

Exhibit 1.1.14: Relative Achievement in Mathematics Cognitive Domains

Country	Overall Mathematics Average Scale Score	Knowing (58 Items)		Applying (85 Items)		Reasoning (40 Items)	
		Average Scale Score	Difference from Overall Score	Average Scale Score	Difference from Overall Score	Average Scale Score	Difference from Overall Score
³ Singapore	615 (2.9)	624 (2.9)	10 (1.1) ▲	615 (2.9)	0 (0.8)	609 (3.0)	-6 (0.7) ▼
Chinese Taipei	607 (1.7)	619 (1.7)	12 (1.3) ▲	612 (1.8)	5 (1.3) ▲	589 (1.8)	-18 (0.7) ▼
Korea, Rep. of	594 (2.6)	600 (3.0)	5 (1.5) ▲	593 (2.6)	-1 (1.2)	592 (2.9)	-2 (1.5)
[†] Hong Kong SAR	594 (4.0)	598 (4.0)	4 (1.2) ▲	592 (4.2)	-2 (1.1)	595 (4.4)	1 (2.5)
Japan	591 (2.3)	591 (2.5)	1 (1.7)	597 (2.5)	6 (1.2) ▲	576 (2.5)	-15 (0.8) ▼
Macao SAR	582 (1.0)	582 (1.5)	0 (1.0)	583 (1.3)	1 (1.2)	582 (1.3)	0 (1.4)
² Lithuania	561 (2.9)	556 (2.8)	-4 (1.4) ▼	566 (2.9)	5 (1.2) ▲	554 (3.1)	-7 (0.8) ▼
³ Türkiye (5)	553 (4.1)	543 (4.9)	-10 (2.6) ▼	559 (4.4)	6 (1.2) ▲	551 (4.5)	-3 (1.4)
² England	552 (2.7)	558 (2.9)	6 (1.1) ▲	550 (2.7)	-2 (1.1)	550 (3.3)	-2 (2.0)
² Poland	546 (2.0)	539 (2.3)	-7 (1.4) ▼	547 (2.4)	1 (1.3)	550 (2.6)	4 (1.3) ▲
Ireland	546 (2.9)	551 (3.3)	5 (1.4) ▲	546 (3.0)	0 (1.0)	541 (2.9)	-5 (1.4) ▼
²⁼ Romania	542 (4.8)	538 (4.7)	-4 (1.6) ▼	542 (5.0)	0 (1.3)	543 (5.2)	1 (2.1)
[†] Netherlands	537 (2.0)	540 (2.6)	3 (1.7)	536 (2.2)	-1 (0.9)	537 (2.3)	0 (1.5)
Latvia	534 (2.8)	534 (2.7)	0 (1.5)	534 (2.8)	0 (1.3)	534 (3.0)	-1 (1.8)
² Norway (5)	531 (2.0)	525 (2.5)	-5 (1.6) ▼	531 (2.0)	1 (1.1)	534 (2.2)	4 (1.4) ▲
² Czech Republic	530 (2.2)	534 (2.6)	4 (1.2) ▲	528 (2.2)	-2 (1.0)	528 (2.5)	-3 (0.8) ▼
² Sweden	530 (2.8)	525 (2.6)	-5 (1.3) ▼	530 (2.6)	0 (1.2)	533 (2.8)	3 (1.2)
Bulgaria	530 (3.6)	528 (3.6)	-2 (1.5)	532 (3.7)	2 (1.1)	522 (4.6)	-8 (1.6) ▼
Finland	529 (2.5)	538 (2.7)	9 (1.2) ▲	525 (2.6)	-4 (1.1) ▼	528 (3.0)	-1 (1.5)
Australia	525 (2.6)	529 (3.0)	4 (1.3) ▲	523 (2.5)	-2 (0.7) ▼	526 (2.9)	2 (1.5)
Germany	524 (2.1)	532 (2.7)	9 (1.8) ▲	519 (2.5)	-5 (1.4) ▼	524 (2.4)	0 (1.3)
