14	0.01	A	19.45	0.19	0.02	B>	1.84	0.11	0.01	A	9.99	0.47	0.03	B>
45	0.69	-0.03	0.00	A	23.06	0.41	0.04	B>	138.25	0.50	0.05	B>	7.12	0.20	0.02	B>	11.81	0.44	0.04	B>
46	43.40	0.27	0.02	B>	17.84	0.39	0.03	B>	142.49	0.57	0.05	B>	183.02	1.11	0.09	B>	27.17	0.85	0.05	B>
47	9.43	0.13	0.01	B>	2.91	-0.16	-0.01	A	6.13	-0.12	-0.01	A	3.04	0.15	0.01	A	1.43	0.20	0.01	A
48	7.36	0.11	0.01	B>	8.88	-0.27	-0.02	B<	7.20	-0.12	-0.01	B<	2.11	-0.12	-0.01	A	3.15	0.25	0.02	A
49	195.83	0.65	0.04	B>	26.61	0.54	0.04	B>	67.78	0.43	0.03	B>	0.00	0.01	0.00	A	8.86	0.58	0.02	B>
50	153.46	0.49	0.04	B>	10.00	0.29	0.02	B>	57.27	0.35	0.03	B>	49.41	0.56	0.05	B>	8.21	0.44	0.03	B>
51	231.52	0.67	0.04	B>	0.13	-0.04	0.00	A	19.97	0.22	0.02	B>	18.31	0.36	0.03	B>	12.74	0.65	0.03	B>
52	418.01	0.86	0.06	B>	23.15	0.46	0.04	B>	287.91	0.83	0.06	B>	193.67	1.16	0.10	B>	29.57	0.94	0.05	B>
53	19.15	0.19	0.01	B>	9.85	0.31	0.02	B>	0.01	0.00	-0.01	A	38.03	-0.50	-0.04	B<	0.05	0.04	0.00	A
54	80.09	0.37	0.03	B>	8.24	0.27	0.02	B>	107.27	0.50	0.04	B>	108.42	0.85	0.07	B>	0.77	0.14	0.01	A

Note. African Am. = African American, Native Am.= Native American, MH $\chi 2$ = Mantel-Haenszel Chi-Square, ΔMH = Delta (MH-D DIF), SMD= Standardized Mean Difference, A= No DIF, B=Weak DIF, C=Strong DIF, < favors reference group, > favors focal group. Item number does not indicate test booklet location due to field test and NRT items.

Table 9.2.1.16
2005 Spring AIMS Differential Item Functioning Reading CRT High School

	Reference: Male N = 34375 Focal: Female N = 33934				Reference: White N = 35391 Focal: African Am. N = 3347				Reference: White N = 35391 Focal: Hispanic N = 22883				Reference: White N = 35391 Focal: Native Am. N = 5122				Reference: White N = 35391 Focal: Asian N = 1689			
Item	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag
1	0.05	-0.01	0.00	A	34.45	-0.58	-0.05	B<	147.48	-0.62	-0.06	B<	25.12	-0.42	-0.04	B<	7.04	-0.42	-0.03	B<
2	51.42	0.30	0.02	B>	9.33	-0.29	-0.03	B<	2.18	0.07	0.00	A	21.37	-0.38	-0.04	B<	9.89	-0.44	-0.03	B<
3	2.54	-0.08	0.00	A	8.11	-0.33	-0.02	B<	21.83	-0.28	-0.02	B<	9.10	-0.29	-0.02	B<	1.23	-0.21	-0.01	A
4	4.50	0.10	0.01	A	1.55	-0.13	-0.01	A	73.04	-0.45	-0.04	B<	44.52	-0.58	-0.05	B<	9.12	-0.47	-0.03	B<
5	61.43	0.32	0.03	B>	15.80	0.38	0.03	B>	32.38	0.27	0.02	B>	45.08	0.55	0.05	B>	30.05	0.80	0.06	B>
6	220.25	0.61	0.05	B>	2.53	0.15	0.01	A	8.44	0.14	0.01	B>	8.44	-0.24	-0.03	B<	25.81	0.76	0.05	B>
7	20.06	-0.19	-0.01	B<	153.92	-1.21	-0.10	B<	783.52	-1.38	-0.13	B<	254.87	-1.35	-0.12	B<	38.07	-0.91	-0.06	B<
8	3.15	-0.08	-0.01	A	0.03	-0.02	0.00	A	78.57	-0.46	-0.05	B<	2.42	-0.13	-0.01	A	10.11	0.52	0.03	B>
9	14.22	-0.15	-0.01	B<	0.62	-0.07	-0.01	A	7.69	-0.13	-0.02	B<	0.54	-0.06	-0.01	A	0.11	0.05	0.00	A
10	0.14	-0.02	0.00	A	7.26	-0.27	-0.02	B<	134.45	-0.59	-0.04	B<	71.09	-0.70	-0.06	B<	30.24	-0.82	-0.05	B<
11	31.56	0.26	0.02	B>	0.17	0.05	0.00	A	109.60	0.58	0.04	B>	5.39	-0.20	-0.02	A	0.95	0.17	0.01	A
12	173.28	0.83	0.03	B>	7.98	0.42	0.02	B>	25.99	0.39	0.02	B>	20.13	-0.49	-0.03	B<	16.69	-0.90	-0.03	B<
13	226.74	-0.89	-0.03	B<	15.09	-0.51	-0.02	B<	35.24	-0.42	-0.02	B<	18.16	-0.46	-0.03	B<	18.91	-0.89	-0.03	B<
14	17.53	-0.21	-0.01	B<	9.65	-0.35	-0.02	B<	69.37	-0.49	-0.04	B<	116.46	-0.97	-0.08	B<	4.77	-0.39	-0.02	A
15	157.21	-0.51	-0.04	B<	33.52	-0.57	-0.05	B<	24.11	-0.24	-0.03	B<	147.02	-1.08	-0.09	B<	4.28	-0.28	-0.02	A
16	11.69	-0.16	-0.01	B<	0.11	0.04	0.00	A	56.83	0.41	0.03	B>	16.64	0.36	0.03	B>	13.84	0.64	0.03	B>
17	25.46	0.20	0.02	B>	3.00	0.16	0.02	A	5.28	-0.11	-0.01	A	65.13	-0.64	-0.06	B<	0.19	0.06	0.00	A
18	0.26	-0.02	0.00	A	10.03	-0.29	-0.03	B<	1.54	0.06	0.01	A	3.97	-0.16	-0.01	A	0.43	-0.09	-0.01	A
19	499.16	-1.15	-0.06	B<	35.67	-0.66	-0.04	B<	51.39	-0.42	-0.02	B<	36.97	-0.55	-0.04	B<	0.28	0.11	0.00	A
20	1.55	-0.05	0.00	A	5.82	0.23	0.02	A	14.36	0.18	0.01	B>	233.78	1.27	0.12	B>	19.14	0.62	0.05	B>
21	0.13	-0.01	0.00	A	1.01	0.10	0.01	A	0.01	-0.01	0.00	A	3.14	-0.15	-0.01	A	3.42	0.23	0.02	A
22	187.63	0.77	0.03	B>	0.37	0.08	0.00	A	77.15	0.58	0.04	B>	189.02	1.44	0.10	B>	12.97	0.82	0.03	B>
23	30.78	-0.24	-0.02	B<	0.06	-0.03	0.00	A	17.37	-0.21	-0.02	B<	2.19	0.13	0.01	A	0.56	0.12	0.01	A
24	3.80	-0.08	-0.01	A	5.87	0.23	0.02	A	22.90	0.22	0.02	B>	15.76	0.32	0.03	B>	2.67	0.22	0.02	A
25	87.39	0.55	0.02	B>	18.04	-0.54	-0.03	B<	77.59	-0.61	-0.03	B<	10.01	-0.33	-0.02	B<	31.97	-1.16	-0.04	B<
26	91.37	0.59	0.02	B>	2.06	-0.20	-0.01	A	1.68	-0.09	-0.01	A	0.20	-0.05	0.00	A	1.25	-0.28	-0.01	A
27	492.13	-0.90	-0.08	B<	0.28	-0.05	0.00	A	1.82	-0.06	0.00	A	34.59	-0.47	-0.04	B<	3.22	-0.25	-0.02	A
28	61.59	-0.38	-0.02	B<	0.06	0.03	0.00	A	17.04	-0.24	-0.01	B<	55.13	-0.65	-0.05	B<	1.11	-0.19	-0.01	A
29	77.96	-0.41	-0.03	B<	0.46	0.07	0.01	A	0.00	0.00	0.00	A	1.49	0.11	0.01	A	1.35	-0.19	-0.01	A
30	80.26	0.44	0.03	B>	4.29	0.23	0.02	A	0.49	0.04	0.00	A	44.50	0.61	0.05	B>	2.47	-0.27	-0.01	A

Note. African Am. = African American, Native Am.= Native American, MH $\chi 2$ = Mantel-Haenszel Chi-Square, ΔMH = Delta (MH-D DIF), SMD= Standardized Mean Difference, A= No DIF, B=Weak DIF, C=Strong DIF, < favors reference group, > favors focal group. Item number does not indicate test booklet location due to field test and NRT items.

(table continues)

Table 9.2.1.16 (continued)
2005 Spring AIMS Differential Item Functioning Reading CRT High School

