Content Domain	Main Topic	Cognitive Domain
ALGEBRA	Algebraic Expressions	Knowing Facts and Procedures

Value of -3x given value of x

If $x = -3$, what is the value of $-3x$?

(A) -9

(B) -6

(C) -1

(D) 1

(E) 9

Item Number: M012042

Correct Response: **E**

Overall Percent Correct

Hong Kong, SAR	84	▲
Korea, Republic of	84	▲
Chinese Taipei	83	▲
Singapore	80	▲
Estonia	77	▲
Japan	74	▲
Russian Federation	73	▲
Hungary	69	▲
Israel	67	▲
Serbia and Montenegro	65	▲
United States	65	▲
Belgium (Flemish)	63	▲
Armenia	62	▲
Latvia	61	▲
Lithuania	60	▲
Slovak Republic	58	▲
Bulgaria	57	▲
Moldova, Republic of	54	▲
Netherlands	54	▲
Romania	51	O
Slovenia	51	O
Lebanon	49	O
International average	**48**	
Malaysia	48	O
Macedonia, Republic of	47	O
Iran, Islamic Republic of	44	O
Philippines	44	▼
Indonesia	43	▼
Jordan	41	▼
Bahrain	40	▼
Cyprus	38	▼
Australia	37	▼
Egypt	37	▼
England	37	▼
Italy	37	▼
New Zealand	35	▼
Botswana	30	▼
Sweden	28	▼
Tunisia	26	▼
Palestinian Nat'l Auth.	25	▼
Morocco	24	▼
Scotland	24	▼
South Africa	16	▼
Chile	15	▼
Saudi Arabia	11	▼
Norway	9	▼

Country average vs. International average:

Higher	▲
Not different	O
Lower	▼

Content Domain	Main Topic	Cognitive Domain
ALGEBRA	Algebraic Expressions	Knowing Facts and Procedures

Subtract fractions involving x

Subtract: $\dfrac{3x}{7} - \dfrac{x}{7} =$

Ⓐ $\dfrac{2}{7}$

Ⓑ 3

Ⓒ $2x$

Ⓓ $\dfrac{x}{7}$

Ⓔ $\dfrac{2x}{7}$

Item Number: M022185

Correct Response: **E**

Overall Percent Correct

Korea, Republic of	86	▲
Hong Kong, SAR	83	▲
Singapore	81	▲
Japan	76	▲
Latvia	76	▲
Chinese Taipei	76	▲
Hungary	74	▲
Russian Federation	67	▲
Lebanon	67	▲
Romania	65	▲
Israel	65	▲
Estonia	65	▲
Serbia and Montenegro	64	▲
Slovak Republic	63	▲
Bulgaria	63	▲
Malaysia	61	▲
Armenia	60	▲
Belgium (Flemish)	60	▲
Cyprus	58	▲
Moldova, Republic of	58	▲
Lithuania	57	O
International average	**54**	
Jordan	54	O
Bahrain	49	▼
Philippines	49	▼
United States	49	▼
Italy	48	▼
Egypt	48	▼
Slovenia	47	▼
Tunisia	47	▼
Botswana	46	▼
Iran, Islamic Republic of	46	▼
Palestinian Nat'l Auth.	44	▼
Australia	44	▼
Indonesia	43	▼
Morocco	43	▼
New Zealand	42	▼
Scotland	41	▼
Norway	40	▼
Sweden	39	▼
Netherlands	39	▼
Saudi Arabia	37	▼
Macedonia, Republic of	37	▼
England	36	▼
Chile	27	▼
South Africa	27	▼

Country average vs. International average:	
Higher	▲
Not different	O
Lower	▼

Content Domain	Main Topic	Cognitive Domain
ALGEBRA	Algebraic Expressions	Knowing Facts and Procedures

Which equals 2*x* minus 3*y* plus 7*x* plus 5*y*

Which of these is equal to $2x - 3y + 7x + 5y$?

(A) $5x + 2y$

(B) $5x + 8y$

(C) $9x + 2y$

(D) $9x + 8y$

Item Number: M032036

Overall Percent Correct		
Korea, Republic of	82	▲
Japan	82	▲
Chinese Taipei	79	▲
Singapore	79	▲
Slovak Republic	76	▲
Hong Kong, SAR	74	▲
Hungary	74	▲
Estonia	72	▲
Belgium (Flemish)	67	▲
Latvia	66	▲
Israel	65	▲
Serbia and Montenegro	62	▲
Russian Federation	62	▲
Bulgaria	58	▲
Romania	58	▲
Lebanon	55	O
Slovenia	55	O
Netherlands	54	O
Lithuania	53	O
Italy	53	O
Iran, Islamic Republic of	52	O
Malaysia	51	O
International average	**49**	
Scotland	48	O
United States	47	O
Moldova, Republic of	46	O
Sweden	45	O
Egypt	45	O
Australia	45	O
Macedonia, Republic of	41	▼
Norway	41	▼
Armenia	41	▼
Jordan	38	▼
Philippines	36	▼
Cyprus	35	▼
Palestinian Nat'l Auth.	33	▼
England	33	▼
New Zealand	33	▼
Morocco	32	▼
Bahrain	27	▼
Chile	25	▼
Botswana	25	▼
Tunisia	24	▼
South Africa	23	▼
Saudi Arabia	23	▼
Indonesia	22	▼

Correct Response:	**C**

Country average vs. International average:	
Higher	▲
Not different	O
Lower	▼

Content Domain	Main Topic	Cognitive Domain
ALGEBRA	Algebraic Expressions	Reasoning

The value of a + 2 times (b plus c)

If $a + 2b = 5$ and $c = 3$, what is the value of $a + 2(b + c)$?

Answer: _____

Item Number: M032557

SCORING

Correct Response

- 11

Incorrect Response

- 8

- Other incorrect (including crossed out/erased, stray marks, illegible or off task).

Overall Percent Correct

Korea, Republic of	64	▲
Singapore	58	▲
Chinese Taipei	57	▲
Hong Kong, SAR	56	▲
Russian Federation	53	▲
Romania	40	▲
Hungary	38	▲
Israel	38	▲
Japan	37	▲
Estonia	35	▲
Latvia	34	▲
Serbia and Montenegro	34	▲
Armenia	33	▲
Moldova, Republic of	31	▲
Bulgaria	30	▲
Slovak Republic	28	▲
Belgium (Flemish)	28	▲
Lithuania	26	▲
Lebanon	25	O
International average	**22**	
Malaysia	20	O
Australia	20	O
United States	20	O
Cyprus	20	O
Macedonia, Republic of	18	▼
Scotland	18	O
Italy	16	▼
Netherlands	16	▼
England	15	▼
New Zealand	14	▼
Slovenia	13	▼
Sweden	10	▼
Egypt	10	▼
Jordan	9	▼
Indonesia	8	▼
Tunisia	5	▼
Palestinian Nat'l Auth.	5	▼
Philippines	5	▼
Morocco	4	▼
Iran, Islamic Republic of	3	▼
Chile	3	▼
Norway	3	▼
South Africa	3	▼
Botswana	2	▼
Bahrain	2	▼
Saudi Arabia	0	▼

Country average vs. International average:

Higher	▲
Not different	O
Lower	▼

The value of *a* + 2 times (*b* plus *c*) (continued)

Item Number: M032557

Student Responses

Correct Response:

If $a + 2b = 5$ and $c = 3$, what is the value of $a + 2(b + c)$?

Answer: __11__

Incorrect Response:

If $a + 2b = 5$ and $c = 3$, what is the value of $a + 2(b + c)$?

