

Appendix F.1: Average Percent Correct in the Mathematics Content and Cognitive Domains

eTIMSS		Mathematics Content Domains			Mathematics Cognitive Domains		
Country	Overall Mathematics	Number	Measurement and Geometry	Data	Knowing	Applying	Reasoning
Austria	50 (0.6)	52 (0.6)	48 (0.6)	50 (0.8)	58 (0.5)	49 (0.7)	42 (0.6)
Canada	43 (0.5)	42 (0.5)	42 (0.5)	48 (0.6)	50 (0.5)	42 (0.5)	37 (0.5)
Chile	27 (0.5)	27 (0.5)	27 (0.5)	29 (0.6)	32 (0.5)	26 (0.5)	24 (0.4)
Chinese Taipei	67 (0.4)	69 (0.5)	65 (0.5)	66 (0.6)	78 (0.4)	67 (0.5)	53 (0.5)
Croatia	43 (0.5)	44 (0.5)	42 (0.6)	41 (0.7)	51 (0.6)	41 (0.6)	36 (0.6)
Czech Republic	49 (0.6)	51 (0.7)	49 (0.6)	47 (0.7)	56 (0.6)	48 (0.7)	44 (0.7)
Denmark	47 (0.5)	46 (0.6)	47 (0.5)	49 (0.6)	54 (0.5)	45 (0.6)	41 (0.5)
England	55 (0.8)	57 (0.9)	50 (0.8)	60 (0.7)	63 (0.7)	54 (0.8)	47 (0.9)
Finland	49 (0.5)	48 (0.5)	48 (0.6)	52 (0.7)	56 (0.6)	48 (0.6)	42 (0.5)
France	37 (0.7)	37 (0.8)	39 (0.7)	38 (0.8)	46 (0.8)	35 (0.7)	30 (0.7)
Georgia	36 (0.8)	41 (0.8)	32 (0.7)	31 (0.9)	42 (0.9)	36 (0.8)	29 (0.8)
Germany	46 (0.6)	45 (0.6)	46 (0.6)	46 (0.8)	54 (0.6)	42 (0.6)	41 (0.7)
Hong Kong SAR	67 (0.8)	67 (0.9)	66 (0.9)	69 (0.8)	73 (0.7)	69 (0.9)	58 (1.1)
Hungary	47 (0.7)	50 (0.7)	44 (0.7)	45 (0.8)	56 (0.7)	45 (0.7)	40 (0.7)
Italy	44 (0.7)	47 (0.7)	40 (0.7)	42 (0.8)	53 (0.7)	43 (0.8)	33 (0.6)
Korea, Rep. of	67 (0.6)	67 (0.6)	66 (0.6)	70 (0.6)	75 (0.5)	66 (0.6)	59 (0.7)
Lithuania	51 (0.7)	51 (0.8)	49 (0.7)	55 (0.7)	58 (0.7)	52 (0.8)	42 (0.7)
Malta	43 (0.3)	44 (0.4)	38 (0.4)	46 (0.6)	51 (0.3)	41 (0.4)	35 (0.4)
Netherlands	50 (0.6)	49 (0.6)	47 (0.6)	56 (0.8)	56 (0.5)	48 (0.7)	44 (0.6)
Norway (5)	52 (0.6)	52 (0.6)	50 (0.6)	55 (0.8)	58 (0.5)	50 (0.7)	46 (0.6)
Portugal	47 (0.7)	48 (0.8)	44 (0.7)	49 (0.7)	55 (0.7)	47 (0.7)	38 (0.7)
Qatar	31 (0.7)	33 (0.8)	27 (0.7)	31 (0.9)	38 (0.8)	29 (0.8)	23 (0.6)
Russian Federation	58 (0.9)	60 (0.9)	56 (1.0)	58 (0.9)	62 (0.8)	59 (1.0)	52 (1.0)
Singapore	73 (0.9)	76 (0.9)	68 (1.0)	72 (0.9)	80 (0.8)	73 (1.0)	63 (1.1)
Slovak Republic	43 (0.8)	44 (0.8)	40 (0.8)	45 (0.9)	49 (0.8)	41 (0.9)	39 (0.8)
Spain	41 (0.4)	42 (0.5)	37 (0.5)	43 (0.5)	49 (0.4)	40 (0.5)	33 (0.5)
Sweden	46 (0.7)	45 (0.8)	44 (0.7)	50 (0.9)	52 (0.8)	44 (0.8)	42 (0.7)
Turkey (5)	48 (1.0)	50 (1.1)	46 (0.9)	47 (1.1)	54 (1.0)	49 (1.1)	38 (1.0)
United Arab Emirates	38 (0.3)	40 (0.4)	35 (0.3)	38 (0.3)	45 (0.4)	37 (0.4)	30 (0.3)
United States	50 (0.7)	52 (0.7)	44 (0.6)	52 (0.7)	58 (0.7)	49 (0.7)	40 (0.6)
International Average	48 (0.1)	49 (0.1)	46 (0.1)	49 (0.1)	55 (0.1)	47 (0.1)	41 (0.1)

Benchmarking Participants

Ontario, Canada	44 (0.9)	41 (0.8)	43 (1.0)	49 (1.0)	49 (0.9)	43 (1.0)	38 (0.8)
Quebec, Canada	49 (0.6)	49 (0.6)	47 (0.6)	52 (0.8)	57 (0.5)	48 (0.7)	38 (0.6)
Moscow City, Russian Fed.	66 (0.6)	67 (0.7)	61 (0.7)	70 (0.7)	68 (0.5)	68 (0.7)	60 (0.8)
Madrid, Spain	45 (0.6)	47 (0.7)	40 (0.6)	46 (0.6)	53 (0.6)	43 (0.6)	36 (0.6)
Abu Dhabi, UAE	30 (0.4)	31 (0.4)	28 (0.4)	30 (0.4)	37 (0.4)	28 (0.4)	23 (0.4)
Dubai, UAE	52 (0.4)	54 (0.4)	48 (0.4)	55 (0.5)	59 (0.5)	52 (0.4)	43 (0.5)