	Reference: Male N = 34375 Focal: Female N = 33934				Reference: White N = 35391 Focal: African Am. N = 3347				Reference: White N = 35391 Focal: Hispanic N = 22883				Reference: White N = 35391 Focal: Native Am. N = 5122				Reference: White N = 35391 Focal: Asian N = 1689			
Item	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag	MH χ^2	ΔMH	SMD	Flag
31	59.15	0.35	0.02	B>	11.28	0.37	0.03	B>	29.27	0.29	0.02	B>	0.62	0.07	0.01	A	6.92	-0.40	-0.03	B<
32	292.74	0.70	0.06	B>	51.78	0.72	0.06	B>	55.74	0.37	0.03	B>	6.69	-0.21	-0.02	B<	0.61	-0.11	-0.01	A
33	2.30	-0.07	0.00	A	0.31	0.06	0.00	A	2.02	0.08	0.00	A	30.16	-0.48	-0.04	B<	23.19	-0.70	-0.05	B<
34	2512.67	-2.26	-0.16	C<	17.49	-0.42	-0.03	B<	246.54	-0.79	-0.06	B<	316.12	-1.47	-0.13	B<	11.10	-0.51	-0.03	B<
35	16.31	-0.17	-0.01	B<	1.84	-0.14	-0.01	A	1.15	-0.05	0.00	A	40.01	0.53	0.05	B>	9.77	0.48	0.03	B>
36	2.19	-0.07	0.00	A	20.50	-0.45	-0.03	B<	1.69	0.07	0.01	A	188.33	1.21	0.10	B>	1.78	-0.21	-0.01	A
37	7.28	0.13	0.01	B>	12.69	0.39	0.03	B>	65.17	0.45	0.03	B>	25.90	0.46	0.04	B>	4.28	0.35	0.02	A
38	221.97	-0.64	-0.05	B<	3.13	-0.18	-0.01	A	47.76	-0.34	-0.02	B<	5.19	-0.20	-0.01	A	0.11	-0.05	0.00	A
39	91.27	0.41	0.03	B>	27.63	0.56	0.04	B>	1.05	0.05	0.01	A	12.69	-0.29	-0.02	B<	0.80	-0.13	-0.01	A
40	2.72	-0.07	-0.01	A	0.23	0.05	0.00	A	1.30	-0.05	-0.01	A	0.15	-0.03	0.00	A	11.74	0.47	0.04	B>
41	30.93	0.25	0.02	B>	53.09	0.76	0.06	B>	117.89	0.57	0.05	B>	57.07	0.65	0.05	B>	25.45	0.81	0.05	B>
42	613.37	1.14	0.07	B>	60.25	0.84	0.06	B>	478.72	1.22	0.09	B>	482.70	2.07	0.16	C>	29.20	0.92	0.05	B>
43	10.44	-0.15	-0.01	B<	5.33	-0.25	-0.02	A	27.59	-0.29	-0.01	B<	60.25	-0.66	-0.05	B<	7.35	-0.43	-0.02	B<
44	317.68	-0.69	-0.07	B<	20.89	-0.43	-0.04	B<	150.95	-0.58	-0.04	B<	4.15	-0.17	-0.01	A	71.24	-1.07	-0.10	B<
45	22.23	0.27	0.01	B>	10.67	0.45	0.02	B>	8.37	-0.20	-0.01	B<	30.70	-0.54	-0.03	B<	19.79	-0.90	-0.03	B<
46	156.90	0.54	0.04	B>	12.52	0.36	0.03	B>	166.30	0.67	0.05	B>	241.53	1.36	0.11	B>	21.51	0.73	0.05	B>
47	39.12	0.30	0.02	B>	0.42	0.07	0.01	A	17.19	0.23	0.02	B>	53.78	0.67	0.05	B>	5.39	0.42	0.02	A
48	76.12	0.50	0.02	B>	13.63	0.48	0.02	B>	117.07	0.73	0.04	B>	164.66	1.36	0.08	B>	1.90	0.31	0.01	A
49	90.30	0.54	0.02	B>	5.56	0.30	0.02	A	22.20	0.31	0.02	B>	54.03	0.75	0.05	B>	0.02	0.04	0.00	A
50	205.30	0.65	0.05	B>	54.45	0.79	0.06	B>	226.30	0.82	0.05	B>	87.51	0.82	0.07	B>	14.35	0.59	0.04	B>
51	122.86	0.42	0.04	B>	0.81	0.08	0.01	A	6.09	0.11	0.01	A	7.58	0.22	0.02	B>	3.32	0.24	0.02	A
52	0.81	0.04	0.00	A	18.44	-0.42	-0.04	B<	33.36	0.29	0.02	B>	0.19	0.04	0.00	A	1.52	-0.18	-0.01	A
53	63.29	-0.33	-0.03	B<	3.79	0.19	0.02	A	3.13	0.09	0.00	A	9.26	-0.27	-0.02	B<	16.84	0.57	0.04	B>
54	2.25	0.08	0.00	A	0.29	0.07	0.00	A	32.70	0.36	0.02	B>	17.52	0.40	0.03	B>	6.52	0.53	0.02	A

Note. African Am. = African American, Native Am.= Native American, MH $\chi 2$ = Mantel-Haenszel Chi-Square, ΔMH = Delta (MH-D DIF), SMD= Standardized Mean Difference, A= No DIF, B=Weak DIF, C=Strong DIF, < favors reference group, > favors focal group. Item number does not indicate test booklet location due to field test and NRT items.

9.2.2 Context Effects

As described in Part 3, the AIMS NRT is comprised of a subset of TerraNova Complete Battery Form D items that were selected to closely match the content blueprint and test characteristic curves of TerraNova Form D Complete Battery. The AIMS NRT items were embedded within the AIMS DPA assessments rather than administered as part of an intact TerraNova form. Removing NRT items from an intact norm-referenced test form and embedding them within the AIMS DPA could introduce item context effects. A series of analyses were conducted to examine the possible impact of the departure from intact TerraNova forms on the AIMS NRT scores. Context effects were examined at the item level, test form level, and student score level.

Analyses were conducted at the item level by comparing the item parameters derived from the national standardization sample and the Arizona student population. Analyses were conducted for all tests that were administered as part of the AIMS NRT: Grades 3-8 Reading, Language, and Math. Three comparisons of item parameters were made.

First, items were examined for rank order difference in difficulty (p-value). Within each test of the AIMS NRT, items were rank ordered by their national standardization p-values. Items were also ordered by their Arizona student population p-values. The rank orders from the two sets of student data were compared to identify items that changed their rank order.

In the second comparison of item parameters, the differences between standardization sample p-values and Arizona p-values were compared. The comparison was conducted in the following manner. Because classical p-values are not on an interval scale, the p-values for each item were converted to the logit metric as ln(pvalue/(1-pvalue)). Then, the standardization sample p-values were regressed onto the Arizona p-values. This regression yielded a regression equation that was used to derive a predicted p-value, a residual, and a Studentized residual for each item. Items with a Studentized residual greater than 1.96 (equivalent to an alpha level of .05) were identified as having significantly different p-values.

Third, a and b parameters from the TerraNova national standardization data and the Arizona student population were compared. TerraNova items are calibrated using the 3 parameter logistic model (3PL) model (Lord & Novick, 1968: Lord, 1980). The 3PL model defines a selected-response item in terms of three parameters: the item difficulty or location, the item discrimination, and the pseudo-guessing parameter. In the 3 PL model, the probability that a student with scale score θ responds correctly to item i is

$$P_i(\theta) = c_i + \frac{1 - c_i}{1 + \exp[-1.7a_i(\theta - b_i)]},$$

where a_i is the item discrimination, b_i is the item difficulty, and c_i is the probability of a correct response by a low-scoring examinee.

Lord's chi-square statistic (Lord, 1980, p.223) was used to test the equivalence of the item parameter estimates from the standardization sample and the Arizona student population. This test is calculated as

$$\chi_i^2 = \mathbf{v}_i' \Sigma_i^{-1} \mathbf{v}_i,$$

where $\mathbf{v}'_i$ is the vector $\{\hat{b}_{i1} - \hat{b}_{i2},\ \hat{a}_{i1} - \hat{a}_{i2}\}$ and Σ_i^{-1} is the inverse of the asymptotic variance-covariance matrix for $\hat{b}_{i1} - \hat{b}_{i2}$ and $\hat{a}_{i1} - \hat{a}_{i2}$. Therefore, Lord's Chi-square is an omnibus statistic that tests for a difference in both the a parameter and the b parameter. This is a very conservative test of context effects because it tests for any significant differences between the a or b parameters. Due to differences between the national and local populations, items parameters may differ for reasons other than context effects. Context effects are highly unlikely if items are functioning similarly between their intact form administration (TerraNova) and their administration embedded within the AIMS DPA.

A summary of the item level comparison is presented in Table 9.2.2.1. This table includes the p-value mean and standard deviation from both the TerraNova national standardization data as well as the Arizona student population data for each content area and grade. The table also includes the Pearson product moment correlation between the logit p-values (r) and the Spearman's rank correlation (r_s) as an index of the similarity in rank order between the two sets of item difficulties. Tables 9.2.2.1 through 9.2.2.18 present the results of individual item parameter comparisons for each grade and content area. Given that 420 items across the 18 grade/content area combinations were compared using two different statistics, relatively few items' parameters differed significantly between the national and Arizona populations. With the exception of Grade 3 Mathematics, only one or two items were identified in each form. Furthermore, only 11 items had parameters that differed at $p > .01$.

Items identified by the above analyses as functioning significantly differently between the standardization sample and Arizona student population were investigated to reveal possible sources of item interaction or other context effects. In only one instance was a possible interaction with other items identified, for item number 16 in the grade 7 mathematics test. No other obvious reasons for context effects were identified for any items functioning significantly differently between the standardization sample and the Arizona student population. Other reasons for differences may include differences in curricular focus or regional differences.

Table 9.2.2.1
TerraNova and Arizona NRT P-value Differences

		TN National P-Value		AZ NRT P-Value			
Test	N	M	SD	M	SD	r	r_s
Mathematics							
3	25	0.74	0.16	0.74	0.16	0.86	0.83
4	25	0.70	0.13	0.73	0.14	0.94	0.91
5	25	0.69	0.13	0.69	0.14	0.95	0.95
6	25	0.66	0.12	0.67	0.11	0.94	0.88
7	25	0.58	0.14	0.59	0.16	0.96	0.95
8	25	0.60	0.15	0.63	0.16	0.96	0.96
Reading							
3	25	0.68	0.15	0.64	0.16	0.96	0.94
4	25	0.72	0.11	0.71	0.13	0.96	0.94
5	25	0.65	0.12	0.66	0.14	0.90	0.87
6	25	0.67	0.13	0.68	0.15	0.98	0.96
7	25	0.62	0.12	0.62	0.13	0.93	0.83
8	25	0.68	0.14	0.69	0.15	0.95	0.94
Language							
3	20	0.67	0.16	0.63	0.19	0.98	0.94
4	20	0.66	0.14	0.65	0.15	0.98	0.97
5	20	0.62	0.09	0.62	0.11	0.87	0.82
6	20	0.64	0.11	0.62	0.11	0.87	0.90
7	20	0.64	0.11	0.66	0.12	0.92	0.90
8	20	0.62	0.15	0.63	0.19	0.98	0.97

Note. r computed with p-values converted to a logit scale.

Table 9.2.2.2
TerraNova and Arizona NRT Item Differences
Mathematics Grade 3

Item	TN National P-Value	AZ NRT P-Value	TN National Rank	AZ NRT Rank	Studentized Residual	Lord's χ^2
3	0.41	0.41	1	1	-	-
4	0.45	0.52	2	3	-	-
21	0.48	0.47	3	2	-	-
22	0.50	0.57	4	4	-	-
16	0.57	0.58	5	5	-	-
18	0.58	0.64	6	8	-	-
20	0.63	0.63	7	7	-	-
19	0.65	0.83	8	17	-	12.97**
15	0.69	0.69	9	9	-	-
17	0.74	0.83	10	16	-2.36*	8.8*
2	0.74	0.72	11	10	-	-
11	0.77	0.85	12	18	-	6.97*
10	0.79	0.78	13	13	-	-
5	0.80	0.78	14	12	-	-
8	0.80	0.74	15	11	-	-
12	0.83	0.81	16	15	-	-
9	0.85	0.63	17	6	-	37.97**
7	0.86	0.94	18	24	-	11.08**
14	0.87	0.93	19	23	-	7.88*
24	0.88	0.87	20	19	-	-
23	0.88	0.87	21	20	-	-
6	0.89	0.81	22	14	-	-
13	0.90	0.89	23	22	-	-
25	0.93	0.88	24	21	2.11*	7.32*
1	0.96	0.98	25	25	-	-

Note. TN= Terra Nova Complete Battery Form D national standarization; AZ NRT = Arizona NRT.
*$p < .05$ ** $p < .01$

Table 9.2.2.3
TerraNova and Arizona NRT Item Differences
Mathematics Grade 4

Item	TN National P-Value	AZ NRT P-Value	TN National Rank	AZ NRT Rank	Studentized Residual	Lord's χ^2
18	0.50	0.46	1	2	-	-
17	0.51	0.58	2	3	-	-
14	0.52	0.58	3	4	-	-
23	0.54	0.46	4	1	-	6.58*
25	0.55	0.66	5	9	-	-
5	0.56	0.59	6	6	-	-
21	0.58	0.62	7	7	-	-
7	0.60	0.58	8	5	-	-
24	0.63	0.62	9	8	-	-
19	0.64	0.66	10	11	-	-
16	0.67	0.66	11	10	2.25*	-
22	0.73	0.79	12	14	-	-
15	0.74	0.73	13	12	-	-
8	0.75	0.74	14	13	-	-
6	0.77	0.85	15	19	-	-
20	0.78	0.88	16	24	-	-
4	0.78	0.85	17	20	-	-
9	0.78	0.79	18	15	-	-
12	0.79	0.84	19	18	-	-
13	0.79	0.87	20	23	-	-
2	0.82	0.87	21	21	-	-
1	0.83	0.84	22	17	-	-
3	0.83	0.83	23	16	-	-
10	0.88	0.87	24	22	-	-
11	0.91	0.93	25	25	-	-