Answer: __8__

Content Domain	Main Topic	Cognitive Domain
ALGEBRA	Algebraic Expressions	Solving Routine Problems

Three consecutive even numbers

Sam wanted to find three consecutive even numbers that add up to 84.
He wrote the equation $k + (k + 2) + (k + 4) = 84$.
What does the letter k represent?

- Ⓐ   The least of the three even numbers
- Ⓑ   The middle even number
- Ⓒ   The greatest of the three even numbers
- Ⓓ   The average of the three even numbers

Item Number: M022002

Correct Response: **A**

Overall Percent Correct

Hong Kong, SAR	57	▲
Chinese Taipei	50	▲
Singapore	48	▲
Korea, Republic of	46	▲
Romania	42	▲
Estonia	37	▲
Russian Federation	36	▲
Moldova, Republic of	34	▲
Japan	34	▲
Bulgaria	34	▲
Serbia and Montenegro	33	▲
Latvia	33	▲
Hungary	31	▲
Israel	31	▲
Armenia	30	▲
Belgium (Flemish)	30	▲
Slovak Republic	27	O
Netherlands	27	O
Philippines	25	O
Bahrain	25	O
International average	**24**	
United States	23	O
Macedonia, Republic of	22	O
Italy	21	O
Australia	20	O
Botswana	20	▼
South Africa	19	▼
Saudi Arabia	19	▼
Lithuania	19	▼
Cyprus	19	▼
Egypt	18	▼
Jordan	18	▼
Indonesia	16	▼
England	16	▼
Palestinian Nat'l Auth.	16	▼
New Zealand	16	▼
Iran, Islamic Republic of	15	▼
Sweden	15	▼
Morocco	15	▼
Slovenia	12	▼
Lebanon	12	▼
Chile	11	▼
Scotland	11	▼
Norway	11	▼
Malaysia	11	▼
Tunisia	6	▼

Country average vs. International average:

Higher	▲
Not different	O
Lower	▼

Content Domain	Main Topic	Cognitive Domain
ALGEBRA	Algebraic Expressions	Using Concepts

Total number of books three boys have

Graham has twice as many books as Bob. Chan has six more books than Bob. If Bob has x books, which of the following represents the total number of books the three boys have?

Ⓐ $3x + 6$

Ⓑ $3x + 8$

Ⓒ $4x + 6$

Ⓓ $5x + 6$

Ⓔ $8x + 2$

Item Number: M022251

Correct Response:	C

Overall Percent Correct

Singapore	66	▲
Chinese Taipei	59	▲
Korea, Republic of	55	▲
Hong Kong, SAR	53	▲
Israel	41	▲
Hungary	41	▲
Slovak Republic	38	▲
Russian Federation	36	▲
Japan	35	▲
Romania	35	▲
Netherlands	35	▲
Estonia	34	▲
Cyprus	34	▲
Belgium (Flemish)	33	▲
Italy	33	O
Latvia	32	O
Lithuania	32	O
New Zealand	31	O
Serbia and Montenegro	31	O
Slovenia	31	O
International average	**29**	
Moldova, Republic of	29	O
Australia	28	O
Bulgaria	28	O
Sweden	28	O
Armenia	26	O
United States	26	▼
England	25	▼
Malaysia	25	▼
Scotland	25	▼
Tunisia	24	▼
Norway	23	▼
Iran, Islamic Republic of	23	▼
Morocco	22	▼
Macedonia, Republic of	22	▼
Egypt	21	▼
Jordan	20	▼
Lebanon	20	▼
Palestinian Nat'l Auth.	20	▼
Philippines	19	▼
Bahrain	18	▼
Chile	18	▼
Indonesia	18	▼
Saudi Arabia	15	▼
Botswana	13	▼
South Africa	12	▼

Country average vs. International average:	
Higher	▲
Not different	O
Lower	▼

Content Domain	Main Topic	Cognitive Domain
ALGEBRA	Algebraic Expressions	Using Concepts

Carla paid *x* zeds for 3 cartons of juice

Carla paid *x* zeds for 3 cartons of juice. What is the price in zeds of 1 carton of juice?

Ⓐ $\dfrac{x}{3}$

Ⓑ $\dfrac{3}{x}$

Ⓒ $3 + x$

Ⓓ $3x$

Item Number: M032044

Overall Percent Correct		
Singapore	85	▲
Hong Kong, SAR	81	▲
Chinese Taipei	74	▲
Belgium (Flemish)	67	▲
Netherlands	62	▲
Malaysia	59	▲
Russian Federation	58	▲
England	55	▲
Hungary	55	▲
Korea, Republic of	53	▲
Estonia	53	▲
Israel	53	▲
Slovak Republic	52	▲
Sweden	52	▲
Japan	51	▲
Lithuania	51	▲
Scotland	49	▲
Australia	49	O
United States	48	▲
Armenia	48	O
Lebanon	48	O
Latvia	46	O
Italy	45	O
International average	**45**	
New Zealand	43	O
Serbia and Montenegro	42	O
Romania	42	O
Bulgaria	42	O
Moldova, Republic of	41	O
Philippines	40	▼
Norway	40	▼
Slovenia	40	▼
Macedonia, Republic of	39	▼
Indonesia	39	▼
Tunisia	36	▼
Cyprus	36	▼
Egypt	35	▼
Jordan	34	▼
Chile	31	▼
Bahrain	30	▼
Palestinian Nat'l Auth.	30	▼
Botswana	29	▼
Morocco	28	▼
Ghana	28	▼
South Africa	23	▼
Saudi Arabia	22	▼
Iran, Islamic Republic of	21	▼

Correct Response:	**A**

Country average vs. International average:	
Higher	▲
Not different	O
Lower	▼

Content Domain	Main Topic	Cognitive Domain
ALGEBRA	Equations and Formulas	Knowing Facts and Procedures

Find *n* from proportionality equation

If $\dfrac{12}{n} = \dfrac{36}{21}$, then *n* equals

Ⓐ   3

Ⓑ   7

Ⓒ   36

Ⓓ   63

Item Number: M012040

Overall Percent Correct

Country		
Singapore	93	▲
Korea, Republic of	89	▲
Hong Kong, SAR	88	▲
Belgium (Flemish)	86	▲
Netherlands	85	▲
Chinese Taipei	83	▲
Malaysia	83	▲
United States	80	▲
Hungary	79	▲
Japan	79	▲
Scotland	79	▲
Australia	76	▲
England	74	▲
Slovak Republic	74	▲
Israel	72	▲
Slovenia	72	▲
Estonia	71	▲
Lebanon	71	▲
Russian Federation	71	▲
Latvia	70	▲
New Zealand	68	O
Iran, Islamic Republic of	66	O
Sweden	66	O
Cyprus	65	O
Italy	65	O
International average	**64**	
Lithuania	64	O
Tunisia	64	O
Serbia and Montenegro	63	O
Moldova, Republic of	61	O
Romania	61	O
Bulgaria	59	▼
Norway	59	▼
Egypt	58	▼
Indonesia	58	▼
Armenia	54	▼
Morocco	54	▼
Jordan	53	▼
Palestinian Nat'l Auth.	52	▼
Philippines	52	▼
Macedonia, Republic of	50	▼
Bahrain	44	▼
Chile	44	▼
Botswana	41	▼
Saudi Arabia	30	▼
Ghana	28	▼
South Africa	26	▼

Correct Response:	**B**

Country average vs. International average:

Higher	▲
Not different	O
Lower	▼

Content Domain	Main Topic	Cognitive Domain
ALGEBRA	Equations and Formulas	Knowing Facts and Procedures

True expression for values of *L,K,M*

If $L = 4$ when $K = 6$ and $M = 24$, which of the following is true?

