

Table 403.—Eighth-grade students' perceptions about mathematics and hours spent on leisure activities, by country: 1999

Country	Students reporting that mathematics is not one of their strengths								Average hours each day ¹					
	Strongly disagree		Disagree		Agree		Strongly agree		Watching TV or videos	Playing or talking with friends	Doing jobs at home	Playing sports	Reading for enjoyment	Playing computer games
	Percent	Mean score	Percent	Mean score	Percent	Mean score	Percent	Mean score						
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Australia	18 (1.1)	573 (5.8)	36 (1.0)	546 (5.3)	28 (0.9)	499 (5.2)	17 (0.8)	478 (5.4)	2.3 (0.05)	1.5 (0.03)	0.9 (0.03)	1.6 (0.03)	0.6 (0.02)	0.8 (0.05)
Belgium (Flemish)	17 (0.8)	598 (5.4)	30 (0.9)	581 (4.8)	31 (1.0)	540 (4.5)	21 (0.9)	526 (4.0)	2.1 (0.04)	1.8 (0.05)	1.0 (0.04)	1.8 (0.07)	0.6 (0.02)	0.9 (0.04)
Bulgaria	18 (1.9)	560 (10.6)	26 (1.2)	541 (6.3)	30 (1.4)	494 (4.9)	25 (1.5)	476 (5.1)	2.8 (0.05)	2.6 (0.06)	1.9 (0.04)	1.5 (0.05)	1.0 (0.03)	0.8 (0.05)
Canada	26 (1.2)	577 (3.2)	31 (0.7)	542 (3.0)	26 (1.0)	502 (4.7)	17 (0.8)	485 (3.4)	2.2 (0.03)	2.1 (0.04)	1.1 (0.03)	1.9 (0.03)	0.7 (0.04)	0.8 (0.03)
Chile	15 (0.6)	444 (8.7)	27 (0.7)	408 (4.7)	35 (0.7)	382 (4.7)	23 (0.7)	367 (5.5)	2.7 (0.05)	1.9 (0.04)	1.5 (0.03)	2.0 (0.03)	0.7 (0.02)	0.6 (0.05)
Chinese Taipei	16 (0.6)	646 (6.1)	28 (0.7)	623 (4.3)	34 (0.7)	564 (4.5)	23 (0.7)	533 (3.9)	2.0 (0.04)	1.3 (0.03)	1.0 (0.02)	1.2 (0.02)	0.9 (0.02)	0.9 (0.04)
Cyprus	23 (1.0)	525 (4.3)	34 (0.8)	492 (2.8)	27 (0.9)	445 (2.9)	16 (0.6)	438 (4.3)	2.2 (0.04)	1.8 (0.04)	0.9 (0.03)	1.4 (0.04)	0.7 (0.02)	1.0 (0.04)
Czech Republic	12 (0.9)	567 (6.9)	35 (1.2)	541 (5.0)	36 (1.1)	500 (4.7)	16 (0.9)	486 (5.8)	2.3 (0.05)	3.0 (0.07)	1.2 (0.03)	2.0 (0.05)	1.0 (0.04)	0.9 (0.05)
England	19 (0.9)	539 (6.9)	40 (1.2)	512 (4.5)	28 (1.2)	471 (4.8)	13 (0.8)	458 (6.3)	2.5 (0.08)	2.5 (0.08)	0.8 (0.02)	1.6 (0.04)	0.6 (0.02)	1.2 (0.05)
Finland	17 (0.8)	570 (4.4)	34 (1.0)	543 (3.8)	31 (1.1)	498 (2.6)	18 (1.0)	474 (3.7)	2.5 (0.04)	3.2 (0.07)	0.9 (0.02)	1.6 (0.04)	0.8 (0.02)	1.1 (0.04)
Hong Kong	11 (0.5)	619 (5.5)	31 (0.8)	606 (3.9)	39 (0.7)	573 (4.4)	20 (0.8)	549 (5.0)	2.4 (0.04)	1.3 (0.04)	0.6 (0.01)	1.0 (0.03)	0.8 (0.02)	1.0 (0.04)
Hungary	15 (0.7)	598 (5.7)	34 (1.1)	552 (4.7)	40 (1.1)	503 (3.7)	11 (0.7)	493 (5.9)	2.7 (0.05)	2.0 (0.05)	1.6 (0.04)	1.5 (0.04)	0.8 (0.02)	1.0 (0.05)