Note. TN= Terra Nova Complete Battery Form D national standarization; AZ NRT = Arizona NRT.
*$p < .05$ ** $p < .01$

Table 9.2.2.4
TerraNova and Arizona NRT Item Differences
Mathematics Grade 5

Item	TN National P-Value	AZ NRT P-Value	TN National Rank	AZ NRT Rank	Studentized Residual	Lord's χ^2
23	0.46	0.58	1	7	1.97*	26.34**
22	0.46	0.55	2	4	-	9.53**
5	0.50	0.45	3	1	-	-
24	0.51	0.51	4	3	-	-
10	0.55	0.57	5	6	-	-
3	0.55	0.48	6	2	-	-
2	0.56	0.55	7	5	-	-
25	0.61	0.63	8	9	-	-
16	0.64	0.61	9	8	-	-
20	0.66	0.69	10	13	-	-
12	0.68	0.67	11	11	-	-
1	0.68	0.69	12	14	2.10*	-
15	0.71	0.67	13	12	-	-
13	0.72	0.71	14	15	-	-
14	0.72	0.66	15	10	-	-
4	0.75	0.78	16	16	-	-
18	0.77	0.78	17	17	-	-
21	0.78	0.85	18	22	-	8.81*
17	0.79	0.81	19	19	-	-
7	0.80	0.78	20	18	-	-
9	0.82	0.82	21	20	-	-
19	0.85	0.87	22	23	-	-
11	0.86	0.91	23	24	-	-
8	0.87	0.84	24	21	-	-
6	0.88	0.91	25	25	-	-

Note. TN= Terra Nova Complete Battery Form D national standarization; AZ NRT = Arizona NRT.
*$p < .05$ ** $p < .01$

Table 9.2.2.5
TerraNova and Arizona NRT Item Differences
Mathematics Grade 6

Item	TN National P-Value	AZ NRT P-Value	TN National Rank	AZ NRT Rank	Studentized Residual	Lord's χ^2
7	0.40	0.38	1	1	-	-
22	0.50	0.58	2	6	-	7.65*
16	0.52	0.62	3	8	-	-
20	0.53	0.55	4	5	-	-
25	0.54	0.53	5	2	2.23*	-
6	0.55	0.54	6	4	-	-
18	0.56	0.54	7	3	-	-
2	0.57	0.61	8	7	-	-
23	0.59	0.73	9	17	-	-
17	0.64	0.70	10	14	-	-
24	0.64	0.71	11	15	-	-
3	0.65	0.66	12	10	-	-
21	0.67	0.68	13	12	-	-
13	0.68	0.66	14	9	-	-
11	0.70	0.72	15	16	-	-
19	0.70	0.68	16	11	-	-
15	0.71	0.69	17	13	-	-
12	0.73	0.77	18	21	-	-
9	0.75	0.78	19	24	2.50*	-
5	0.76	0.73	20	18	-	-
1	0.77	0.78	21	22	-	-
4	0.77	0.77	22	20	-	-
14	0.78	0.78	23	23	-	-
8	0.79	0.75	24	19	-	-
10	0.90	0.93	25	25	-	-

Note. TN= Terra Nova Complete Battery Form D national standarization; AZ NRT = Arizona NRT.
*$p < .05$ ** $p < .01$

Table 9.2.2.6
TerraNova and Arizona NRT Item Differences
Mathematics Grade 7

Item	TN National P-Value	AZ NRT P-Value	TN National Rank	AZ NRT Rank	Studentized Residual	Lord's χ^2
18	0.38	0.38	1	2	-	-
23	0.39	0.39	2	6	-	-
20	0.40	0.39	3	4	-	-
17	0.41	0.37	4	1	-	-
10	0.41	0.40	5	7	-	-
1	0.45	0.39	6	3	-	-
24	0.50	0.51	7	9	-	-
7	0.51	0.39	8	5	-	-
19	0.51	0.55	9	11	-	-
25	0.53	0.45	10	8	-	-
16	0.54	0.66	11	17	-	6.37*
5	0.56	0.59	12	14	-	-
8	0.56	0.54	13	10	-2.28*	-
4	0.57	0.62	14	15	-	-
11	0.60	0.58	15	12	2.49*	-
21	0.63	0.65	16	16	-	-
2	0.65	0.59	17	13	-	-
13	0.66	0.69	18	19	-	-
3	0.67	0.70	19	20	-	-
14	0.69	0.69	20	18	-	-
12	0.74	0.80	21	22	-	6.07*
9	0.74	0.78	22	21	-	-
15	0.79	0.81	23	23	-	-
6	0.83	0.83	24	24	-	-
22	0.87	0.89	25	25	-	-

Note. TN= Terra Nova Complete Battery Form D national standarization; AZ NRT = Arizona NRT.
*$p < .05$ ** $p < .01$

Table 9.2.2.7
TerraNova and Arizona NRT Item Differences
Mathematics Grade 8

Item	TN National P-Value	AZ NRT P-Value	TN National Rank	AZ NRT Rank	Studentized Residual	Lord's χ^2
22	0.35	0.36	1	2	-	-
15	0.36	0.37	2	3	-	-
25	0.38	0.31	3	1	-	-
21	0.41	0.49	4	4	-	-
19	0.44	0.51	5	7	-	-
2	0.45	0.49	6	5	-	-
9	0.46	0.53	7	8	-	-
23	0.50	0.56	8	11	-	-
20	0.50	0.56	9	10	-	-
18	0.53	0.49	10	6	-	-
13	0.54	0.55	11	9	-	-
4	0.60	0.72	12	16	-	-
5	0.62	0.57	13	12	-	-
24	0.63	0.64	14	13	-	-
11	0.67	0.68	15	14	-	-
6	0.70	0.73	16	18	-	-
1	0.70	0.73	17	17	-	-
14	0.71	0.70	18	15	-	-
7	0.74	0.80	19	22	-	-
12	0.75	0.79	20	21	2.06*	-
3	0.76	0.81	21	23	-2.02*	-
16	0.76	0.76	22	19	-	-
17	0.78	0.84	23	24	-	-
8	0.80	0.79	24	20	-	-
10	0.82	0.86	25	25	-	-

Note. TN= Terra Nova Complete Battery Form D national standarization; AZ NRT = Arizona NRT.
*$p < .05$ ** $p < .01$

Table 9.2.2.9
TerraNova and Arizona NRT Item Differences
Reading Grade 3

Item	TN National P-Value	AZ NRT P-Value	TN National Rank	AZ NRT Rank	Studentized Residual	Lord's χ^2
10	0.37	0.32	1	1	-	-
20	0.47	0.44	2	2	-	-
22	0.50	0.49	3	6	-2.04*	-
11	0.52	0.50	4	7	-	-
9	0.54	0.44	5	3	-	-
17	0.55	0.47	6	5	-	-
21	0.55	0.46	7	4	-	-
7	0.56	0.53	8	8	-	-
23	0.56	0.59	9	10	-	-
13	0.66	0.59	10	9	-	-
15	0.67	0.62	11	11	-	-
8	0.71	0.62	12	12	-	6.78*
2	0.71	0.75	13	20	-	9.91**
24	0.71	0.70	14	16	1.97*	-
6	0.73	0.72	15	17	-	-
19	0.75	0.67	16	14	-	-
16	0.75	0.80	17	21	-	-
12	0.75	0.65	18	13	-	-
18	0.78	0.69	19	15	-	-
14	0.80	0.74	20	19	-	-
5	0.81	0.81	21	22	-	-
25	0.83	0.72	22	18	-	-
3	0.84	0.85	23	23	-	-
1	0.90	0.93	24	24	-	-
4	0.94	0.93	25	25	-	-

Note. TN= Terra Nova Complete Battery Form D national standarization; AZ NRT = Arizona NRT.
*$p < .05$ ** $p < .01$

Table 9.2.2.10
TerraNova and Arizona NRT Item Differences
Reading Grade 4

Item	TN National P-Value	AZ NRT P-Value	TN National Rank	AZ NRT Rank	Studentized Residual	Lord's χ^2
21	0.45	0.39	1	1	-	-
19	0.57	0.51	2	2	-	9.56**
14	0.57	0.56	3	4	-	-
24	0.61	0.63	4	8	-	-
15	0.61	0.62	5	7	-	-
9	0.64	0.55	6	3	-	-
23	0.64	0.61	7	6	-	-
25	0.66	0.60	8	5	-	-
17	0.69	0.72	9	12	-	-
22	0.71	0.70	10	10	2.56*	-
11	0.71	0.73	11	13	-	-
4	0.73	0.66	12	9	-	-
6	0.74	0.76	13	14	-	-
18	0.75	0.77	14	18	-	-
13	0.76	0.76	15	16	-	-
20	0.76	0.72	16	11	-	-
7	0.77	0.76	17	17	-	-
2	0.78	0.82	18	20	-	-
10	0.78	0.78	19	19	-	-
16	0.78	0.76	20	15	-	-
12	0.81	0.84	21	22	-	-
8	0.82	0.89	22	24	-	6.35*
1	0.84	0.83	23	21	-	-
3	0.86	0.85	24	23	-	-
5	0.92	0.94	25	25	-	-

Note. TN= Terra Nova Complete Battery Form D national standarization; AZ NRT = Arizona NRT.
*$p < .05$ ** $p < .01$

Table 9.2.2.11
TerraNova and Arizona NRT Item Differences
Reading Grade 5

Item	TN National P-Value	AZ NRT P-Value	TN National Rank	AZ NRT Rank	Studentized Residual	Lord's χ^2
25	0.39	0.36	1	1	-	-
22	0.44	0.39	2	2	-	-
21	0.48	0.41	3	3	-	-
15	0.52	0.51	4	4	-	-
24	0.54	0.58	5	6	-	-
1	0.56	0.59	6	8	-	-
7	0.56	0.60	7	9	-	-
11	0.60	0.63	8	11	-	-
19	0.63	0.60	9	10	2.35*	-
13	0.65	0.76	10	18	-	-
3	0.66	0.54	11	5	-	-
6	0.66	0.74	12	17	-	-
10	0.66	0.69	13	13	-	-
20	0.66	0.59	14	7	-	-
5	0.67	0.72	15	16	-	-
16	0.71	0.77	16	19	-	9.87**
8	0.71	0.67	17	12	-	-
23	0.72	0.70	18	15	-	-
12	0.73	0.85	19	24	-	12.42**
4	0.74	0.80	20	20	-	-
18	0.76	0.70	21	14	-	-
14	0.79	0.81	22	21	-	-
2	0.83	0.86	23	25	-	-
9	0.84	0.84	24	23	-	-
17	0.86	0.83	25	22	-	8.07*

Note. TN= Terra Nova Complete Battery Form D national standarization; AZ NRT = Arizona NRT.
*$p < .05$ ** $p < .01$

Table 9.2.2.12
TerraNova and Arizona NRT Item Differences
Reading Grade 6

Item	TN National P-Value	AZ NRT P-Value	TN National Rank	AZ NRT Rank	Studentized Residual	Lord's χ^2
25	0.42	0.41	1	1	-	-
23	0.46	0.43	2	2	-	-
21	0.51	0.48	3	3	-	-
15	0.53	0.59	4	8	-	-
9	0.54	0.54	5	5	-	-
19	0.56	0.50	6	4	-	-
11	0.57	0.56	7	7	-	-
22	0.57	0.54	8	6	-	-
16	0.62	0.63	9	12	-	-
20	0.63	0.62	10	10	-	-
6	0.63	0.70	11	15	-	-
24	0.65	0.67	12	13	-	-
18	0.65	0.61	13	9	-	-
4	0.66	0.63	14	11	-	-
1	0.70	0.69	15	14	-	-
17	0.71	0.77	16	17	-	-
5	0.73	0.73	17	16	-	-
14	0.77	0.82	18	20	-	-
7	0.78	0.81	19	19	-	-
2	0.78	0.83	20	21	-	-
10	0.80	0.79	21	18	-	-
8	0.83	0.87	22	23	-	-
13	0.85	0.85	23	22	-	-
3	0.86	0.91	24	24	-	-
12	0.88	0.91	25	25	-	-