Ⓐ $L = \dfrac{M}{K}$

Ⓑ $L = \dfrac{K}{M}$

Ⓒ $L = KM$

Ⓓ $L = K + M$

Ⓔ $L = M - K$

Item Number: M022196

Overall Percent Correct

Singapore	88	▲
Korea, Republic of	86	▲
Hong Kong, SAR	84	▲
Chinese Taipei	82	▲
Estonia	81	▲
Russian Federation	79	▲
Hungary	79	▲
Japan	77	▲
Belgium (Flemish)	76	▲
Slovak Republic	75	▲
Latvia	75	▲
Serbia and Montenegro	73	▲
Lithuania	73	▲
Sweden	70	▲
Lebanon	69	▲
Romania	67	▲
Armenia	66	▲
Slovenia	66	▲
Israel	64	▲
Moldova, Republic of	63	▲
Bulgaria	63	O
Tunisia	63	▲
United States	62	▲
Macedonia, Republic of	60	O
Netherlands	59	O
International average	**58**	
Morocco	57	O
Italy	57	O
England	54	O
Malaysia	54	O
Indonesia	54	O
Cyprus	52	▼
Australia	49	▼
Scotland	49	▼
New Zealand	49	▼
Jordan	44	▼
Norway	40	▼
Egypt	38	▼
Iran, Islamic Republic of	38	▼
Palestinian Nat'l Auth.	35	▼
Bahrain	35	▼
Botswana	28	▼
Philippines	25	▼
Saudi Arabia	22	▼
Chile	21	▼
South Africa	14	▼

Correct Response:	**A**

Country average vs. International average:

Higher	▲
Not different	O
Lower	▼

Content Domain	Main Topic	Cognitive Domain
ALGEBRA	Equations and Formulas	Knowing Facts and Procedures

Solve equation for *x*

If $4(x + 5) = 80$, then $x =$

Answer: _____

Item Number: M022253

SCORING

Correct Response

• 15

Incorrect Response

• 25 [100 ÷ 4]

• 60 [80 – (4 x 5)]

• 71 [80 – 4 – 5]

• Any expression or equation, other than x = 15, containing x.

• Other incorrect (including crossed out/erased, stray marks, illegible, or off task).

Overall Percent Correct

Hong Kong, SAR	90	▲
Singapore	82	▲
Korea, Republic of	82	▲
Japan	80	▲
Chinese Taipei	80	▲
Estonia	72	▲
Hungary	70	▲
Russian Federation	66	▲
Slovak Republic	65	▲
Belgium (Flemish)	64	▲
Latvia	64	▲
Slovenia	64	▲
Armenia	61	▲
Serbia and Montenegro	61	▲
Romania	60	▲
Bulgaria	59	▲
United States	57	▲
Israel	57	▲
Cyprus	54	▲
Moldova, Republic of	53	▲
Lithuania	51	▲
Australia	50	▲
Malaysia	46	O
Netherlands	44	O
International average	**44**	
England	44	O
New Zealand	44	O
Macedonia, Republic of	37	▼
Italy	37	▼
Scotland	37	▼
Lebanon	31	▼
Sweden	28	▼
Tunisia	26	▼
Jordan	25	▼
Indonesia	25	▼
Egypt	23	▼
Philippines	22	▼
Bahrain	19	▼
Iran, Islamic Republic of	18	▼
Palestinian Nat'l Auth.	17	▼
Morocco	16	▼
Norway	11	▼
Chile	9	▼
Saudi Arabia	6	▼
South Africa	5	▼
Botswana	5	▼

Country average vs. International average:

Higher	▲
Not different	O
Lower	▼

Solve equation for *x* (continued)

Item Number: M022253

Student Responses

Correct Response:

If $4(x + 5) = 80$, then $x =$ 4 (x + 5) 80
15+50 80
xy
80

Answer: ___15___

Incorrect Response:

If $4(x + 5) = 80$, then $x =$

Answer: ___20___

$4(x+5)=80$

$4x+20=80$

$4x+80-20°=80-80$

$\dfrac{4x}{4} = \dfrac{60}{4}$

$x = 20$

Content Domain	Main Topic	Cognitive Domain
ALGEBRA	Equations and Formulas	Knowing Facts and Procedures

If *x* plus 3*y* equals 11 and 2*x* plus 3*y* equals 13

If $x + 3y = 11$ and $2x + 3y = 13$, then $y =$

Ⓐ   3

Ⓑ   2

Ⓒ   −2

Ⓓ   −3

Item Number: M032728

Correct Response: **A**

Overall Percent Correct

Country	%	
Korea, Republic of	76	▲
Singapore	70	▲
Chinese Taipei	69	▲
Japan	61	▲
Hong Kong, SAR	59	▲
Scotland	55	▲
Belgium (Flemish)	53	▲
Latvia	51	▲
Estonia	50	▲
United States	49	▲
Serbia and Montenegro	49	▲
England	49	O
Romania	48	O
Hungary	47	O
Slovak Republic	46	O
New Zealand	45	O
Moldova, Republic of	45	O
Bulgaria	45	O
Russian Federation	44	O
Australia	44	O
Israel	44	O
Netherlands	43	O
Malaysia	43	O
International average	**42**	
Lebanon	40	O
Botswana	38	O
Lithuania	37	O
Jordan	37	▼
Tunisia	36	▼
Slovenia	36	O
Macedonia, Republic of	36	▼
Sweden	35	▼
Philippines	35	▼
Cyprus	34	▼
Egypt	34	▼
Iran, Islamic Republic of	34	▼
Indonesia	33	▼
Chile	31	▼
Palestinian Nat'l Auth.	31	▼
South Africa	31	▼
Norway	30	▼
Saudi Arabia	29	▼
Armenia	29	▼
Italy	28	▼
Bahrain	27	▼
Morocco	23	▼

Country average vs. International average:

Higher	▲
Not different	O
Lower	▼

Content Domain	Main Topic	Cognitive Domain
ALGEBRA	Equations and Formulas	Solving Routine Problems

If *x* minus *y* equals 5 and *x*/2 equals 3

If $x - y = 5$ and $\dfrac{x}{2} = 3$, what is the value of y?

(A) 6

(B) 1

(C) −1

(D) −7

Item Number: M032208

Overall Percent Correct

Singapore	82	▲
Korea, Republic of	79	▲
Hong Kong, SAR	78	▲
Chinese Taipei	77	▲
Australia	69	▲
Belgium (Flemish)	69	▲
New Zealand	67	▲
Hungary	67	▲
England	66	▲
United States	63	▲
Scotland	61	▲
Japan	61	▲
Malaysia	58	▲
Israel	58	▲
Estonia	58	▲
Serbia and Montenegro	58	▲
Romania	57	▲
Latvia	56	▲
Slovenia	55	O
Cyprus	55	▲
Norway	55	O
Sweden	53	O
Netherlands	53	O
Lithuania	53	O
Russian Federation	52	O
International average	**51**	
Lebanon	48	O
Slovak Republic	47	O
Moldova, Republic of	47	O
Italy	46	▼
Macedonia, Republic of	45	▼
Bulgaria	44	▼
Palestinian Nat'l Auth.	43	▼
Armenia	43	▼
Botswana	39	▼
Indonesia	38	▼
Bahrain	38	▼
Jordan	38	▼
Chile	37	▼
Egypt	36	▼
Philippines	33	▼
Tunisia	31	▼
Morocco	31	▼
South Africa	30	▼
Iran, Islamic Republic of	26	▼
Saudi Arabia	24	▼

