

TIMSS 2011

Summary Statistics and Standard Errors for Proficiency in Mathematics at the Eighth Grade

Exhibit 1: Summary Statistics and Standard Errors for Proficiency in Overall Mathematics at the Eighth Grade

Country	Sample Size	Overall Mathematics			
		Mean Proficiency	Standard Deviation	Jackknife Sampling Error	Overall Standard Error
Armenia	5846	466.588	90.683	2.554	2.726
Australia	7556	504.802	85.421	5.026	5.090
Bahrain	4640	409.217	99.570	1.713	1.964
Chile	5835	416.267	79.653	2.434	2.594
Chinese Taipei	5042	609.279	105.912	3.073	3.183
England	3842	506.760	85.251	5.453	5.525
Finland	4266	514.034	64.852	2.365	2.480
Georgia	4563	431.139	105.907	3.688	3.764
Ghana	7323	330.831	85.555	4.036	4.337
Hong Kong SAR	4015	585.566	84.470	3.672	3.809
Hungary	5178	504.806	89.589	3.444	3.476
Indonesia	5795	385.838	83.930	4.276	4.314
Iran, Islamic Rep. of	6029	414.961	94.702	4.279	4.302
Israel	4699	515.844	98.208	4.014	4.054
Italy	3979	498.376	73.165	2.364	2.408
Japan	4414	569.829	84.679	2.517	2.620
Jordan	7694	405.882	99.234	3.736	3.747
Kazakhstan	4390	486.952	79.695	3.959	3.974
Korea, Rep. of	5166	612.793	89.869	2.547	2.917
Lebanon	3974	449.327	74.748	3.609	3.744
Lithuania	4747	502.366	78.954	2.295	2.507
Macedonia, Rep. of	4062	426.141	108.643	5.130	5.200
Malaysia	5733	439.824	91.854	5.350	5.377
Morocco	8986	371.145	85.554	1.808	1.981
New Zealand	5336	487.779	84.782	5.477	5.496
Norway	3862	474.643	64.729	2.376	2.440
Oman	9542	366.151	108.158	2.509	2.797

Exhibit 1: Summary Statistics and Standard Errors for Proficiency in Overall Mathematics at the Eighth Grade (Continued)

Country	Sample Size	Overall Mathematics			
		Mean Proficiency	Standard Deviation	Jackknife Sampling Error	Overall Standard Error
Palestinian Nat'l Auth.	7812	404.181	100.429	3.343	3.483
Qatar	4422	409.596	110.156	2.807	3.068
Romania	5523	457.948	101.860	3.958	4.027
Russian Federation	4893	538.976	81.125	3.488	3.562
Saudi Arabia	4344	393.823	93.475	4.512	4.625
Singapore	5927	610.989	84.096	3.683	3.775
Slovenia	4415	504.781	70.485	2.160	2.174
Sweden	5573	484.309	67.545	1.832	1.912
Syrian Arab Republic	4413	380.166	96.883	4.126	4.472
Thailand	6124	427.109	85.877	4.168	4.282
Tunisia	5128	424.736	75.436	2.657	2.816
Turkey	6928	452.490	113.079	3.826	3.901
Ukraine	3378	479.186	89.843	3.827	3.882
United Arab Emirates	14089	455.720	88.391	2.002	2.067
United States	10477	509.485	77.047	2.575	2.633
Ninth Grade Participants					
Botswana	5400	396.682	77.655	2.386	2.503
Honduras	4418	337.982	76.983	3.537	3.727
South Africa	11969	351.909	86.124	2.346	2.486
Benchmarking Participants					
Alberta, Canada	4799	505.141	63.092	2.587	2.648
Ontario, Canada	4756	511.625	70.582	2.412	2.487
Quebec, Canada	6149	531.564	61.840	2.309	2.339
Abu Dhabi, UAE	4373	448.758	86.903	3.662	3.749
Dubai, UAE	5571	477.565	93.354	2.024	2.100
Alabama, US	2113	465.927	79.226	5.874	5.927
California, US	2614	492.620	80.626	4.846	4.887
Colorado, US	2167	517.794	76.121	4.813	4.913
Connecticut, US	2099	517.624	83.950	4.771	4.841
Florida, US	1712	513.304	76.358	6.438	6.446
Indiana, US	2260	521.506	70.747	5.088	5.146
Massachusetts, US	2075	560.580	73.274	5.261	5.293
Minnesota, US	2500	544.726	72.080	4.591	4.608
North Carolina, US	2103	536.898	80.177	6.744	6.815