Note. TN= Terra Nova Complete Battery Form D national standarization; AZ NRT = Arizona NRT.
*$p < .05$ ** $p < .01$

Table 9.2.2.13
TerraNova and Arizona NRT Item Differences
Reading Grade 7

Item	TN National P-Value	AZ NRT P-Value	TN National Rank	AZ NRT Rank	Studentized Residual	Lord's χ^2
12	0.36	0.32	1	1	2.07*	-
20	0.36	0.32	2	2	-	-
11	0.42	0.48	3	3	-	-
25	0.52	0.54	4	7	-	-
18	0.54	0.50	5	4	-	-
24	0.55	0.62	6	11	-	-
16	0.57	0.59	7	9	-	-
19	0.58	0.51	8	5	-	-
10	0.58	0.54	9	6	-	-
15	0.59	0.63	10	12	-	-
14	0.60	0.65	11	15	-	-
22	0.61	0.71	12	22	-	7.65*
2	0.63	0.60	13	10	-	-
23	0.64	0.72	14	23	-	-
13	0.64	0.68	15	17	-	-
17	0.66	0.63	16	13	-	-
7	0.67	0.69	17	19	-	-
9	0.68	0.64	18	14	-	-
21	0.68	0.59	19	8	-	-
6	0.70	0.66	20	16	-	-
4	0.70	0.69	21	18	-	-
8	0.73	0.69	22	20	-	-
5	0.76	0.70	23	21	-	-
3	0.81	0.81	24	24	-	-
1	0.88	0.90	25	25	-	-

Note. TN= Terra Nova Complete Battery Form D national standarization; AZ NRT = Arizona NRT.
*$p < .05$ ** $p < .01$

Table 9.2.2.14
TerraNova and Arizona NRT Item Differences
Reading Grade 8

Item	TN National P-Value	AZ NRT P-Value	TN National Rank	AZ NRT Rank	Studentized Residual	Lord's χ^2
21	0.47	0.38	1	1	2.06*	-
23	0.49	0.53	2	3	2.39*	-
6	0.51	0.57	3	6	-	-
22	0.52	0.59	4	8	-	-
17	0.52	0.50	5	2	-	-
12	0.55	0.57	6	7	-	-
24	0.58	0.65	7	12	-	-
9	0.58	0.56	8	4	-	-
25	0.59	0.64	9	11	-	-
19	0.61	0.59	10	9	-	-
8	0.62	0.57	11	5	-	-
7	0.64	0.65	12	14	-	-
10	0.66	0.63	13	10	-	-
13	0.68	0.65	14	13	-	-
15	0.72	0.70	15	16	-	-
16	0.72	0.69	16	15	-	-
11	0.77	0.80	17	17	-	-
18	0.77	0.80	18	19	-	-
20	0.80	0.80	19	18	-	-
3	0.82	0.87	20	21	-	-
5	0.83	0.91	21	24	-	-
14	0.86	0.86	22	20	-	-
2	0.87	0.94	23	25	-	-
4	0.88	0.88	24	23	-	-
1	0.89	0.87	25	22	-	-

Note. TN= Terra Nova Complete Battery Form D national standarization; AZ NRT = Arizona NRT.
*$p < .05$ ** $p < .01$

Table 9.2.2.14
TerraNova and Arizona NRT Item Differences
Language Grade 3

Item	TN National P-Value	AZ NRT P-Value	TN National Rank	AZ NRT Rank	Studentized Residual	Lord's χ^2
6	0.40	0.30	1	1	-	-
7	0.44	0.47	2	7	-	-
12	0.45	0.41	3	2	-	-
19	0.52	0.45	4	6	-	-
10	0.52	0.44	5	4	-	-
14	0.53	0.41	6	3	-	-
15	0.61	0.58	7	9	-	-
5	0.61	0.45	8	5	-	-
18	0.61	0.54	9	8	-	-
20	0.66	0.68	10	11	-	-
3	0.69	0.65	11	10	-	-
11	0.75	0.70	12	12	-	-
8	0.78	0.75	13	14	-2.02*	-
9	0.79	0.74	14	13	-	-
1	0.80	0.81	15	17	-	-
16	0.81	0.81	16	18	-	-
17	0.83	0.81	17	16	-	-
13	0.83	0.80	18	15	-	-
4	0.90	0.93	19	19	-	-
2	0.92	0.93	20	20	2.27*	-

Note. TN= Terra Nova Complete Battery Form D national standarization; AZ NRT = Arizona NRT.
*$p < .05$ ** $p < .01$

Table 9.2.2.15
TerraNova and Arizona NRT Item Differences
Language Grade 4

Item	TN National P-Value	AZ NRT P-Value	TN National Rank	AZ NRT Rank	Studentized Residual	Lord's χ^2
6	0.39	0.37	1	1	-	-
11	0.44	0.49	2	3	2.42*	-
12	0.46	0.46	3	2	-	-
5	0.54	0.51	4	4	-	-
20	0.54	0.51	5	5	-	-
3	0.58	0.57	6	8	-	-
19	0.58	0.56	7	7	-	-
4	0.58	0.56	8	6	-	-
9	0.64	0.63	9	9	-	-
10	0.66	0.69	10	12	-	-
18	0.68	0.75	11	14	-	-
8	0.69	0.67	12	10	-	-
14	0.71	0.70	13	13	-	-
2	0.72	0.67	14	11	-	-
7	0.76	0.77	15	15	-	-
15	0.78	0.79	16	16	-	-
16	0.81	0.80	17	17	-	-
1	0.83	0.81	18	18	-	-
13	0.85	0.88	19	19	-	-
17	0.89	0.91	20	20	-	-

Note. TN= Terra Nova Complete Battery Form D national standarization; AZ NRT = Arizona NRT.
*$p < .05$ ** $p < .01$

Table 9.2.2.16
TerraNova and Arizona NRT Item Differences
Language Grade 5

Item	TN National P-Value	AZ NRT P-Value	TN National Rank	AZ NRT Rank	Studentized Residual	Lord's χ^2
17	0.36	0.33	1	1	-	-
20	0.51	0.55	2	3	2.58**	-
14	0.52	0.56	3	5	-	-
3	0.56	0.52	4	2	-	-
6	0.59	0.62	5	10	-	-
9	0.60	0.66	6	14	-	-
10	0.61	0.55	7	4	-	-
11	0.62	0.57	8	6	-	-
1	0.63	0.57	9	7	-	-
13	0.63	0.63	10	11	-	-
18	0.63	0.62	11	9	-2.24*	-
16	0.64	0.70	12	16	-	-
8	0.64	0.71	13	17	-	-
15	0.65	0.63	14	13	-	-
12	0.66	0.61	15	8	-	-
19	0.67	0.72	16	18	-	-
4	0.68	0.68	17	15	-	-
2	0.73	0.63	18	12	-	-
5	0.74	0.73	19	19	-	-
7	0.80	0.89	20	20	-	9.07*

Note. TN= Terra Nova Complete Battery Form D national standarization; AZ NRT = Arizona NRT.
*$p < .05$ ** $p < .01$

Table 9.2.2.17
TerraNova and Arizona NRT Item Differences
Language Grade 6

Item	TN National P-Value	AZ NRT P-Value	TN National Rank	AZ NRT Rank	Studentized Residual	Lord's χ^2
15	0.45	0.42	1	1	-	-
6	0.47	0.45	2	2	-	-
3	0.48	0.53	3	3	-	-
5	0.51	0.56	4	8	-	8.51*
4	0.55	0.55	5	7	-	-
2	0.56	0.54	6	5	-	-
20	0.62	0.54	7	6	-	-
8	0.63	0.58	8	10	-	-
10	0.63	0.54	9	4	-	-
1	0.64	0.58	10	9	-	-
17	0.65	0.65	11	12	-	-
14	0.67	0.68	12	15	-	-
19	0.68	0.74	13	17	2.37*	-
12	0.71	0.63	14	11	-	-
18	0.71	0.76	15	18	-	-
13	0.72	0.71	16	16	-	-
11	0.76	0.67	17	14	-	-
9	0.76	0.67	18	13	-	-
16	0.79	0.86	19	20	-	-
7	0.80	0.78	20	19	-	-

Note. TN= Terra Nova Complete Battery Form D national standarization; AZ NRT = Arizona NRT.
*$p < .05$ ** $p < .01$

Table 9.2.2.18
TerraNova and Arizona NRT Item Differences
Language Grade 7

Item	TN National P-Value	AZ NRT P-Value	TN National Rank	AZ NRT Rank	Studentized Residual	Lord's χ^2
14	0.43	0.45	1	2	-	-
4	0.46	0.40	2	1	-	7.32*
19	0.48	0.50	3	3	-	-
7	0.51	0.53	4	4	-	-
5	0.51	0.59	5	5	-	-
15	0.55	0.62	6	8	-	-
6	0.62	0.61	7	6	-	-
17	0.63	0.68	8	10	-	-
18	0.66	0.70	9	11	-	-
9	0.67	0.72	10	12	-	-
3	0.67	0.76	11	14	-	-
2	0.67	0.61	12	7	-	10.05**
20	0.68	0.77	13	16	-	-
10	0.68	0.67	14	9	-	-
16	0.71	0.75	15	13	-	-
12	0.74	0.79	16	19	-	-
8	0.75	0.80	17	20	-	-
11	0.76	0.78	18	18	-	-
13	0.78	0.76	19	15	-	-
1	0.78	0.77	20	17	-	-

Note. TN= Terra Nova Complete Battery Form D national standarization; AZ NRT = Arizona NRT.
*$p < .05$ ** $p < .01$

Table 9.2.2.19
TerraNova and Arizona NRT Item Differences
Language Grade 8

Item	TN National P-Value	AZ NRT P-Value	TN National Rank	AZ NRT Rank	Studentized Residual	Lord's χ^2
8	0.38	0.37	1	4	-	-
9	0.39	0.37	2	3	-	-
5	0.41	0.31	3	1	-	-
3	0.44	0.33	4	2	-	-
6	0.48	0.50	5	6	-	-
7	0.50	0.50	6	5	-	-
11	0.54	0.52	7	7	-	-
12	0.63	0.60	8	8	-	-
17	0.64	0.66	9	11	-	-
19	0.65	0.66	10	12	-	-
1	0.65	0.63	11	9	-	-
15	0.65	0.65	12	10	-	-
20	0.66	0.68	13	13	-	-
4	0.69	0.68	14	14	-	-
13	0.71	0.79	15	15	-	-
18	0.76	0.80	16	16	-	-
10	0.78	0.85	17	18	-	-
14	0.78	0.81	18	17	-	-
16	0.83	0.89	19	19	-	-
2	0.87	0.90	20	20	-	-

Note. TN= Terra Nova Complete Battery Form D national standarization; AZ NRT = Arizona NRT.
*$p < .05$ ** $p < .01$

In addition to the above analyses examining possible context effects on item difficulty, a comparison of reliability between the TerraNova Complete Battery and the AIMS NRT test forms was conducted to examine the effects that reducing the number of items had on the precision of score estimates. The AIMS NRT is a subset of TerraNova Form D Complete Battery and, therefore, had fewer items. Table 9.2.2.20 presents the number of items in the TerraNova Complete Battery and the AIMS NRT tests. Because the AIMS NRT had fewer items, the internal consistency of the AIMS NRT as measured by K-R 20 is expected to be lower than the internal consistency of the Form D Complete Battery. Table 9.2.2.21 presents the internal consistency of both tests. Although the internal consistencies of the AIMS NRT forms are lower than their respective Form D Complete Battery counterparts, the internal consistencies for the AIMS NRT are still acceptable given the number of items and purpose of the test and are within the range of those found for abbreviated forms of NRTs such as TerraNova Survey.