Correct Response:	B

Country average vs. International average:	
Higher	▲
Not different	O
Lower	▼

Content Domain	Main Topic	Cognitive Domain
ALGEBRA	Equations and Formulas	Solving Routine Problems

If *a/b* equals 70

If $\dfrac{a}{b} = 70$, then $\dfrac{a}{2b} =$

- (A) 35
- (B) 68
- (C) 72
- (D) 140

Item Number: M032210

Overall Percent Correct

Country	Percent	
Chinese Taipei	70	▲
Singapore	69	▲
Korea, Republic of	69	▲
Hong Kong, SAR	68	▲
Estonia	61	▲
Russian Federation	60	▲
Hungary	58	▲
Serbia and Montenegro	57	▲
Japan	55	▲
Romania	53	▲
Latvia	53	▲
Belgium (Flemish)	52	▲
Lithuania	51	▲
Slovak Republic	47	▲
Bulgaria	46	▲
Israel	44	▲
Italy	44	O
Macedonia, Republic of	42	O
Moldova, Republic of	41	O
Indonesia	41	O
Armenia	41	O
International average	**40**	
Netherlands	40	O
Sweden	38	O
United States	38	O
England	38	O
Lebanon	37	O
Slovenia	37	O
Australia	37	O
Malaysia	36	O
New Zealand	32	▼
Scotland	30	▼
Cyprus	30	▼
Tunisia	30	▼
Philippines	27	▼
Iran, Islamic Republic of	27	▼
Egypt	26	▼
Botswana	25	▼
Morocco	24	▼
Jordan	23	▼
Norway	22	▼
Chile	22	▼
Palestinian Nat'l Auth.	21	▼
South Africa	17	▼
Saudi Arabia	15	▼
Bahrain	15	▼

Correct Response:	A

Country average vs. International average:	
Higher	▲
Not different	O
Lower	▼

Content Domain	Main Topic	Cognitive Domain
ALGEBRA	Equations and Formulas	Solving Routine Problems

7 oranges and 4 lemons cost 43 zeds

At a market, 7 oranges and 4 lemons cost 43 zeds, and 11 oranges and 12 lemons cost 79 zeds. Using x to represent the cost of an orange and y to represent the cost of a lemon, write two equations that could be used to find the values of x and y.

Equation 1: _____

Equation 2: _____

Item Number: M032545

SCORING

Correct Response

- $7x + 4y = 43$ (or equivalent) and $11x + 12y = 79$ (or equivalent).

Incorrect Response

- One equation correct and one incorrect/missing.
- Other incorrect (including crossed out/erased, stray marks, illegible, or off task).

Overall Percent Correct

Hong Kong, SAR	72	▲
Japan	67	▲
Chinese Taipei	62	▲
Armenia	61	▲
Singapore	60	▲
Korea, Republic of	57	▲
Estonia	46	▲
Serbia and Montenegro	43	▲
Israel	41	▲
Russian Federation	39	▲
Romania	38	▲
Jordan	37	▲
Hungary	34	▲
Bulgaria	33	▲
Moldova, Republic of	27	O
Egypt	27	O
Slovak Republic	25	O
Macedonia, Republic of	24	O
International average	**24**	
Belgium (Flemish)	22	O
Iran, Islamic Republic of	20	O
United States	20	▼
Latvia	20	▼
Scotland	20	▼
Lithuania	19	▼
England	18	▼
Bahrain	16	▼
Indonesia	16	▼
Malaysia	15	▼
Sweden	15	▼
Australia	15	▼
Italy	14	▼
New Zealand	12	▼
Cyprus	11	▼
Slovenia	9	▼
Morocco	9	▼
Netherlands	9	▼
Philippines	7	▼
Palestinian Nat'l Auth.	6	▼
Lebanon	6	▼
Botswana	5	▼
Saudi Arabia	4	▼
Norway	3	▼
Chile	3	▼
Ghana	2	▼
South Africa	2	▼
Tunisia	1	▼

Country average vs. International average:	
Higher	▲
Not different	O
Lower	▼

7 oranges and 4 lemons cost 43 zeds (continued)

Item Number: M032545

Student Responses

Correct Response:

At a market, 7 oranges and 4 lemons cost 43 zeds, and 11 oranges and 12 lemons cost 79 zeds. Using x to represent the cost of an orange and y to represent the cost of a lemon, write two equations that could be used to find the values of x and y.

Equation 1: $X = \dfrac{43 - 4y}{7}$

Equation 2: $y = \dfrac{79 - 11x}{12}$

Incorrect Response:

At a market, 7 oranges and 4 lemons cost 43 zeds, and 11 oranges and 12 lemons cost 79 zeds. Using x to represent the cost of an orange and y to represent the cost of a lemon, write two equations that could be used to find the values of x and y.

Equation 1: $7x + 4y = z$

Equation 2: $11x + 12y = z$

Content Domain	Main Topic	Cognitive Domain
ALGEBRA	Equations and Formulas	Using Concepts

Objects balanced on scale

The objects on the scale make it balance exactly. On the left pan there is a 1 kg weight (mass) and half a brick. On the right pan there is one brick.
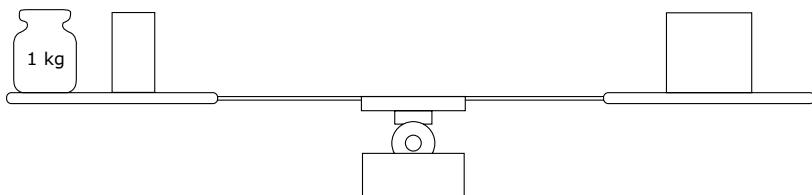
What is the weight (mass) of one brick?

Ⓐ 0.5 kg

Ⓑ 1 kg

Ⓒ 2 kg

Ⓓ 3 kg

Item Number: M012002

Overall Percent Correct

Country	Percent	
Estonia	86	▲
Russian Federation	85	▲
Netherlands	83	▲
Japan	82	▲
Singapore	82	▲
Hong Kong, SAR	81	▲
Italy	79	▲
Belgium (Flemish)	78	▲
Korea, Republic of	78	▲
Slovak Republic	78	▲
Sweden	78	▲
Latvia	77	▲
Australia	76	▲
Chinese Taipei	76	▲
England	76	▲
Lithuania	76	▲
Hungary	75	▲
New Zealand	75	▲
Malaysia	74	▲
Scotland	74	▲
United States	74	▲
Bulgaria	73	▲
Slovenia	73	▲
Moldova, Republic of	68	▲
Israel	67	▲
Norway	66	O
Romania	66	O
Serbia and Montenegro	65	O
Cyprus	64	O
International average	**63**	
Iran, Islamic Republic of	63	O
Macedonia, Republic of	63	O
Jordan	52	▼
Armenia	51	▼
Tunisia	51	▼
Chile	50	▼
Morocco	49	▼
Palestinian Nat'l Auth.	45	▼
Bahrain	42	▼
Egypt	42	▼
Indonesia	41	▼
Lebanon	41	▼
Botswana	36	▼
Philippines	34	▼
Saudi Arabia	31	▼
South Africa	28	▼
Ghana	26	▼

Correct Response:	C

Country average vs. International average:	
Higher	▲
Not different	O
Lower	▼

Content Domain	Main Topic	Cognitive Domain
ALGEBRA	Equations and Formulas	Using Concepts

If *y* equals 3*x* plus 2

If $y = 3x + 2$, which of these expresses x in terms of y?

