

TABLE 1-4

Average TIMSS mathematics scores of students in grade 8 and percentage of students in the highest and lowest percentiles among participating developed economies, by education system: 2015

(Average score and percent)

Education system	Mean score	Percentage of student scores			
		Below 5th percentile	Below 10th percentile	At or above 90th percentile	At or above 95th percentile
Participating developed economy, total	534	5.0	10.0	10.0	5.0
Singapore	621	0.7	1.9	40.7	23.2
Taiwan	599	2.7	5.1	32.5	19.4
South Korea	606	0.9	2.1	30.7	17.8
Japan	586	1.7	3.7	23.5	13.6
Hong Kong	594	1.5	3.1	22.7	10.8
Russia	538	3.6	8.3	7.8	3.2
Israel	511	12.9	19.7	7.1	2.8
United States	518	6.5	12.5	4.9	1.8
England	518	4.9	11.5	4.6	1.3
Australia	505	8.4	15.5	3.3	1.1
New Zealand	493	12.1	20.5	3.0	1.0
Canada	527	3.0	7.0	2.8	0.7
Ireland	523	4.6	8.9	2.7	0.7
Lithuania	511	6.3	12.5	2.4	0.7
Slovenia	516	3.5	8.8	2.2	0.6
Norway	512	4.5	9.9	1.7	0.5
Malta	494	13.3	20.2	1.6	0.3
Italy	494	8.2	16.0	1.1	0.2
Sweden	501	6.5	13.7	1.0	0.2

* = estimate is significantly different from U.S. estimate at the 0.05 level of statistical significance.

TIMSS = Trends in International Mathematics and Science Study.

Note(s)

Education systems are listed in descending order by the percentage of students scoring at or above the 90th percentile. TIMSS participants include both countries, which are complete, independent political entities, and non-national entities (e.g., Hong Kong). Developed economies are based on the International Monetary Fund (IMF) designation of advanced economies (Table A, pg. 132 in *World Economic Outlook: Challenges to Steady Growth*, 2018). IMF classifies Russia as a developing economy, but it is included in this analysis because it is a large economy with high levels of student achievement.

Source(s)

National Center for Science and Engineering Statistics, National Science Foundation, special tabulations (2018) of the 2015 TIMSS; Mullis IVS, Martin MO, Foy P, and Hooper M, *TIMSS 2015 International Results in Mathematics* (2016).