Table 9.2.2.20
Number of items in AIMS NRT versus TN Form D Complete Battery

	Reading		Language		Mathematics	
Grade	AIMS NRT	TN	AIMS NRT	TN	AIMS NRT	TN
3	25	42	20	28	25	50
4	25	50	20	30	25	57
5	25	46	20	34	25	57
6	25	42	20	38	25	56
7	25	50	20	30	25	57
8	25	48	20	32	25	56

Table 9.2.2.21
Internal Consistency of AIMS NRT versus TN Form D Complete Battery

	Reading		Language		Mathematics	
Grade	AIMS NRT	TN	AIMS NRT	TN	AIMS NRT	TN
3	0.83	0.92	0.79	0.88	0.82	0.91
4	0.87	0.94	0.80	0.89	0.83	0.92
5	0.83	0.93	0.84	0.90	0.85	0.94
6	0.83	0.91	0.83	0.92	0.86	0.93
7	0.87	0.93	0.81	0.89	0.85	0.93
8	0.83	0.92	0.79	0.90	0.82	0.93

Note. KR-20 for the TerraNova was obtained from *TerraNova®, The Second Edition: California Achievement Tests®* Technical Report (CTB/McGraw-Hill, 2003) based on the Spring norming sample.

Analyses were also conducted to examine the similarity in student scores between TerraNova Form D Complete Battery and the AIMS NRT. Students' scale scores in the same grades and content areas as the AIMS NRT (Grades 3-8 reading, language, and mathematics) were compared using national standardization data for TerraNova Form D Complete Battery. Each student in the national standardization data received an estimated scale score from their responses to the items that comprise TerraNova Form D Complete Battery as well as an estimated scale score from their responses to the items that comprise the AIMS NRT.

The item parameters used for operational scoring of the AIMS NRT— TerraNova national standardization item parameters—were used to score students in these analyses. Students were scored using IRT pattern scoring using maximum-likelihood estimation with an exhaustive search

between the lowest obtainable scale score and highest obtainable scale score to estimate a TerraNova Form D Complete Battery score as well as an AIMS NRT score.

Table 9.2.2.22 presents scale score descriptive statistics for student scores based on each set of items and the correlation among the TerraNova and AIMS NRT scores. Shown in the table are sample size (N), mean (M), standard deviation (SD), skewness, kurtosis, and Pearson's product moment correlation (*r*). Correlations among the TerraNova Form D Complete Battery scores and the AIMS NRT scores ranged from .79 to .90. These correlations are similar to correlations for alternate forms but are likely to be slightly inflated because the AIMS NRT items are also present in TerraNova Complete Battery Form D.

Table 9.2.2.22
Descriptive statistics for standardization sample scored on AIMS NRT and TN

		AIMS NRT				TN				
Test	N	M	SD	Skewness	Kurtosis	M	SD	Skewness	Kurtosis	*r*
RD										
3	2134	624.41	54.05	-1.39	4.03	624.34	41.56	-0.94	3.54	0.88
4	2161	640.78	58.84	-0.42	3.21	632.69	47.26	-0.96	3.77	0.87
5	1829	647.16	56.48	-0.58	2.06	646.68	47.14	-0.95	2.68	0.88
6	1908	651.00	52.99	-0.71	2.25	650.55	46.58	-1.01	2.70	0.90
7	2001	650.66	58.76	-1.07	1.33	646.26	55.39	-0.97	1.09	0.90
8	1807	670.28	59.88	-0.34	1.03	662.24	50.69	-0.79	1.70	0.90
LA										
3	2134	608.61	38.58	-0.53	3.89	621.51	39.60	-1.11	4.22	0.87
4	2161	623.89	52.68	-0.88	2.01	633.08	44.92	-0.88	2.90	0.86
5	1829	651.98	60.34	-0.82	2.17	643.46	51.98	-1.15	2.70	0.86
6	1908	631.93	57.36	-0.52	2.08	649.19	46.45	-0.76	3.08	0.79
7	2001	643.80	53.47	-0.65	2.15	647.04	53.80	-0.81	1.78	0.83
8	1807	649.68	57.77	-0.16	1.03	657.43	49.10	-0.59	1.67	0.87
MA										
3	2030	606.48	54.33	-0.42	3.08	603.70	39.40	-0.41	3.07	0.85
4	1944	613.51	54.65	-1.32	4.93	619.19	47.89	-1.24	4.03	0.82
5	1905	630.37	66.97	-1.32	3.15	632.87	50.46	-1.35	3.41	0.84
6	1979	648.86	56.37	-1.20	2.84	655.11	50.24	-1.15	2.82	0.85
7	1910	656.54	66.60	-0.90	1.29	657.04	47.91	-0.90	1.73	0.84
8	1878	682.06	68.61	-0.62	0.88	673.75	51.15	-0.72	1.22	0.87

Results from the analyses conducted to examine the effect of administering TerraNova items outside an intact form for the Arizona NRT did not show any clear evidence of strong or prevalent context effects. These results support the validity of the AIMS NRT scores.

9.2.3 Correlation Matrices Among AIMS Assessments

Correlations were examined between scale scores on each 2005 Spring AIMS tests by grade level. Note that data used for the calculation of correlation included records with valid scale scores in all content areas and tests in each grade level. Sample sizes are therefore slightly lower than presented in other parts of this technical report.

In addition, because students in high school had different testing windows for the reading and writing and mathematics tests, merging was necessary to match reading and writing records with mathematics records. Once valid records were selected for each of the high school content areas, and

records with duplicate student identification numbers were removed, data was merged based on student identification number. Table 9.2.3.1 presents the resulting reduction in N size for each step of the merge. Scale score means and distributions prior to and after the merge were compared to ensure that the match did not substantially alter the data. Only slight increases in mean and decreases in standard deviation occurred after the merge, and density plots illustrated that the shape of the distribution prior to and after merging matched reasonably well. Therefore, correlations presented for the high school tests are based on the matched data, with a total N size of 47,081.

All correlations are presented in Tables 9.2.3.2 through 9.2.3.8. The patterns of correlation presented in the tables are consistent with expectations given the constructs measured. Correlations were consistently high between tests designed to measure the same or very similar constructs (i.e., CRT Math and NRT Math or CRT Reading and NRT Reading). Correlations were much lower between tests designed to measure dissimilar constructs such as Math and Writing.

Table 9.2.3.1
Matching Process for High School Test Correlations Calculations

Content	N Total Valid	N Valid in Both Reading and Writing	N with Missing or Duplicate SAIS	N Valid Prior to Merge	N Valid All Content with Matched SAIS
Reading	68,788	66,153	1000	65,153	47,081
Writing	68,272				
Math	66,788	NA	1089	65,699	

Table 9.2.3.2
2005 Spring AIMS Correlations Among Tests
Grade 3

Test	N	1	2	3	4	5	6
1. RD CRT	75875	--	0.61	0.81	0.84	0.78	0.73
2. WR CRT	75875		--	0.56	0.56	0.58	0.53
3. MA CRT	75875			--	0.70	0.71	0.84
4. RD NRT	75875				--	0.73	0.65
5. LA NRT	75875					--	0.66
6. MA NRT	75875						--

Note. N size will be less than presented in other parts of this Technical Report due to missing or invalid test records in some but not all content areas.

Table 9.2.3.3
2005 Spring AIMS Correlations Among Tests
Grade 4

Test	N	1	2	3	4	5	6
1. RD CRT	74685	--	0.58	0.79	0.81	0.75	0.69
2. WR CRT	74685		--	0.56	0.54	0.55	0.51
3. MA CRT	74685			--	0.67	0.70	0.83
4. RD NRT	74685				--	0.68	0.60
5. LA NRT	74685					--	0.63
6. MA NRT	74685						--

Note. N size will be less than presented in other parts of this Technical Report due to missing or invalid test records in some but not all content areas.

Table 9.2.3.4
2005 Spring AIMS Correlations Among Tests
Grade 5

Test	N	1	2	3	4	5	6
1. RD CRT	75323	--	0.62	0.78	0.84	0.74	0.71
2. WR CRT	75323		--	0.57	0.56	0.56	0.52
3. MA CRT	75323			--	0.68	0.68	0.84
4. RD NRT	75323				--	0.67	0.63
5. LA NRT	75323					--	0.62
6. MA NRT	75323						--

Note. N size will be less than presented in other parts of this Technical Report due to missing or invalid test records in some but not all content areas.

Table 9.2.3.5
2005 Spring AIMS Correlations Among Tests
Grade 6

Test	N	1	2	3	4	5	6
1. RD CRT	74630	--	0.57	0.78	0.85	0.72	0.71
2. WR CRT	74630		--	0.53	0.53	0.50	0.51
3. MA CRT	74630			--	0.71	0.67	0.85
4. RD NRT	74630				--	0.65	0.66
5. LA NRT	74630					--	0.62
6. MA NRT	74630						--

Note. N size will be less than presented in other parts of this Technical Report due to missing or invalid test records in some but not all content areas.

Table 9.2.3.6
2005 Spring AIMS Correlations Among Tests
Grade 7

Test	N	1	2	3	4	5	6
1. RD CRT	75854	--	0.56	0.77	0.85	0.73	0.69
2. WR CRT	75854		--	0.53	0.52	0.53	0.49
3. MA CRT	75854			--	0.68	0.69	0.85
4. RD NRT	75854				--	0.67	0.62
5. LA NRT	75854					--	0.62
6. MA NRT	75854						--

Note. N size will be less than presented in other parts of this Technical Report due to missing or invalid test records in some but not all content areas.

Table 9.2.3.7
2005 Spring AIMS Correlations Among Tests
Grade 8

Test	N	1	2	3	4	5	6
1. RD CRT	74434	--	0.66	0.77	0.86	0.75	0.70
2. WR CRT	74434		--	0.59	0.64	0.61	0.57
3. MA CRT	74434			--	0.68	0.68	0.86
4. RD NRT	74434				--	0.70	0.63
5. LA NRT	74434					--	0.63
6. MA NRT	74434						--

Note. N size will be less than presented in other parts of this Technical Report due to missing or invalid test records in some but not all content areas.

Table 9.2.3.9
2005 Spring AIMS Correlations Among Tests
High School

Test	N	1	2	3
1. RD CRT	47081	--	0.69	0.74
2. WR CRT	47081		--	0.63
3. MA CRT	47081			--

Note. N size will be less than presented in other parts of this Technical Report due to 1) missing or invalid test records in some but not all content areas and 2) matching reading, writing and math records according to student identification number.

9.2.4 Continuity with Previous AIMS Assessments

The ADE contracted with CTB/McGraw-Hill to administer, score, and report the 2005 AIMS assessments. In order to provide evidence regarding continuity with previous assessments, CTB conducted two special studies. The first study linked scores on the previous NRT (SAT/9) to scores on TerraNova. The second study investigated the degree of agreement between raters from the previous vendor and CTB raters on the high school writing prompt.

9.2.4.1 Arizona Linking Study

The Arizona Linking Study created linkages between TerraNova and the Stanford Achievement Test, Ninth Version (SAT/9) for reading, language, and mathematics in Grades 2-9. The primary purpose of the linking study was to provide evidence regarding the continuity of norm-referenced testing in Arizona for the transition from SAT/9 to TerraNova. Results from this study will help Arizona make the transition from SAT/9 to TerraNova as well as help Arizona educators use and interpret NRT scores based on TerraNova. Results from the TerraNova to SAT/9 Linking study are included in the document *Arizona Linking Study: Technical Report for the Linking of TerraNova to SAT/9* (CTB/McGraw-Hill, 2005).