(A) $\quad x = \dfrac{y-2}{3}$

(B) $\quad x = \dfrac{y+2}{3}$

(C) $\quad x = \dfrac{y}{3} - 2$

(D) $\quad x = \dfrac{y}{3} + 2$

Item Number: M032046

Overall Percent Correct

Singapore	61	▲
Hong Kong, SAR	60	▲
Korea, Republic of	52	▲
Chinese Taipei	48	▲
Japan	46	▲
Armenia	45	▲
Russian Federation	44	▲
Romania	44	▲
Serbia and Montenegro	43	▲
Moldova, Republic of	34	▲
Bulgaria	34	▲
Malaysia	31	▲
Belgium (Flemish)	31	▲
Indonesia	30	▲
Macedonia, Republic of	30	▲
Estonia	27	O
United States	26	O
International average	**25**	
Lebanon	24	O
Israel	24	O
Jordan	23	O
Philippines	22	▼
Egypt	21	▼
Lithuania	21	▼
Hungary	21	▼
Latvia	21	▼
Cyprus	20	▼
Italy	20	▼
England	20	▼
Slovak Republic	19	▼
Australia	18	▼
Netherlands	17	▼
Tunisia	17	▼
Iran, Islamic Republic of	16	▼
Palestinian Nat'l Auth.	15	▼
Bahrain	15	▼
Slovenia	15	▼
New Zealand	14	▼
Scotland	12	▼
Morocco	12	▼
Saudi Arabia	12	▼
Sweden	11	▼
Botswana	10	▼
South Africa	10	▼
Chile	9	▼
Norway	6	▼

Correct Response: A

Country average vs. International average:

Higher	▲
Not different	O
Lower	▼

Content Domain	Main Topic	Cognitive Domain
ALGEBRA	Patterns	Reasoning

Number of matchsticks continuing pattern

Matchsticks are arranged as shown in the figures.

Figure 1   Figure 2   Figure 3

If the pattern is continued, how many matchsticks would be used to make Figure 10?

Ⓐ 30

Ⓑ 33

Ⓒ 36

Ⓓ 39

Ⓔ 42

Item Number: M012017

Overall Percent Correct

Korea, Republic of	78	▲
Singapore	73	▲
Chinese Taipei	71	▲
Japan	67	▲
Hong Kong, SAR	66	▲
Belgium (Flemish)	64	▲
New Zealand	63	▲
Australia	62	▲
Scotland	61	▲
Hungary	61	▲
Slovak Republic	60	▲
Netherlands	59	▲
Russian Federation	59	▲
Sweden	59	▲
Estonia	58	▲
Israel	58	▲
Malaysia	57	▲
United States	56	▲
Slovenia	56	▲
Lithuania	56	▲
Moldova, Republic of	55	▲
Italy	54	▲
Bulgaria	53	O
England	52	O
Romania	51	O
Serbia and Montenegro	51	O
Macedonia, Republic of	50	O
Latvia	49	O
Cyprus	49	O
International average	**48**	
Armenia	47	O
Norway	46	O
Chile	43	▼
Philippines	41	▼
Bahrain	37	▼
Iran, Islamic Republic of	34	▼
Jordan	33	▼
Lebanon	32	▼
Egypt	30	▼
Tunisia	29	▼
Indonesia	29	▼
Palestinian Nat'l Auth.	29	▼
Botswana	27	▼
Morocco	26	▼
South Africa	24	▼
Saudi Arabia	16	▼
Ghana	16	▼

Correct Response:	B

Country average vs. International average:	
Higher	▲
Not different	O
Lower	▼

Content Domain	Main Topic	Cognitive Domain
ALGEBRA	Patterns	Reasoning

Numbers in sequence increasing by 4

The numbers in the sequence 7, 11, 15, 19, 23, … increase by four. The numbers in the sequence 1, 10, 19, 28, 37, … increase by nine. The number 19 is in both sequences. If the two sequences are continued, what is the next number that is in BOTH the first and the second sequences?

Answer: _____

Item Number: M022008

SCORING

Correct

• 55

Incorrect Response

• 27 AND 46 [23 + 4 and 37 + 9]

• Either 27 OR 46

• Other incorrect (including crossed out/erased, stray marks, illegible, or off task).

Overall Percent Correct

Armenia	63	▲
Korea, Republic of	51	▲
Singapore	50	▲
Hungary	49	▲
Japan	46	▲
United States	45	▲
Italy	45	▲
Belgium (Flemish)	43	▲
Slovenia	41	▲
Australia	39	▲
Hong Kong, SAR	39	▲
Slovak Republic	39	▲
Chinese Taipei	39	▲
Bulgaria	38	▲
Estonia	38	▲
Netherlands	38	▲
Scotland	37	▲
Sweden	35	▲
Malaysia	35	▲
England	34	O
Tunisia	34	O
New Zealand	33	O
Lithuania	33	O
Russian Federation	32	O
Romania	32	O
Israel	31	O
Cyprus	31	O
Latvia	31	O
International average	**31**	
Moldova, Republic of	30	O
Iran, Islamic Republic of	25	▼
Macedonia, Republic of	24	▼
Chile	24	▼
Indonesia	23	▼
Serbia and Montenegro	23	▼
Bahrain	22	▼
Morocco	20	▼
Norway	20	▼
Palestinian Nat'l Auth.	19	▼
Botswana	18	▼
Lebanon	17	▼
Jordan	16	▼
Egypt	14	▼
Philippines	14	▼
Saudi Arabia	8	▼
South Africa	6	▼
Ghana	4	▼

Country average vs. International average:	
Higher	▲
Not different	O
Lower	▼

Numbers in sequence increasing by 4 (continued)

Item Number: M022008

Student Responses

Correct Response:

The numbers in the sequence 7, 11, 15, 19, 23, ... increase by four. The numbers in the sequence 1, 10, 19, 28, 37, ... increase by nine. The number 19 is in both sequences. If the two sequences are continued, what is the next number that is in BOTH the first and the second sequences?

Answer: __55__

7, 11, 15, 19, 23, 27, 31, 35, 39, 43, 47, 51, ⦿55, 59, 63 67, 71

1, 10, 19, 28, 37, 46, ⦿55

Incorrect Response:

The numbers in the sequence 7, 11, 15, 19, 23, ... increase by four. The numbers in the sequence 1, 10, 19, 28, 37, ... increase by nine. The number 19 is in both sequences. If the two sequences are continued, what is the next number that is in BOTH the first and the second sequences?

Answer: __46__

39
46

Content Domain	Main Topic	Cognitive Domain
A. ALGEBRA	**Patterns**	**Solving Routine Problems**
B. ALGEBRA	Patterns	Solving Routine Problems
C. ALGEBRA	Patterns	Reasoning

Sequence of figures with triangles: fill table

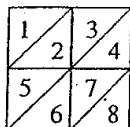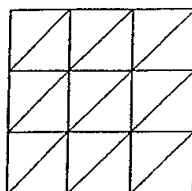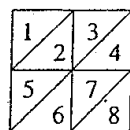The three figures below are divided into small congruent triangles.
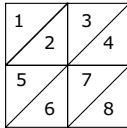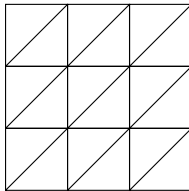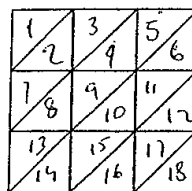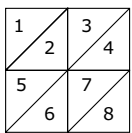

Figure 1   Figure 2   Figure 3

A. Complete the table below. First, fill in how many small triangles make up Figure 3. Then, find the number of small triangles that would be needed for the 4th figure if the sequence of figures is extended.