[†] Denmark	524 (2.1)	521 (2.2)	-3 (0.7) ▼	523 (2.5)	-1 (1.6)	525 (2.5)	1 (1.3)
² Serbia	523 (3.3)	522 (3.3)	-1 (1.6)	522 (3.4)	-1 (1.5)	523 (3.4)	0 (1.0)
^{2†} Belgium (Flemish)	521 (2.4)	534 (2.9)	13 (1.4) ▲	517 (2.4)	-4 (0.8) ▼	516 (2.8)	-4 (1.3) ▼
Hungary	520 (3.6)	527 (3.5)	7 (1.5) ▲	515 (3.5)	-5 (0.9) ▼	521 (3.4)	0 (1.0)
Portugal	517 (2.8)	517 (2.8)	0 (1.1)	516 (2.9)	-1 (0.8)	518 (2.8)	1 (1.0)
^{2†} United States	517 (3.1)	521 (3.4)	4 (1.5)	517 (3.2)	0 (0.8)	513 (3.2)	-4 (1.3) ▼
² Cyprus	516 (2.5)	519 (2.4)	2 (1.3)	514 (2.6)	-2 (1.0)	515 (2.5)	-1 (1.1)
Slovak Republic	515 (3.1)	513 (3.3)	-2 (2.0)	514 (3.2)	-1 (1.8)	518 (3.1)	3 (2.2)
Slovenia	514 (1.8)	516 (2.0)	2 (1.5)	514 (1.8)	1 (1.3)	509 (2.0)	-4 (1.4) ▼
² Italy	513 (2.8)	511 (2.9)	-3 (1.0) ▼	513 (2.9)	0 (1.4)	513 (2.7)	0 (1.3)
² Armenia	513 (2.8)	507 (2.8)	-6 (1.8) ▼	515 (2.9)	2 (1.3)	509 (2.8)	-4 (1.6)
²⁼ Albania	512 (4.9)	509 (5.7)	-2 (3.0)	514 (5.4)	2 (1.5)	508 (5.2)	-3 (2.3)
¹³ Canada	504 (2.0)	502 (2.1)	-2 (0.6) ▼	504 (2.0)	0 (0.6)	504 (2.2)	0 (0.9)
² Spain	498 (2.1)	500 (2.7)	1 (1.6)	497 (1.9)	-1 (0.8)	500 (2.2)	1 (1.1)
United Arab Emirates	498 (1.2)	497 (1.3)	-1 (0.5)	497 (1.2)	-1 (0.4) ▼	501 (1.2)	3 (0.7) ▲
¹ Georgia	498 (3.1)	491 (3.4)	-6 (1.5) ▼	501 (3.2)	3 (1.2) ▲	496 (3.1)	-2 (1.3)
Azerbaijan	494 (3.5)	492 (3.4)	-2 (1.3)	496 (3.4)	2 (1.3)	490 (3.6)	-5 (1.4) ▼
^{2†} New Zealand	490 (2.6)	488 (2.8)	-2 (1.5)	489 (2.5)	-2 (1.3)	495 (2.4)	5 (1.9)
² Belgium (French)	489 (2.4)	496 (2.6)	6 (1.1) ▲	489 (2.8)	-1 (1.5)	484 (2.6)	-6 (1.1) ▼
² Kazakhstan	487 (3.6)	479 (3.3)	-9 (0.9) ▼	490 (3.5)	3 (0.9) ▲	488 (3.5)	1 (1.9)
² France	484 (2.9)	484 (3.4)	0 (2.6)	484 (3.1)	0 (1.3)	482 (2.9)	-2 (1.4)
² Montenegro	477 (2.1)	474 (2.0)	-3 (1.2) ▼	478 (2.1)	1 (1.2)	474 (2.3)	-3 (1.6)
North Macedonia	474 (3.6)	472 (3.2)	-2 (1.5)	473 (3.3)	0 (2.0)	470 (3.4)	-3 (2.0)
Qatar	464 (3.5)	464 (3.4)	0 (1.4)	462 (3.5)	-2 (1.5)	466 (3.4)	2 (1.4)
Bahrain	462 (4.1)	459 (4.3)	-2 (1.9)	460 (4.2)	-1 (1.2)	469 (4.0)	8 (1.5) ▲
² Kosovo	451 (3.4)	453 (3.4)	2 (1.8)	450 (3.4)	-1 (1.4)	447 (3.5)	-4 (1.1) ▼