9.2.4.2 Writing Inter-Vendor Rater Agreement

The handover of the AIMS contract from one vendor to another prevents retention of previously trained hand-scoring staff. Every effort has been made by CTB Scoring to review anchor papers, training papers, qualification papers, scoring guide (rubrics), and Arizona standards in order to provide continuity in hand scoring for the AIMS writing assessments. CTB Scoring has strict protocols for approving raters, including satisfactory completion of qualifying rounds. Even though training materials have been shared between the two vendors, tacit knowledge—which can influence the decisions made in scoring students, especially those who are on score point borderlines—is extremely difficult to pass between vendors. Furthermore, the processes used to train scorers and score the responses are not synonymous between the two vendors. For example, in 2005 writing traits were scored in four rater item blocks. For the above reasons, CTB conducted an inter-vendor agreement study to examine and document possible differences between scores assigned by the two vendors. This study was conducted for the 2005 AIMS high school operational writing prompt prior to administration and scoring. Results were shared with CTB Scoring in order to help ensure consistency and increase score accuracy and reliability.

The materials used in the study included the training materials mentioned above and approximately 1800 papers from 36 Arizona school districts. The papers included the student responses to a field test of the 2005 AIMS high school operational writing prompt and final scores assigned by the previous vendor (Harcourt Assessment). Scores assigned to the student responses by the previous vendor were transcribed onto score sheets, scanned, and provided as a data file to CTB Research. The same raters who had been fully trained to score the 2005AIMS high school writing prompt scored the field test responses in four rater item blocks. Paper score sheets were used to capture all scores and CTB Research was provided with files of student scores. CTB Research merged the data by student and conducted the following analyses.

The similarity of trait scores from the two vendors was examined by computing raw score means, raw score standard deviations, percentage of agreement, Cohen's Kappa, and intraclass correlations. Please see Section 9.1.2 for more details on Cohen's Kappa and intraclass correlation.

Table 9.2.4 includes the mean raw score and standard deviation of each trait from the two vendors as well as mean and standard deviation of the total raw score from each vendor. Also included in the table are percentage of agreement, Cohen's Kappa, and intraclass correlation for each trait. Prefect agreement includes the students whose CTB and Harcourt Assessment (HA) score were exactly the same. Adjacent agreement includes the students whose CTB and HA scores differed by one point. Discrepant percentage includes the students whose CTB and HA scores differed by more than one point. These analyses were conducted with recoded data where condition code A was treated as missing and other condition codes were treated as zero.

The level of agreement between CTB and HA found in this study are comparable to inter-rater agreement within one vendor for similar type items (i.e., CR items with 6 points).

Table 9.2.4
Writing Inter-Vendor Rater Agreement

		Max	CTB		HA		% Agreement				Intraclass
Trait	N	Points	M	SD	M	SD	Perfect	Adjacent	Discrepant	Kappa	Correlation
1 Ideas and Content	1797	6	3.39	0.98	3.51	0.92	68.17	30.16	1.67	0.68	0.79
2 Organization	1797	6	3.55	0.96	3.68	0.89	65.72	32.55	1.73	0.64	0.77
3 Voice	1797	6	3.64	1.01	3.76	0.90	63.49	34.72	1.78	0.63	0.77
4 Word Choice	1797	6	3.49	0.95	3.60	0.91	69.34	29.38	1.28	0.68	0.80
5 Sentence Fluency	1797	6	3.41	0.97	3.60	0.90	64.50	33.39	2.11	0.64	0.76
6 Conventions	1797	6	3.56	0.96	3.62	0.93	65.05	33.56	1.39	0.64	0.78
Total Raw Score	1797	36	21.03	5.29	21.78	4.91	-	-	-	-	-

Note. HA= Harcourt Assessment.

Part 10: Classification

Part 10 of this technical report provides information regarding classifying students into proficiency categories. The following AERA/APA/NCME standards are covered in this part: 1.5, 1.7, 2.14, 2.15, 4.9, 4.19, 4.20, 4.21, and 6.5.

Scores from the 2005 Spring AIMS assessments are used to classify students into one of four performance categories: Falls Far Below the Standard, Approaches the Standard, Meets the Standard, and Exceeds the Standard. This part of the technical report provides information regarding classifying students into these four performance categories. Arizona educators made recommendations for cut scores for each category in standard setting workshops facilitated by CTB. Analyses were conducted to examine the consistency and accuracy with which students were assigned to performance categories.

10.1 Standard Setting Technical Documentation

Standard setting for the AIMS CRT mathematics and reading tests was conducted in early May, 2005 using the Bookmark Standard Setting Procedure. All technical documentation regarding the standard setting is available in the Bookmark Standard Setting Technical Report, submitted by CTB/McGraw-Hill to the ADE in June 2005.

Standard setting for the AIMS CRT writing tests was also conducted in May, 2005. The Body of Work Standard Setting Procedure was used for this standard setting. Technical documentation is available in the Body of Work Standard Setting Technical Report, submitted by CTB/McGraw-Hill to the ADE in June 2005.

Final scale score ranges for each of the four performance level categories for the AIMS CRT tests are presented below in Table 10.1.1.

Table 10.1.1
2005 Spring AIMS
Final Scale Score Ranges by Performance Level

Test		FFBS	AS	MS	ES
Mathematics					
	3	200-385	386-419	420-491	492-650
	4	230-413	414-447	448-520	521-675
	5	255-441	442-475	476-549	550-700
	6	270-462	463-495	496-573	574-725
	7	290-483	484-516	517-598	599-740
	8	300-504	505-536	537-622	623-800
	HS	500-667	668-682	683-749	750-900
Reading					
	3	200-378	379-430	431-515	516-640
	4	220-401	402-449	450-535	536-660
	5	240-423	424-467	468-555	556-675
	6	250-432	433-477	478-570	571-690
	7	260-442	443-488	489-586	587-720
	8	270-451	452-498	499-601	602-800
	HS	500-626	627-673	674-772	773-900
Writing					
	3	200-336	337-423	424-528	529-650
	4	230-365	366-460	461-571	572-700
	5	255-393	394-496	497-614	615-740
	6	275-399	400-503	504-629	630-760
	7	290-406	407-509	510-644	645-770
	8	300-412	413-516	517-659	660-800
	HS	500-609	610-677	678-753	754-900

Note. FFBS = Falls Far Below the Standard; AS = Approaches the Standard; MS = Meets the Standard; ES = Exceeds the Standard.

10.2 Classification Consistency and Accuracy

This section describes the analyses conducted to estimate classification consistency and accuracy for the 2005 AIMS DPA and high school test administrations. Classification consistency can be defined as the agreement between examinees' performance category classification from two independent administrations of the same test (or two parallel forms of the test). Classification accuracy can be defined as the agreement between the actual classifications using observed cut scores and true classifications based on known true cut scores (Livingston & Lewis, 1995).

In conjunction with internal consistency, classification consistency is an important type of reliability and is particularly relevant to high stakes pass/fail tests such as the AIMS high school tests. As a form of reliability, classification consistency represents how reliably students can be classified into performance categories. Please see Part 9 of this report for more information on the internal consistency of the AIMS assessments.

For tests such as the AIMS high school assessments, classification consistency is most important for students whose ability is near the pass/fail cut score. Students whose ability is far above or far below the value established for passing are unlikely to be misclassified because repeated

administration of the test will nearly always result in the same classification. Examinees whose true scores are close to the cut score are a more serious concern. These students' true scores will likely lie within the standard error of measurement of the cut score. For this reason, the measurement error at the cut scores should be considered when evaluating the classification consistency of a test. For convenience, the cut scores and their associated standard errors are presented in Table 10.2.3.1. Furthermore, the number of students near the cut scores should also be considered when evaluating classification consistency; these numbers show the number of students who are most likely to be misclassified. The number of students near the cut scores for each grade and content area can be found in the state scale score frequency distributions presented in Part 8 of this report.

Classification consistency and accuracy were estimated using the IRT procedure suggested by Lee, Hanson, and Brennan (2002) and Wang, Kolen and Harris (2000). The following description is based on the paper by Lee et al. (2002).

10.2.1 Classification Consistency

Assume that θ is a single latent trait measured by a test and denote Φ as a latent random variable. When a test X consists of K items and its maximum number-correct score is N, the marginal probability of the number-correct (NC) score x is

$$P(X = x) = \int P(X = x \mid \Phi = \theta) g(\theta) d\theta, \quad x = 0,1,..., N.$$

where $g(\theta)$ is the density of θ.

In this report, the marginal distribution $P(X = x)$ is denoted as $f(x)$, and the conditional error distribution $P(X = x \mid \Phi = \theta)$ is denoted as $f(x \mid \theta)$. It is assumed that examinees are classified into one of H mutually exclusive categories on the basis of predetermined H-1 observed score cutoffs, $C_1, C_2, \ldots, C_{H-1}$. Let L_h represent the h^{th} category into which examinees with $C_{h-1} \le X \le C_h$ are classified. $C_0 = 0$ and $C_H =$ the maximum number-correct score. Then, the conditional and marginal probabilities of each category classification are as follows:

$$P(X \in L_h \mid \theta) = \sum_{x=C_{h-1}}^{C_{h-1}} f(x \mid \theta), \quad h = 1, 2, \ldots, \text{H}.$$

$$P(X \in L_h) = \int \sum_{x=C_{h-1}}^{C_{h-1}} f(x \mid \theta) g(\theta) d\theta, \quad h = 1, 2, \ldots, \text{H}.$$

Because obtaining test scores from two independent administrations of AIMS was not feasible due to security, logistic, and cost constraints, a psychometric model was used to obtain the estimated classification consistency indices using test scores from a single administration. Based on the psychometric model, a symmetric H*H contingency table can be constructed. The elements of H*H contingency table consist of the joint probabilities of the row and column observed category classifications.

That two administrations are independent implies that if X_1 and X_2 represent the raw score random variables on the two administrations, then, conditioned on θ, X_1 and X_2 are independent and identically distributed. Consequently, the conditional bivariate distribution of X_1 and X_2 is

$$f(x_1,\ x_2 \mid \theta) = f(x_1 \mid \theta) f(x_2 \mid \theta).$$

The marginal bivariate distribution of X_1 and X_2 can be expressed as follows:

$$f(x_1,\ x_2) = \int f(x_1, x_2 \mid \theta) f(\theta) d\theta.$$

Consistent classification means that both X_1 and X_2 fall in the same category. The conditional probability of falling in the same category on the two administrations is

$$P(X_1 \in L_h,\ X_2 \in L_h \mid \theta) = \left[\sum_{x_1 = C_{h-1}}^{C_{h-1}} f(x_1 \mid \theta) \right]^2, \qquad h = 1, 2, \ldots, \text{H}.$$

The agreement index P, conditional on theta, is obtained by

$$P(\theta) = \sum_{h=1}^{H} P(X_1 \in L_h,\ X_2 \in L_h \mid \theta).$$

The agreement index (classification consistency) can be computed as

$$P = \int P(\theta) g(\theta) d(\theta).$$

The probability of consistent classification by chance, P_C, is the sum of squared marginal probabilities of each category classification.

$$P_C = \sum_{h=1}^{H} P(X_1 \in L_h) P(X_2 \in L_h) = \sum_{h=1}^{H} \left[P(X_1 \in L_h) \right]^2.$$

Then, the coefficient kappa (Cohen, 1960) is

$$k = \frac{P - P_C}{1 - P_C}$$

10.2.2 Classification Accuracy

Let Γ_w denote true category. When an examinee has an observed score, $x \in L_h$ ($h = 1, 2, \ldots, \text{H}$), and a latent score , $\theta \in \Gamma_w$ ($w = 1, 2, \ldots, \text{H}$), an accurate classification is made when $h = w$. The conditional probability of accurate classification is

$$\gamma(\theta) = P(X \in L_w \mid \theta),$$

where w is the category such that $\theta \in \Gamma_w$.