Indonesia	6 (0.4)	411 (10.6)	31 (0.8)	418 (5.2)	53 (1.0)	404 (4.6)	10 (0.5)	359 (10.7)	1.7 (0.05)	1.1 (0.02)	1.9 (0.03)	1.0 (0.02)	0.9 (0.02)	0.2 (0.05)
Iran, Islamic Republic	26 (1.0)	459 (4.6)	35 (0.7)	426 (3.3)	25 (0.9)	404 (4.5)	14 (0.6)	397 (5.2)	1.8 (0.04)	1.3 (0.04)	1.7 (0.04)	1.3 (0.06)	0.9 (0.02)	0.3 (0.04)
Israel	29 (1.0)	508 (4.2)	32 (0.8)	483 (4.5)	25 (0.8)	438 (4.0)	14 (0.7)	418 (6.3)	3.1 (0.05)	2.4 (0.04)	1.3 (0.05)	1.8 (0.05)	1.0 (0.03)	1.5 (0.05)
Italy	22 (0.9)	529 (5.6)	32 (0.9)	495 (3.6)	27 (0.8)	456 (4.9)	18 (0.9)	435 (5.0)	1.8 (0.03)	2.7 (0.05)	1.1 (0.03)	1.7 (0.03)	0.7 (0.02)	1.0 (0.03)
Japan	12 (0.5)	602 (4.9)	29 (0.7)	598 (2.7)	38 (0.6)	576 (2.7)	21 (0.7)	545 (3.3)	3.1 (0.05)	1.8 (0.04)	0.5 (0.02)	1.1 (0.03)	0.8 (0.02)	0.9 (0.05)
Jordan ²	27 (1.1)	491 (5.4)	29 (0.9)	446 (4.3)	26 (0.9)	401 (4.3)	17 (0.8)	386 (4.8)	1.7 (0.04)	1.1 (0.04)	1.3 (0.05)	1.4 (0.05)	1.4 (0.04)	0.8 (0.04)
Korea, Republic of	10 (0.5)	648 (3.9)	33 (0.7)	621 (3.0)	41 (0.8)	564 (2.7)	15 (0.5)	536 (3.6)	2.9 (0.04)	1.3 (0.03)	0.6 (0.01)	0.6 (0.02)	0.6 (0.01)	0.8 (0.04)
Latvia (Latvian-speaking schools)	10 (0.7)	572 (6.2)	28 (1.1)	534 (4.9)	41 (1.0)	487 (3.8)	20 (0.9)	470 (4.3)	2.8 (0.05)	2.6 (0.06)	1.7 (0.03)	1.3 (0.03)	0.9 (0.03)	0.7 (0.05)
Lithuania	11 (0.8)	536 (7.0)	35 (1.4)	508 (5.1)	42 (1.4)	461 (3.9)	12 (0.9)	436 (6.6)	2.4 (0.05)	2.4 (0.06)	1.6 (0.05)	1.0 (0.03)	0.7 (0.02)	0.6 (0.05)
Macedonia, Republic of	13 (0.6)	501 (7.2)	27 (0.9)	474 (5.3)	37 (1.0)	441 (5.4)	24 (1.1)	423 (4.9)	2.2 (0.05)	1.8 (0.05)	1.9 (0.04)	1.8 (0.05)	1.2 (0.04)	0.7 (0.05)
Malaysia	23 (0.9)	544 (5.4)	45 (0.9)	525 (4.6)	27 (1.0)	497 (5.1)	5 (0.3)	481 (6.6)	1.9 (0.05)	1.2 (0.03)	1.8 (0.03)	1.1 (0.02)	1.1 (0.02)	0.5 (0.05)
Moldova	17 (1.0)	506 (6.0)	44 (1.2)	477 (4.6)	29 (1.0)	455 (5.5)	10 (0.7)	440 (6.9)	2.6 (0.07)	1.9 (0.06)	3.2 (0.09)	1.4 (0.04)	1.5 (0.04)	1.0 (0.07)
Morocco ³	18 (0.7)	378 (6.1)	32 (1.2)	350 (5.9)	28 (0.9)	324 (4.2)	22 (0.7)	320 (6.0)	1.1 (0.03)	0.9 (0.03)	1.5 (0.03)	1.5 (0.04)	1.4 (0.05)	0.7 (0.03)
Netherlands	16 (0.8)	570 (7.4)	28 (1.4)	557 (7.9)	36 (1.5)	529 (8.2)	20 (1.0)	515 (9.2)	2.4 (0.10)	2.6 (0.09)	0.8 (0.04)	1.8 (0.06)	0.7 (0.04)	0.9 (0.10)
New Zealand	16 (0.8)	548 (6.7)	36 (1.1)	518 (5.4)	32 (0.9)	466 (4.7)	15 (0.8)	436 (5.1)	2.5 (0.05)	1.6 (0.04)	1.0 (0.03)	1.5 (0.04)	0.7 (0.02)	0.9 (0.05)
Philippines	14 (0.5)	374 (9.6)	37 (1.1)	368 (6.9)	31 (0.8)	337 (5.7)	17 (0.8)	309 (6.1)	1.7 (0.04)	1.2 (0.03)	2.4 (0.05)	1.6 (0.04)	1.6 (0.04)	0.7 (0.04)