¹ Bosnia & Herzegovina	447 (3.2)	448 (3.4)	1 (1.4)	447 (3.5)	0 (1.3)	444 (4.0)	-3 (2.6)
^{2†} Chile	444 (2.8)	433 (2.8)	-10 (1.0) ▼	444 (2.4)	1 (1.4)	453 (3.1)	9 (1.8) ▲
Uzbekistan	443 (3.2)	441 (3.1)	-3 (1.2)	448 (3.2)	4 (1.4) ▲	428 (4.0)	-15 (1.7) ▼
Jordan	427 (5.3)	422 (5.4)	-5 (1.6) ▼	426 (5.5)	-1 (1.6)	434 (5.2)	7 (2.0) ▲
Oman	421 (4.0)	408 (4.3)	-14 (0.9) ▼	428 (4.1)	6 (1.1) ▲	428 (4.0)	7 (1.2) ▲
^ψ Iran, Islamic Rep. of	420 (4.2)	417 (3.8)	-2 (1.2)	425 (4.3)	5 (0.9) ▲	399 (4.6)	-20 (1.6) ▼
³ Saudi Arabia	420 (4.2)	417 (4.1)	-3 (1.5)	415 (4.2)	-4 (1.5) ▼	431 (4.0)	11 (1.9) ▲
Morocco	393 (4.6)	390 (5.0)	-3 (1.7)	400 (4.4)	7 (1.2) ▲	383 (5.1)	-11 (2.1) ▼
Kuwait	382 (4.4)	379 (4.6)	-3 (1.3)	379 (4.5)	-3 (1.9)	391 (4.9)	9 (3.1) ▲
South Africa (5)	362 (3.5)	357 (3.8)	-5 (1.2) ▼	366 (3.5)	5 (1.2) ▲	363 (3.7)	2 (1.9)
^{2ψ} Brazil	400 (3.4)	--	--	--	--	--	--
Benchmarking Participants							
Dubai, UAE	557 (1.6)	557 (1.4)	0 (0.7)	556 (1.6)	0 (0.8)	558 (1.8)	1 (1.8)
² Quebec, Canada	515 (2.7)	520 (2.8)	5 (1.4) ▲	516 (2.7)	1 (0.9)	505 (2.9)	-10 (1.3) ▼
Sharjah, UAE	504 (3.3)	503 (3.4)	-1 (1.1)	503 (3.4)	-1 (1.1)	506 (3.3)	2 (1.3)
³ Ontario, Canada	503 (3.4)	498 (3.7)	-5 (1.2) ▼	504 (3.5)	1 (1.2)	506 (3.6)	3 (1.2)
Abu Dhabi, UAE	459 (1.9)	458 (2.1)	-1 (1.1)	457 (2.0)	-2 (1.2)	463 (1.8)	5 (1.0) ▲

▲ ▼ Subscale score significantly different from overall score ($p < 0.01$)

Numbers of items are based on the TIMSS 2023 fourth-grade mathematics items included in scaling.
 () Standard errors appear in parentheses. Because of rounding some results may appear inconsistent.
 See Appendix B.2 for population coverage notes 1, 2, and 3. See Appendix B.5 for sampling guidelines and sampling participation notes †, ‡, and =.
 ψ Reservations about reliability because the percentage of students with achievement too low for estimation exceeds 15% but does not exceed 25%.
 A dash (-) indicates comparable data not available because average achievement could not be accurately estimated.