Figure	Number of Small Triangles
1	2
2	8
3	
4	

B. The sequence of figures is extended to the 7th figure. How many small triangles would be needed for Figure 7?

Answer: _____

C. The sequence of figures is extended to the 50th figure. Explain a way to find the number of small triangles in the 50th figure that does not involve drawing it and counting the number of triangles.

Item Number: M022261A

SCORING

Correct Response
• 18 AND 32

Incorrect Response
• 18 and any number other than 32.
• 18 and no numerical response for the 4th figure.
• Other incorrect (including crossed out/erased, stray marks, illegible, or off task).

Overall Percent Correct

Korea, Republic of	78	▲
Singapore	74	▲
Japan	74	▲
Hong Kong, SAR	72	▲
Chinese Taipei	69	▲
Netherlands	59	▲
Australia	57	▲
England	57	▲
New Zealand	55	▲
Armenia	53	▲
Scotland	53	▲
Belgium (Flemish)	51	▲
Hungary	50	▲
United States	50	▲
Estonia	50	▲
Sweden	49	▲
Slovenia	42	▲
Malaysia	42	▲
Israel	42	▲
Russian Federation	41	▲
Slovak Republic	40	O
Latvia	38	O
Lithuania	38	O
International average	**36**	
Italy	35	O
Norway	34	O
Romania	31	O
Moldova, Republic of	31	▼
Serbia and Montenegro	31	▼
Cyprus	30	▼
Bulgaria	30	▼
Macedonia, Republic of	25	▼
Chile	23	▼
Jordan	21	▼
Indonesia	20	▼
Palestinian Nat'l Auth.	17	▼
Philippines	17	▼
Morocco	16	▼
Bahrain	16	▼
Iran, Islamic Republic of	15	▼
Egypt	15	▼
Lebanon	12	▼
Botswana	11	▼
South Africa	6	▼
Tunisia	5	▼
Saudi Arabia	4	▼
Ghana	3	▼

Country average vs. International average:

Higher	▲
Not different	O
Lower	▼

Sequence of figures with triangles: fill table (continued)

Item Number: M022261A

Student Responses

Correct Response:

The three figures below are divided into small congruent triangles.

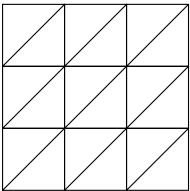Figure 1   Figure 2   Figure 3

a) Complete the table below. First, fill in how many small triangles make up Figure 3. Then, find the number of small triangles that would be needed for the 4th figure if the sequence of figures is extended.

Figure	Number of small triangles
1	2
2	8
3	18
4	32

Incorrect Response:

The three figures below are divided into small congruent triangles.

Figure 1   Figure 2   Figure 3

a) Complete the table below. First, fill in how many small triangles make up Figure 3. Then, find the number of small triangles that would be needed for the 4th figure if the sequence of figures is extended.

Figure	Number of small triangles
1	2
2	8
3	18
4	25

Content Domain	Main Topic	Cognitive Domain
A. ALGEBRA	Patterns	Solving Routine Problems
B. ALGEBRA	**Patterns**	**Solving Routine Problems**
C. ALGEBRA	Patterns	Reasoning

Sequence of figures with triangles: 7th figure

The three figures below are divided into small congruent triangles.

Figure 1   Figure 2   Figure 3

A. Complete the table below. First, fill in how many small triangles make up Figure 3. Then, find the number of small triangles that would be needed for the 4th figure if the sequence of figures is extended.

Figure	Number of Small Triangles
1	2
2	8
3	
4	

B. The sequence of figures is extended to the 7th figure. How many small triangles would be needed for Figure 7?

Answer: _____

C. The sequence of figures is extended to the 50th figure. Explain a way to find the number of small triangles in the 50th figure that does not involve drawing it and counting the number of triangles.

Item Number: M022261B

SCORING

Correct Response

• 98

Incorrect Response

• 49 [Multiplies 7 x 7]

• 58 [Series is 2, 8, 18, 28, 38…7th term is 58]

• Other incorrect (including crossed out/erased, stray marks, illegible, or off task).

Overall Percent Correct

Korea, Republic of	60	▲
Singapore	56	▲
Chinese Taipei	56	▲
Hong Kong, SAR	56	▲
Japan	55	▲
Armenia	42	▲
Netherlands	40	▲
Australia	33	▲
Scotland	31	▲
Hungary	30	▲
United States	30	▲
New Zealand	29	▲
Belgium (Flemish)	28	▲
Sweden	26	▲
England	25	O
Malaysia	24	O
Estonia	24	O
Italy	24	O
Russian Federation	23	O
Slovenia	22	O
Slovak Republic	22	O
International average	**22**	
Moldova, Republic of	20	O
Israel	20	O
Lithuania	19	O
Romania	19	O
Latvia	19	O
Serbia and Montenegro	19	O
Cyprus	17	▼
Bulgaria	16	▼
Indonesia	15	▼
Norway	14	▼
Jordan	12	▼
Philippines	11	▼
Palestinian Nat'l Auth.	11	▼
Macedonia, Republic of	10	▼
Chile	9	▼
Egypt	9	▼
Bahrain	8	▼
Iran, Islamic Republic of	7	▼
Morocco	7	▼
Lebanon	6	▼
Botswana	5	▼
South Africa	4	▼
Tunisia	2	▼
Ghana	2	▼
Saudi Arabia	0	▼

Country average vs. International average:

Higher	▲
Not different	O
Lower	▼

Sequence of figures with triangles: 7th figure (continued)

Item Number: M022261B

Student Responses

Correct Response:

The three figures below are divided into small congruent triangles.

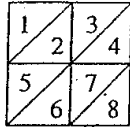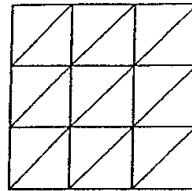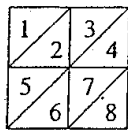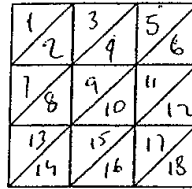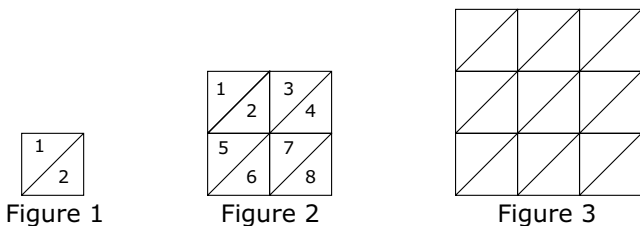Figure 1   Figure 2   Figure 3

b) The sequence of figures is extended to the 7th figure. How many small
    triangles would be needed for Figure 7?

Answer: _____ *98* _____

Incorrect Response:

The three figures below are divided into small congruent triangles.

Figure 1   Figure 2   Figure 3

b) The sequence of figures is extended to the 7th figure. How many small
    triangles would be needed for Figure 7?

58

Answer: _____

Content Domain	Main Topic	Cognitive Domain
A. ALGEBRA	Patterns	Solving Routine Problems
B. ALGEBRA	Patterns	Solving Routine Problems
C. ALGEBRA	**Patterns**	**Reasoning**

Sequence of figures with triangles: 50th figure

The three figures below are divided into small congruent triangles.

Figure 1   Figure 2   Figure 3

A. Complete the table below. First, fill in how many small triangles make up Figure 3. Then, find the number of small triangles that would be needed for the 4th figure if the sequence of figures is extended.

Figure	Number of Small Triangles
1	2
2	8
3	
4	

B. The sequence of figures is extended to the 7th figure. How many small triangles would be needed for Figure 7?

Answer: _____

C. The sequence of figures is extended to the 50th figure. Explain a way to find the number of small triangles in the 50th figure that does not involve drawing it and counting the number of triangles.