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Country	Overall Mathematics	Number	Measurement and Geometry	Data	Knowing	Applying	Reasoning
Armenia	42 (0.7)	48 (0.6)	38 (0.7)	32 (0.9)	49 (0.7)	42 (0.8)	31 (0.6)
Australia	48 (0.7)	46 (0.7)	46 (0.7)	54 (0.8)	53 (0.7)	47 (0.7)	42 (0.7)
Azerbaijan	48 (0.7)	51 (0.7)	42 (0.8)	47 (0.8)	54 (0.7)	48 (0.8)	38 (0.7)
Bahrain	39 (0.6)	39 (0.6)	36 (0.6)	41 (0.7)	46 (0.5)	37 (0.7)	31 (0.6)
Belgium (Flemish)	52 (0.5)	51 (0.6)	53 (0.6)	52 (0.6)	62 (0.5)	49 (0.6)	42 (0.6)
Bulgaria	48 (1.0)	50 (1.0)	46 (1.0)	44 (1.2)	54 (1.0)	48 (1.2)	39 (1.0)
Cyprus	51 (0.7)	54 (0.8)	48 (0.7)	51 (0.9)	58 (0.8)	52 (0.8)	42 (0.8)
Iran, Islamic Rep. of	31 (0.7)	33 (0.7)	31 (0.7)	29 (0.7)	38 (0.7)	31 (0.7)	22 (0.6)
Ireland	56 (0.7)	58 (0.7)	51 (0.7)	56 (0.8)	63 (0.7)	56 (0.7)	46 (0.7)
Japan	68 (0.4)	67 (0.4)	66 (0.6)	73 (0.5)	74 (0.4)	68 (0.5)	59 (0.6)
Kazakhstan	45 (0.7)	50 (0.7)	43 (0.7)	40 (0.7)	52 (0.6)	45 (0.8)	37 (0.7)
Latvia	55 (0.7)	57 (0.8)	52 (0.8)	56 (0.8)	60 (0.7)	55 (0.8)	49 (0.8)
New Zealand	40 (0.6)	39 (0.6)	37 (0.5)	46 (0.7)	45 (0.6)	39 (0.6)	36 (0.6)
Northern Ireland	60 (0.7)	63 (0.8)	55 (0.7)	61 (0.6)	68 (0.7)	60 (0.7)	51 (0.7)
Oman	30 (0.8)	30 (0.9)	30 (0.8)	31 (0.8)	36 (0.9)	29 (0.9)	24 (0.8)
Poland	48 (0.7)	47 (0.7)	48 (0.7)	51 (0.8)	52 (0.7)	48 (0.8)	42 (0.7)
Serbia	45 (0.7)	49 (0.7)	41 (0.8)	43 (1.0)	51 (0.8)	45 (0.8)	38 (0.8)
International Average	47 (0.2)	49 (0.2)	45 (0.2)	48 (0.2)	54 (0.2)	47 (0.2)	39 (0.2)

() Standard errors appear in parentheses. Because of rounding some results may appear inconsistent.

Appendix F.1: Average Percent Correct in the Mathematics Content and Cognitive Domains

(Continued)

Country	Overall Mathematics	Mathematics Content Domains			Mathematics Cognitive Domains		
		Number	Measurement and Geometry	Data	Knowing	Applying	Reasoning
Albania	61 (0.8)	62 (0.9)	58 (0.7)	60 (0.8)	69 (0.8)	59 (0.8)	45 (0.8)
Bosnia and Herzegovina	49 (0.6)	51 (0.6)	49 (0.6)	43 (0.7)	57 (0.5)	45 (0.6)	38 (0.7)
Kosovo	49 (0.7)	50 (0.7)	48 (0.6)	46 (0.8)	59 (0.7)	46 (0.8)	33 (0.7)
Kuwait	39 (0.9)	39 (0.9)	37 (0.9)	40 (1.0)	48 (1.0)	35 (0.9)	25 (0.9)
Montenegro	50 (0.4)	50 (0.4)	50 (0.4)	49 (0.5)	57 (0.4)	47 (0.4)	39 (0.5)
Morocco	38 (0.8)	38 (0.8)	38 (0.8)	38 (1.0)	47 (0.8)	35 (0.9)	25 (0.9)
North Macedonia	55 (1.1)	56 (1.1)	54 (1.0)	55 (1.2)	64 (1.0)	53 (1.2)	41 (1.1)
ψ Pakistan	28 (1.9)	31 (2.0)	25 (1.7)	23 (2.0)	37 (2.3)	23 (1.8)	18 (1.3)
ψ Philippines	25 (0.8)	26 (0.8)	22 (0.7)	26 (1.0)	33 (1.0)	22 (0.8)	14 (0.5)
Saudi Arabia	41 (0.7)	41 (0.7)	40 (0.6)	42 (0.7)	50 (0.7)	37 (0.7)	29 (0.6)
South Africa (5)	36 (0.6)	35 (0.6)	34 (0.7)	40 (0.7)	45 (0.7)	33 (0.7)	23 (0.6)
International Average	43 (0.3)	44 (0.3)	41 (0.3)	42 (0.3)	51 (0.3)	40 (0.3)	30 (0.2)

ψ Reservations about reliability because the percentage of students with achievement too low for estimation exceeds 15% but does not exceed 25%.

() Standard errors appear in parentheses. Because of rounding some results may appear inconsistent.

SOURCE: IEA's Trends in International Mathematics and Science Study - TIMSS 2019
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