10.2.3 Classification Consistency and Accuracy Results

As mentioned above, for convenience, the cut scores and their associated standard errors are presented in table 10.2.3.1. Table 10.2.3.2 presents results from the classification consistency and classification accuracy analyses. These results are for classifying students into four performance levels. Included in the table for each grade and content area are case counts (N), classification consistency (Agreement), classification inconsistency (Inconsistency), probability of consistent classification by chance (Chance), Cohen's Kappa (Kappa), and classification accuracy (Accuracy). Inconsistency is defined as 1-agreement.

Table 10.2.3.1
2005 Spring AIMS
Standard Error of Measurement at Cut Scores

	AS		MS		ES	
Test	Cut Score	SEM	Cut Score	SEM	Cut Score	SEM
Mathematics						
3	386	11	420	11	492	15
4	414	12	448	12	521	17
5	442	11	476	11	550	17
6	463	12	496	12	574	19
7	484	11	517	12	599	18
8	505	13	537	13	623	20
HS	668	8	683	8	750	13
Reading						
3	379	13	431	12	516	20
4	402	11	450	11	536	21
5	424	12	468	12	556	21
6	433	12	478	12	571	22
7	443	13	489	13	587	23
8	452	15	499	15	602	24
HS	627	13	674	12	773	23
Writing						
3	337	14	424	16	529	13
4	366	15	461	15	572	14
5	394	17	497	16	615	14
6	400	17	504	17	630	15
7	407	17	510	17	645	12
8	413	18	517	19	660	13
HS	610	9	678	9	754	8

Note. FFBS = Falls Far Below the Standard; AS = Approaches the Standard;
MS = Meets the Standard; ES = Exceeds the Standard.

Table 10.2.3.2
2005 Spring AIMS
Classification Consistency and Accuracy

Test		N	Agreement	Inconsistency	Chance	Kappa	Accuracy
Mathematics							
	3	77443	0.80	0.20	0.34	0.70	0.86
	4	76152	0.78	0.22	0.32	0.68	0.85
	5	76719	0.79	0.21	0.32	0.70	0.86
	6	75884	0.78	0.22	0.30	0.69	0.85
	7	77084	0.80	0.20	0.34	0.69	0.86
	8	75599	0.78	0.22	0.31	0.68	0.85
	HS	104188	0.81	0.19	0.33	0.72	0.86
Reading							
	3	77047	0.79	0.21	0.37	0.68	0.85
	4	75685	0.80	0.20	0.36	0.69	0.86
	5	76379	0.79	0.21	0.38	0.66	0.85
	6	75940	0.80	0.20	0.38	0.67	0.86
	7	77541	0.79	0.21	0.39	0.66	0.85
	8	76356	0.78	0.22	0.39	0.64	0.84
	HS	95874	0.79	0.21	0.38	0.66	0.85
Writing							
	3	77058	0.85	0.15	0.44	0.74	0.90
	4	76049	0.85	0.15	0.41	0.74	0.89
	5	76681	0.86	0.14	0.47	0.73	0.90
	6	76125	0.85	0.15	0.49	0.71	0.90
	7	77537	0.89	0.11	0.61	0.72	0.92
	8	76227	0.89	0.11	0.60	0.72	0.93
	HS Form A	87719	0.87	0.13	0.41	0.78	0.91
	HS Form T	4139	0.87	0.13	0.32	0.80	0.91

Note. High school results include students in Grades 10, 11, and 12.

References

Allen, M. J., & Yen, W. M. (1979). *Introduction to measurement theory.* Monterey, CA: Brooks/Cole.

American Educational Research Association, American Psychological Association, and National Council on Measurement in Education. (1999). *Standards for educational and psychological testing.* Washington, DC: American Educational Research Association.

Andrich, D. (1978). A rating scale formulation for ordered response categories. *Psychometrika, 43*, 561-573.

Angoff, W. (1993). Perspectives on differential item functioning methodology. In P.W. Holland and H. Warner (Eds.), *Differential Item Functioning* (pp. 3-24). Hillsdale, NJ: Lawrence Erlbaum Associates.

Arizona Department of Education. (2005). *Arizona Linking Study: Technical Report for the Linking of TerraNova to SAT/9.* Monterey, CA: CTB/McGraw-Hill.

Arizona Department of Education. (2005). *Body of Work Standard Setting Technical Report for Grades 3,5,8 and High School Writing.* Monterey, CA: CTB/McGraw-Hill.

Arizona Department of Education. (2005*). Bookmark Standard Setting Technical Report for Grades 3,5,8, and High School Reading and Mathematics.* Monterey, CA: CTB/McGraw-Hill.

Arizona Department of Education. (2005). *Test Administration Directions.* Monterey, CA: CTB/McGraw-Hill.

Arizona Department of Education. (2005). *Test Coordinator's Manual.* Monterey, CA: CTB/McGraw-Hill.

Bock, R. D., & Aitkin, M. (1981). Marginal maximum likelihood estimation of item parameters: An application of an EM algorithm. *Psychometrika, 46,* 443–459.

Brennan, R. L., & Prediger, D. J. (1981). Coefficient kappa: some uses, misuses, and alternatives. *Educational and Psychological Measurement, 41,* 687-699.

Burket, G. R. (1991). PARDUX [Computer program]. Unpublished.

Burket, G. R. (2000). ITEMWIN [Computer program]. Unpublished.

Camilli, G., & Shepard, L. A. (1994). *Methods for identifying biased test items.* Newbury Park, CA: Sage.

Choi, S. (2005). CalcSEM_Rasch.sas [Computer program]. Unpublished.

Clauser, B. E. & Mazor, K.M. (1998). Using statistical procedures to identify differentially functioning test items. *Educational Measurement: Issues and practice, 17,* 31-44.

Cohen, J. (1960). A coefficient of agreement for nominal scales. *Educational and Psychological Measurement, 20,* 37-46.

Crocker, L. & Algina, J. (1986). *Introduction to classical and modern test theory.* Belmont, CA: Wadsworth Group/Thompson Learning.

CTB/McGraw-Hill. (2000). *TerraNova, The Second Edition, California Achievement Tests®.* Monterey, CA: Author.

CTB/McGraw-Hill. (2001). *TerraNova, The Second Edition, Norms Book.* Monterey, CA: Author.

CTB/McGraw-Hill. (2003). *TerraNova®, The Second Edition: California Achievement Tests® Technical Report*. Monterey, CA: Author.

CTB/McGraw-Hill. (2005). *Arizona Linking Study: Technical Report for the Linking of TerraNova to SAT/9.* Monterey, CA: Author.

Fitzpatrick, A. R. (1991). *Status report on the results of preliminary analyses of dichotomous and multi-level items using the PARMATE program*. Monterey, CA: CTB/McGraw-Hill.

Fitzpatrick, A. R., & Julian, M. W. (1996). *Two studies comparing the parameter estimates produced by PARDUX and PARSCALE.* Monterey, CA: CTB/McGraw-Hill.

Green, D.R. (1975, December). *Procedures for assessing bias in achievement tests*. Presented at the National Institute of Education Conference on Test Bias, Annapolis, MD.

Holland, P. W. & Thayer, D. T. (1988). Differential item performance and the Mantel-Haenszel procedure. In H. Wainer & H. I. Braun (Eds.), *Test validity* (pp. 129-145). Hillsdale, NJ: Lawrence Erlbaum Associates.

Lee, W., Hanson, B. A., Brennan, R. L. (2002). Estimating consistency and accuracy indices for multiple classifications. *Applied Psychological Measurement*, *26*, 412-432.

Linacre, J. M. (2002). What do infit and outfit, mean-square and standardized mean? *Rasch Measurement Transactions, 16(2)*, 878.

Linacre, J. M. (2005a). The Partial Credit Model and the One-Item Rating Scale Model, *Rasch Measurement Transactions, 19(1)*, 1000-1002.

Linacre, J. M. (2005b). WINSTEPS Rasch measurement [Computer software]. Chicago: Winsteps.com.

Livingston, S. A., & Lewis, C. (1995). Estimating the consistency and accuracy of classification consistency and accuracy based on test scores. *Journal of Educational Measurement*, *32*, 179-197.

Lord, F. M. (1980). *Applications of item response theory to practical testing programs.* Hillsdale, NJ: Lawrence Erlbaum.

Lord, F. M., & Novick, M. R. (1986). *Statistical theories of mental test scores.* Reading MA: Addison-Wesley.

Lord, F. M., & Wingersky, M.S. (1984). Comparisons of IRT true score and equipercentile observed score "equating." *Applied Psychological Measurement*, *8*, 453-461.

Masters, G. N. (1982). A Rasch model for partial credit scoring. *Psychometrika, 47,*147-174.

Muraki, E., & Bock, R. D. (1991). *PARSCALE: Parameter Scaling of Rating Data* [Computer program]. Chicago, IL: Scientific Software, Inc.

Rasch, G. (1960). *Probabilistic models for some intelligence and attainment tests.* Copenhagen, Denmark: Danmarks Paedogogiske Institut.

Shrout, P. E., & Fleiss, J. L. (1979). *Intraclass correlations: uses in assessing rater reliability. Psychological Bulletin, 86(2),* 420-428.

Stocking, M. L., & Lord, F. M. (1983). Developing a common metric in item response theory. *Applied Psychological Measurement*, 7, 201-210.

Thissen, D. (1982). Marginal maximum-likelihood estimation for the one-parameter logistic model. *Psychometrika, 47,* 175–186.

Thissen, D. (1990). MULTILOG: Multiple categorical item analysis and test scoring. Version 6 [Computer software]. Mooresville, IN: Scientific Software.

Wang, T. W., Kolen, M. J., Harris, D. J. (2000). Psychometric properties of scale scores and performance levels for performance assessments using polytomous IRT. *Journal of Educational Measurement*, *37*, 141-162.

Wright, B.D. (1977). Solving measurement problems with the Rasch model. *Journal of Educational Measurement, 14(2)*, 97-116.

Wright, B. D., & Linacre, J. M. (1992). *BIGSTEPS Rasch Analysis* [Computer software]. Chicago, IL: MESA Press.

Wright, B. D. & Linacre, J.M. (1994). Reasonable mean-square fit values. *Rasch Measurement Transactions, 8*, 370.

Wright, B. D., & Masters, G. N., (1982). *Rating scale analysis: Rasch Measurement*. Chicago: MESA Press.

Yen, W. M. & Burket, G. R. (1997). Comparison of item response theory and Thurstone methods of vertical scaling. *Journal of Educational Measurement, 34(4)*, 293-313.

Zieky, M. (1993). Practical questions in the use of DIF statistics in test development. In Holland, P.W. & Wainer, H. (Eds.) *Differential Item Functioning* (pp. 337-348). Hillsdale, NJ: Lawrence Erlbaum Associates.

Zwick, R., Donoghue, J. R., & Grima, A. (1993). Assessment of differential item functioning for performance tasks. *Journal of Educational Measurement, 26*, 44-66.