Romania	11 (0.7)	517 (6.2)	26 (1.1)	498 (6.5)	44 (1.3)	466 (6.3)	19 (1.0)	450 (7.1)	2.2 (0.06)	1.6 (0.05)	2.0 (0.06)	1.2 (0.04)	1.0 (0.03)	0.6 (0.06)
Russian Federation	21 (0.9)	580 (5.8)	40 (0.9)	538 (5.6)	30 (1.2)	501 (7.3)	9 (0.6)	471 (10.0)	2.6 (0.05)	3.0 (0.05)	1.5 (0.03)	1.3 (0.03)	1.2 (0.03)	0.7 (0.05)
Singapore	16 (0.7)	631 (7.3)	37 (0.7)	614 (6.1)	33 (0.8)	593 (6.4)	13 (0.6)	575 (6.9)	2.4 (0.04)	1.5 (0.04)	0.9 (0.02)	1.5 (0.04)	1.0 (0.02)	1.1 (0.04)
Slovak Republic	12 (0.7)	586 (7.8)	34 (1.1)	554 (4.4)	40 (1.2)	516 (3.9)	14 (0.8)	498 (5.6)	2.5 (0.06)	2.7 (0.06)	1.6 (0.05)	1.9 (0.04)	0.7 (0.02)	0.6 (0.06)
Slovenia	24 (0.8)	583 (4.4)	40 (1.2)	542 (3.4)	24 (0.9)	490 (3.8)	12 (0.8)	471 (5.7)	2.3 (0.05)	1.8 (0.04)	1.2 (0.03)	1.6 (0.04)	0.7 (0.02)	0.9 (0.05)
South Africa	18 (0.6)	313 (8.5)	26 (1.0)	295 (12.4)	31 (0.8)	264 (6.8)	26 (0.9)	247 (5.2)	2.0 (0.07)	1.5 (0.04)	2.0 (0.04)	2.0 (0.05)	1.8 (0.05)	0.8 (0.07)
Thailand	7 (0.4)	515 (8.5)	34 (0.9)	490 (5.2)	46 (0.9)	454 (5.3)	13 (0.5)	435 (7.5)	2.1 (0.05)	1.6 (0.04)	1.6 (0.02)	1.5 (0.03)	1.0 (0.02)	0.4 (0.05)
Tunisia	25 (0.8)	476 (3.7)	31 (0.8)	452 (3.7)	25 (0.7)	432 (5.0)	19 (0.6)	428 (3.5)	2.0 (0.04)	1.3 (0.03)	1.7 (0.04)	1.9 (0.04)	1.4 (0.03)	0.9 (0.04)
Turkey ⁴	13 (0.5)	468 (5.9)	36 (0.8)	446 (4.8)	36 (0.8)	425 (3.8)	15 (0.6)	397 (6.4)	1.6 (0.04)	1.5 (0.03)	1.1 (0.04)	1.4 (0.03)	1.2 (0.03)	0.4 (0.04)
United States	26 (0.8)	547 (4.6)	33 (0.6)	517 (4.5)	24 (0.6)	478 (4.4)	18 (0.7)	455 (4.3)	2.5 (0.06)	2.4 (0.05)	1.1 (0.03)	1.9 (0.03)	0.6 (0.02)	0.9 (0.06)

¹ Average hours based on: No time = 0; less than 1 hour = .5; 1–2 hours = 1.5; 3–5 hours = 4; more than 5 hours = 7.

² Student response data on reading for enjoyment available for 70 to 84 percent of students.

³ Student response data available for 70 to 84 percent of students.

⁴ Student response data for playing computer games available for 70 to 84 percent of students.

NOTE: Data are for 8th grade or equivalent in most countries. Detail may not sum to totals due to rounding. Standard errors appear in parentheses.

SOURCE: International Association for the Evaluation of Educational Achievement, Third International Mathematics and Science Study, 1999, *TIMSS 1999 International Mathematics Report*, by Ina V.S. Mullis et al. Copyright © 2000 International Association for the Evaluation of Educational Achievement (IEA). (This table was prepared May 2001.)