Item Number: M022261C

SCORING

Correct Response
- Correct general (i.e., literal) expression, e.g., 2n2 , or equivalent expressed in words.
- 2 x 502 OR 2 x 50 x 50 OR 100 x 50 OR (50 + 50) x 50 OR equivalent expressed in words (disregard errors in computation).

Partial Response
- Derives answer (5000) without showing work.
- Other partially correct.

Incorrect Response
- 50 x 2 OR 100
- 50 x 50 OR 2,500
- Other incorrect (including crossed out/erased, stray marks, illegible, or off task).

Overall Percent Correct

Chinese Taipei	49	▲
Korea, Republic of	48	▲
Hong Kong, SAR	45	▲
Singapore	44	▲
Japan	44	▲
Netherlands	36	▲
Australia	26	▲
Hungary	24	▲
Scotland	22	▲
Belgium (Flemish)	21	▲
England	20	▲
United States	19	▲
Sweden	17	▲
New Zealand	16	O
Estonia	15	O
Slovak Republic	14	O
International average	**14**	
Italy	14	O
Latvia	13	O
Slovenia	13	O
Serbia and Montenegro	11	▼
Lithuania	11	▼
Romania	11	O
Malaysia	10	▼
Israel	10	▼
Cyprus	10	▼
Norway	9	▼
Russian Federation	9	▼
Armenia	8	▼
Indonesia	7	▼
Chile	6	▼
Jordan	5	▼
Egypt	5	▼
Palestinian Nat'l Auth.	5	▼
Macedonia, Republic of	4	▼
Philippines	4	▼
Bulgaria	4	▼
Bahrain	4	▼
Iran, Islamic Republic of	3	▼
Morocco	2	▼
Botswana	2	▼
South Africa	1	▼
Tunisia	1	▼
Lebanon	1	▼
Ghana	1	▼
Saudi Arabia	0	▼
Moldova, Republic of	0	▼

Country average vs. International average:

Higher	▲
Not different	O
Lower	▼

Sequence of figures with triangles/50th figure (continued)

Item Number: M022261C

Student Responses

Correct Response:

The three figures below are divided into small congruent triangles.

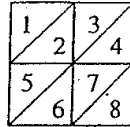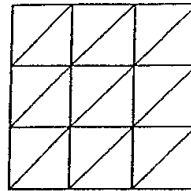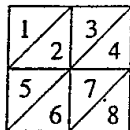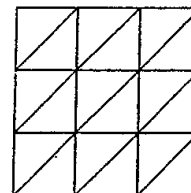Figure 1   Figure 2   Figure 3

c) The sequence of figures is extended to the 50th figure. Explain a way to find the number of small triangles in the 50th figure that does not involve drawing it and counting the number of triangles.

5000 Multiply the figure by itself and then multiply the answer you get by two.

Partial Response:

The three figures below are divided into small congruent triangles.
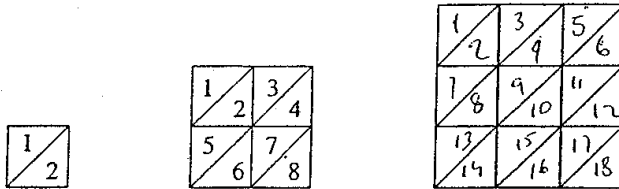

Figure 1   Figure 2   Figure 3

c) The sequence of figures is extended to the 50th figure. Explain a way to find the number of small triangles in the 50th figure that does not involve drawing it and counting the number of triangles.

5000

Sequence of figures with triangles/50th figure (continued)

Item Number: M022261C

Student Responses (continued)

Incorrect Response:

The three figures below are divided into small congruent triangles.

Figure 1   Figure 2   Figure 3

c) The sequence of figures is extended to the 50th figure. Explain a way to find the number of small triangles in the 50th figure that does not involve drawing it and counting the number of triangles.

(handwritten) 50×50÷2=1975 (going up in add numbers 3,5,7,9,11,13)

Content Domain	Main Topic	Cognitive Domain
ALGEBRA	Patterns	Using Concepts

Geometry tiling: identify cell with letter

If the pattern on the grid below was continued, what letter would identify the orientation of the tile in the cell labeled **X**?
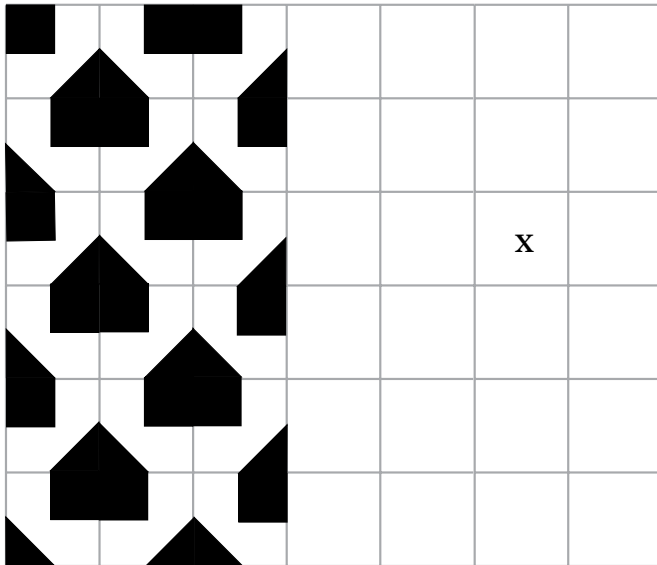
Answer: _____

Item Number: M032744

SCORING

Correct Response

• D (including drawing of tile D).

Incorrect Response

• A, B, or C (including drawings).

• Other incorrect (including crossed out/erased, stray marks, illegible, or off task).

Overall Percent Correct

Japan	73	▲
Korea, Republic of	66	▲
Singapore	62	▲
Sweden	57	▲
Hong Kong, SAR	57	▲
Netherlands	55	▲
Chinese Taipei	55	▲
Estonia	55	▲
Hungary	54	▲
Scotland	54	▲
Australia	53	▲
New Zealand	51	▲
Belgium (Flemish)	50	▲
United States	48	▲
England	47	▲
Slovak Republic	46	▲
Latvia	45	▲
Malaysia	44	▲
Slovenia	43	▲
Russian Federation	39	▲
Norway	36	O
Italy	34	O
Israel	34	O
International average	**32**	
Bulgaria	30	O
Romania	29	O
Lithuania	27	O
Cyprus	24	▼
Chile	23	▼
Bahrain	22	▼
Serbia and Montenegro	20	▼
Jordan	16	▼
Moldova, Republic of	15	▼
Philippines	14	▼
Iran, Islamic Republic of	13	▼
Macedonia, Republic of	13	▼
Indonesia	11	▼
Lebanon	10	▼
South Africa	8	▼
Saudi Arabia	8	▼
Morocco	7	▼
Egypt	7	▼
Botswana	7	▼
Armenia	6	▼
Palestinian Nat'l Auth.	3	▼
Tunisia	2	▼

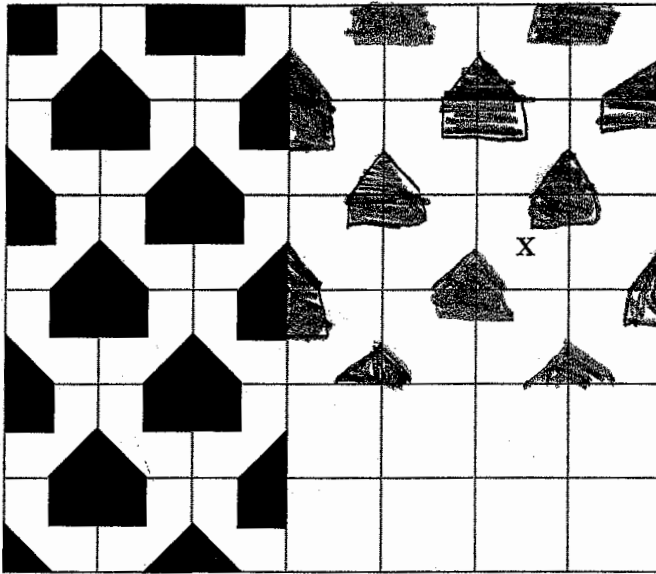| Country average vs. International average:	
Higher	▲
Not different	O
Lower	▼

Geometry tiling: identify cell with letter (continued)

Item Number: M032744

Student Responses

Correct Response:

If the pattern on the grid below was continued, what letter would identify the orientation of the tile in the cell labeled **X**?

