

Figure 6. US 4th and 8th Grade Student Achievement in Algebra-Related Content. The TIMSS 4th grade test had an algebra related sub-test ("patterns, relations and functions") and the 8th grade test a full-scale algebra subtest. Here are the average percent correct on each for all TIMSS countries. Each list is divided into three tiers: those significantly above the mean, those not significantly different from the mean, and those significantly below the mean. The US was in the middle tier in both cases. However, US 4th graders got a higher percentage of their algebra sub-test correct than US 8th graders did for theirs. The 8th grade test had more difficult items but US 8th grader mathematics was also less focused on algebra than many other countries.

Grade 4 (PRF)	
Nation	Percent Correct
Korea	83
Japan	76
Singapore	76
Hong Kong	73
(Hungary)	69
(Slovenia)	68
Czech Republic	67
United States	66
(Latvia (LSS))	65
(Netherlands)	65
(Austria)	64
(Australia)	64
Ireland	64
Canada	62
(Israel)	60
Scotland	57
Cyprus	55
England	55
New Zealand	50
Norway	50
(Thailand)	50
Iceland	48
Portugal	47
Greece	47
Iran, Islamic Republic	40
(Kuwait)	33

Grade 8 (Algebra)	
Nation	Percent Correct
Singapore	76
Japan	72
Hong Kong	70
Korea	69
Czech Republic	65
Hungary	63
Russian Federation	63
Belgium-Flemish	63
Slovak Republic	62
(Bulgaria)	62
(Slovenia)	61
(Israel)	61
(Austria)	59
(Australia)	55
Spain	54
France	54
Canada	54
Ireland	53
(Belgium- French)	53
(Thailand)	53
Switzerland	53
(Netherlands)	53
(Romania)	52
United States	51
Latvia (LSS)	51
New Zealand	49
England	49
(Germany)	48
Cyprus	48
Lithuania	47
(Scotland)	46
(Greece)	46
Norway	45
(Denmark)	45
Sweden	44
Iceland	40
Portugal	40
Iran, Islamic Republic	37
(Kuwait)	30
(Colombia)	28
(South Africa)	23