APPENDIX A
Alignment Study Presentation

Arizona's Instrument to Measure Standards

Alignment Study
July 2004

CTB Staff

Cynthia Fischer Program Manager	Lindy Desmond Program Coordinator	Christine Nieto Evaluation Consultant
Donna Ventura Development Manager	Toni Gibbs Development Supervisor Reading, Language Arts	Dan Dube Development Supervisor Mathematics

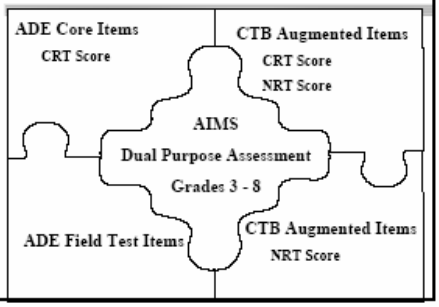
Purpose of Alignment Study

Review test items
to ensure quality of the
Arizona's Instrument to Measure Standards

Importance of Alignment Study

- Your role is essential in verifying the appropriateness of the test items for students throughout the state of Arizona.
- Your work is critical to establishing evidence of the validity of test results.

AIMS Test Design



Schedule for Alignment Study

- 8:00 – 8:30 Registration
- 8:30 – 9:30 Introduction
- 9:30 – 4:30
  - Reading Grades 3, 5, 8 and high school
  - Math Grades 8 and high school
- Noon Lunch
- 10:00 AM and 2:00 PM Breaks

- 8:00 – 8:30 Registration
- 8:30 –4:30
  - Reading Grades 8 and high school
  - Math Grades 3, 5, 8 and high school
- Noon Lunch
- 10:00 AM and 2:00 PM Breaks

APPENDIX A (cont)
Alignment Study Presentation

Process for Alignment Study

Ensure that the content of each item

- ✶ Reflects skills and knowledge that students are expected to know and be able to do.
- ✶ Assesses one performance objective that describes the tasks to be taught and learned.
- ✶ Is written so that a student possessing the knowledge being tested can provide a correct response.
- ✶ Uses grade appropriate content or thinking skills.
- ✶ Is presented at a reading level suitable for the grade level.

Depths of Knowledge

Level 1: Recognizing and Recalling	**Level 2: Using Fundamental Concepts and Procedures**	**Level 3: Concluding and Explaining**
Level 4: Evaluating, Extending, and Making Connections	**Level 5: Integrative Thinking & Performance**	

Recognizing and Recalling

Recall basic facts, terms, concepts, and definitions of the content and processes.

- ✶ Identify place values
- ✶ Determine which of two whole numbers is greater
- ✶ Recognize shapes and solids
- ✶ Identify the state main idea
- ✶ Identify a complete sentence
- ✶ Identify a main character

Using Fundamental Concepts and Procedures

Use basic facts, definitions, graphics, skills, or concepts

- ✶ Identify factors of a number
- ✶ Place numbers on a number line
- ✶ Find the mean, median, mode of a data set
- ✶ Distinguish between fact and opinion
- ✶ Identify a simple conclusion
- ✶ Recognize a simple sequence of events

Concluding and Explaining

Demonstrate an understanding of complex ideas, to draw conclusions

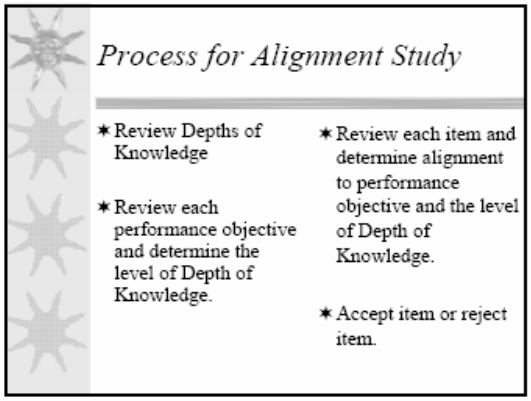
- ✶ Describe likelihood of occurrence in probability
- ✶ Make inferences from a graph and other displays of data
- ✶ Describe the rule of a geometric or numeric pattern
- ✶ Explain author purpose
- ✶ Explain cause and effect relationships
- ✶ Explain differences between fact and opinion

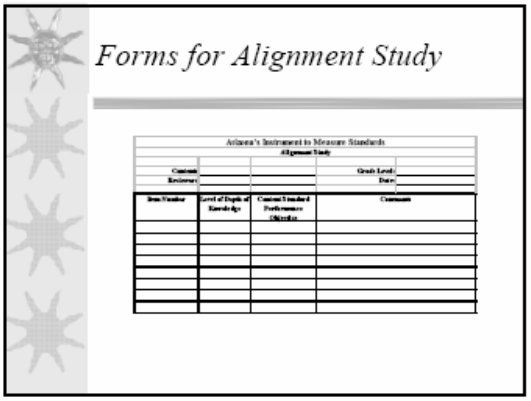
Evaluating. Extending, and Making Connections

Evaluate, interpret, or create, make connections among texts, experiences, and issues

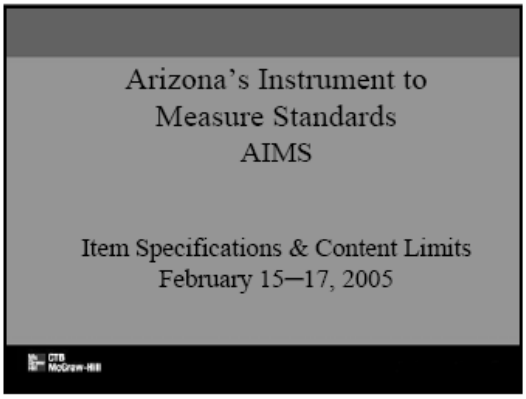
- ✶ Compare and contrast sets of data
- ✶ Develop and solve a word problem based on information in a graph
- ✶ Evaluating an author's technique or use of rhetorical and literary devices
- ✶ Comparing texts for contradictions within or between texts

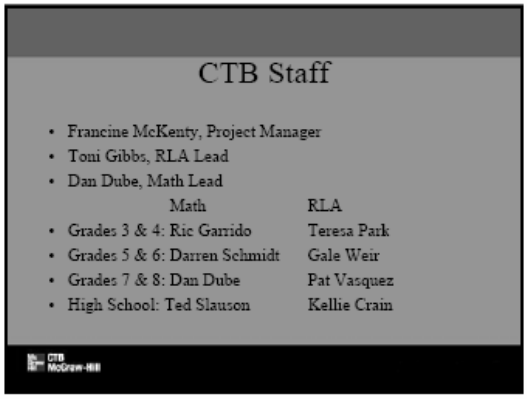
APPENDIX A (cont)
Alignment Study Presentation

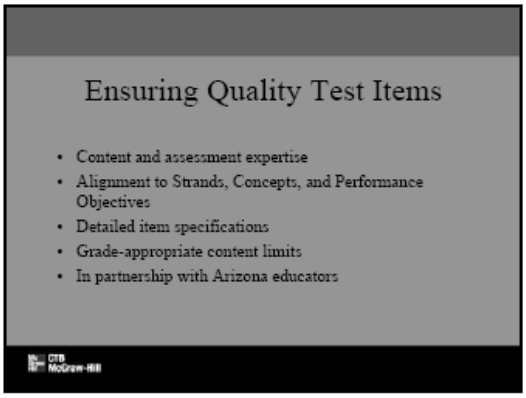


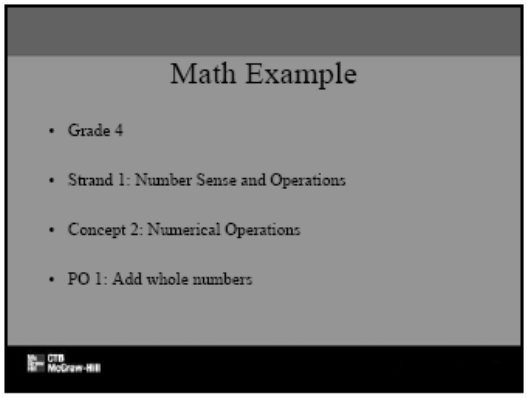


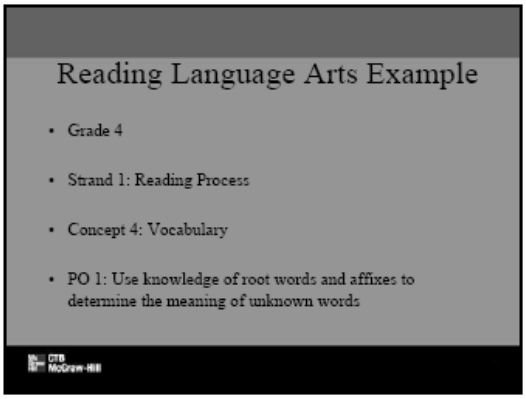
APPENDIX B
Item Selection Presentation

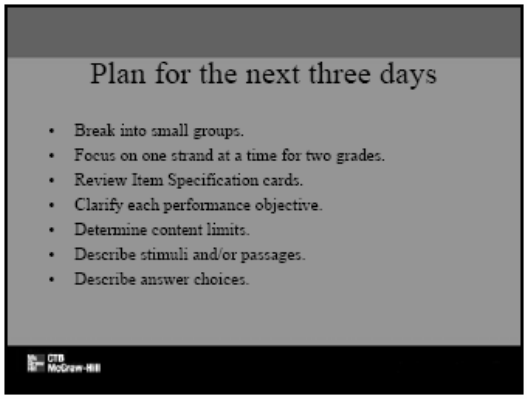




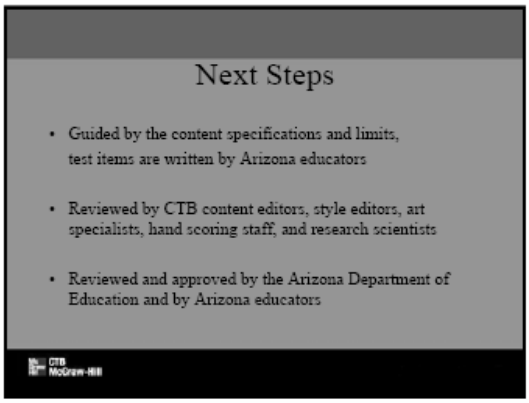








APPENDIX B (cont)
Item Selection Presentation



APPENDIX C

Calibrating a One-Prompt Writing Test: An Investigation of Rasch Calibration Model Behavior

Executive Summary

prepared for
Arizona Department of Education and
National Assessment and Accountability Advisory Committee
CTB Research
March, 2005

CTB anticipates that sparse data likely will be a challenge to calibration of the AIMS Writing test, particularly at the high school level where a large number of score levels result from multiple reads of each response. CTB research examined the effects various data treatments and calibration models in order to develop a calibration design that will best accommodate possible item response theory (IRT) scoring complications that may occur in the event of sparse data. The results of calibration methods were first evaluated for Rasch diagnostic and model fit criteria. Results were examined for the impact of calibration model and data treatment on item difficulty parameters and student theta estimates.

Data

Student scores from Arizona field test writing prompts were used in the study. Data were available from two prompts each for three grades. Each response was scored twice using the 6-trait analytic rubric. The following data treatments and calibration models were investigated:

- Condition codes treated as zeros versus records with condition codes excluded from calibration;
- Second rater scores treated as independent items (for a total of 12 items with 6 points each) versus combining scores from multiple raters into single items (for a total of six items with 12 points each); and
- Andrich Rating Scale model for calibration versus Master's Partial Credit model for calibration.

Findings

- Sparse data was less of a problem when second rater scores were treated as independent items; this treatment resulted in little effect to student theta estimates. Unimodality across the rating categories was achieved and more categories and score points were estimable using the 12 item 6-point method than the 6 item 12-point method.
- There were few empirical differences in item difficulty and theta estimation results between the Rating Scale model and Partial Credit model. However, the Rating Scale model was better able to estimate thetas for all raw score points. This makes the Rating Scale model a viable option in place of the Partial Credit model.

Recommendations

Based on the findings of this study, CTB recommends that the following calibration design will provide the most stable parameter estimation given sparse data.

- Exclude students with condition codes from calibration.
- Treat each rater score as an independent item for calibration at the high school level.
- Use the Rating scale model to calibrate all writing tests.