Answer: _____

Geometry tiling: identify cell with letter (continued)

Item Number: M032744

Student Responses (continued)

Incorrect Response:

If the pattern on the grid below was continued, what letter would identify the orientation of the tile in the cell labeled **X**?
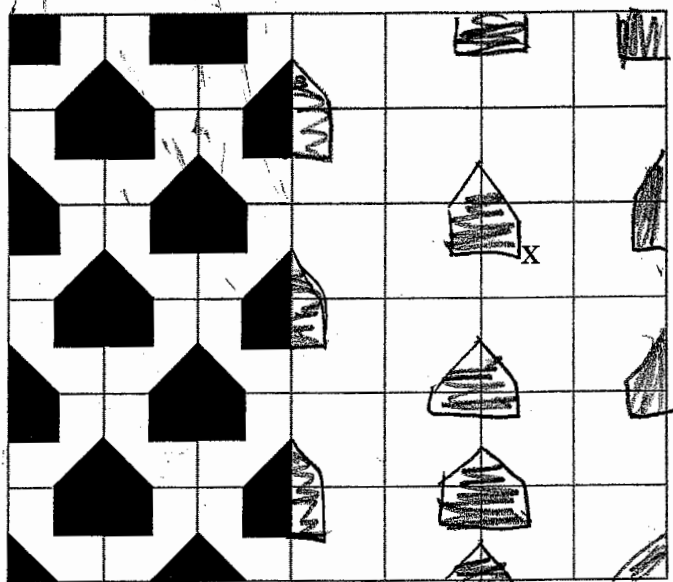

Answer: Pentagon

Content Domain	Main Topic	Cognitive Domain
ALGEBRA	Relationships	Reasoning

Sets of ordered pairs of numbers

(3, 6) , (6, 15) , (8, 21)

Which of these describes how to get the second number from the first number in every ordered pair above?

- (A) Add 3
- (B) Subtract 3
- (C) Multiply by 2
- (D) Multiply by 2 and then add 3
- (E) Multiply by 3 and then subtract 3

Item Number: M012029

Correct Response: | E

Overall Percent Correct

Country		
Korea, Republic of	85	▲
Japan	76	▲
Hungary	75	▲
Estonia	74	▲
Chinese Taipei	71	▲
Singapore	71	▲
Hong Kong, SAR	71	▲
Latvia	71	▲
Australia	70	▲
Russian Federation	69	▲
Scotland	69	▲
United States	68	▲
Netherlands	68	▲
New Zealand	67	▲
England	64	▲
Lithuania	64	▲
Belgium (Flemish)	62	▲
Serbia and Montenegro	58	▲
Israel	57	▲
Slovak Republic	56	▲
Bulgaria	54	O
Slovenia	53	O
Italy	51	O
Malaysia	51	O
International average	**50**	
Jordan	46	▼
Sweden	45	▼
Macedonia, Republic of	42	▼
Romania	42	▼
Norway	40	▼
Moldova, Republic of	39	▼
Bahrain	38	▼
Botswana	36	▼
Iran, Islamic Republic of	35	▼
Armenia	34	▼
Egypt	33	▼
Indonesia	33	▼
Palestinian Nat'l Auth.	33	▼
Philippines	31	▼
Saudi Arabia	26	▼
Cyprus	25	▼
Chile	24	▼
Ghana	23	▼
Lebanon	23	▼
South Africa	21	▼

Country average vs. International average:

Higher	▲
Not different	O
Lower	▼

Content Domain	Main Topic	Cognitive Domain
ALGEBRA	Relationships	Solving Routine Problems

Intersection point of distance/time graphs

The graph represents the distance and time of a hike taken by Joshua and Liam.
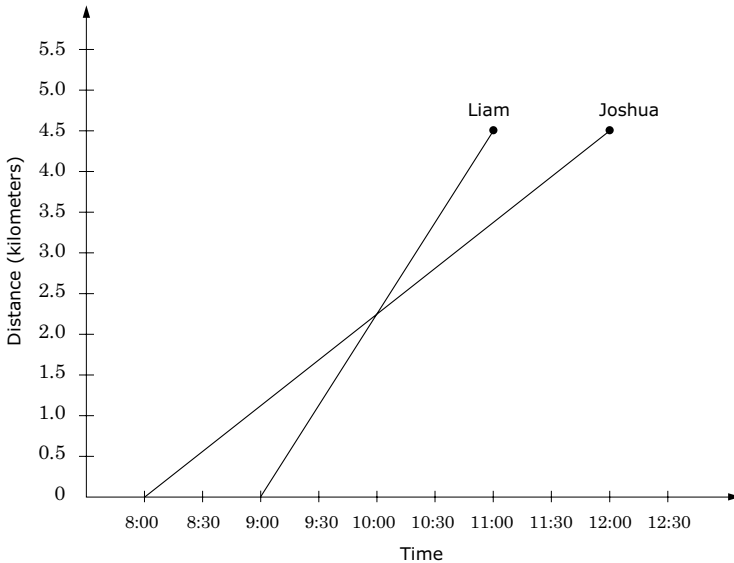
If they both started from the same place and walked in the same direction, at what time did they meet?

Ⓐ 8:00

Ⓑ 8:30

Ⓒ 9:00

Ⓓ 10:00

Ⓔ 11:00

Item Number: M012025

Overall Percent Correct

Japan	96	▲
Hong Kong, SAR	90	▲
Korea, Republic of	89	▲
Estonia	88	▲
Singapore	87	▲
Hungary	84	▲
Lithuania	84	▲
Sweden	84	▲
Russian Federation	81	▲
Netherlands	81	▲
Chinese Taipei	81	▲
England	81	▲
United States	80	▲
Slovenia	79	▲
Latvia	78	▲
Italy	75	▲
Australia	75	▲
Belgium (Flemish)	73	▲
Scotland	73	▲
New Zealand	72	▲
Israel	72	▲
Slovak Republic	70	▲
Serbia and Montenegro	68	▲
Bulgaria	67	▲
Norway	64	O
International average	**62**	
Cyprus	58	O
Romania	58	O
Macedonia, Republic of	53	▼
Malaysia	53	▼
Jordan	52	▼
Armenia	52	▼
Chile	51	▼
Bahrain	50	▼
Egypt	47	▼
Moldova, Republic of	47	▼
Indonesia	46	▼
Lebanon	42	▼
Botswana	41	▼
Palestinian Nat'l Auth.	39	▼
Saudi Arabia	37	▼
Philippines	31	▼
Iran, Islamic Republic of	26	▼
Ghana	21	▼
South Africa	19	▼
Tunisia	14	▼

Correct Response:	D

Country average vs. International average:

Higher	▲
Not different	O
Lower	▼