Exhibit 2: Summary Statistics and Standard Errors for Proficiency in Number at the Eighth Grade

Country	Sample Size	Number			
		Mean Proficiency	Standard Deviation	Jackknife Sampling Error	Overall Standard Error
Armenia	5846	473.813	84.023	2.274	2.419
Australia	7556	512.748	93.243	5.269	5.390
Bahrain	4640	396.606	110.397	1.692	1.730
Chile	5835	412.546	91.452	2.760	2.940
Chinese Taipei	5042	597.579	108.044	2.994	3.144
England	3842	512.248	91.216	5.788	5.817
Finland	4266	526.867	67.673	2.264	2.385
Georgia	4563	435.028	101.187	3.338	3.515
Ghana	7323	320.566	91.285	4.199	4.489
Hong Kong SAR	4015	587.991	86.535	3.664	3.704
Hungary	5178	509.679	99.724	3.808	3.872
Indonesia	5795	374.928	92.742	4.310	4.791
Iran, Islamic Rep. of	6029	402.174	103.304	4.323	4.938
Israel	4699	517.595	96.922	3.866	4.015
Italy	3979	496.289	80.404	2.483	2.856
Japan	4414	556.801	89.374	2.624	2.973
Jordan	7694	390.497	96.374	3.641	3.794
Kazakhstan	4390	479.165	79.212	3.782	4.047
Korea, Rep. of	5166	617.769	93.191	2.531	2.592
Lebanon	3974	451.332	71.981	3.622	3.812
Lithuania	4747	500.905	78.481	2.265	2.480
Macedonia, Rep. of	4062	418.420	106.642	4.908	5.139
Malaysia	5733	450.585	100.277	5.744	5.791
Morocco	8986	379.447	86.830	1.932	2.593
New Zealand	5336	492.462	94.725	5.850	5.898
Norway	3862	492.467	72.075	2.684	2.769
Oman	9542	350.617	107.822	2.550	2.997
Palestinian Nat'l Auth.	7812	399.504	99.618	3.278	3.350
Qatar	4422	408.382	112.093	2.705	3.388
Romania	5523	447.782	103.630	3.983	4.081
Russian Federation	4893	534.242	82.249	3.162	3.244
Saudi Arabia	4344	392.795	95.242	4.677	4.804
Singapore	5927	611.193	80.591	3.481	3.646
Slovenia	4415	510.965	82.349	2.389	2.546
Sweden	5573	503.600	68.280	1.670	1.761
Syrian Arab Republic	4413	372.675	96.568	3.901	3.968
Thailand	6124	424.674	94.662	4.570	4.607

Exhibit 2: Summary Statistics and Standard Errors for Proficiency in Number at the Eighth Grade (Continued)

Country	Sample Size	Number			
		Mean Proficiency	Standard Deviation	Jackknife Sampling Error	Overall Standard Error
Tunisia	5128	431.065	80.209	2.582	2.788
Turkey	6928	434.700	116.489	3.798	3.920
Ukraine	3378	472.197	92.367	3.932	4.058
United Arab Emirates	14089	459.012	90.945	2.056	2.237
United States	10477	513.825	84.907	2.781	2.991
Ninth Grade Participants					
Botswana	5400	392.069	89.714	2.789	3.273
Honduras	4418	352.465	74.256	3.188	3.527
South Africa	11969	358.559	87.954	2.161	2.575
Benchmarking Participants					
Alberta, Canada	4799	523.243	73.486	2.816	2.984
Ontario, Canada	4756	518.737	82.621	2.420	2.576
Quebec, Canada	6149	542.919	63.898	2.433	2.496
Abu Dhabi, UAE	4373	452.486	90.014	3.764	3.821
Dubai, UAE	5571	479.361	96.669	2.222	2.305
Alabama, US	2113	462.766	89.188	6.831	7.113
California, US	2614	492.463	84.904	5.024	5.159
Colorado, US	2167	520.627	82.930	4.990	5.145
Connecticut, US	2099	527.291	88.696	4.771	4.930
Florida, US	1712	517.143	83.918	6.897	7.007
Indiana, US	2260	527.675	76.366	5.326	5.437
Massachusetts, US	2075	567.258	79.216	5.731	5.926
Minnesota, US	2500	556.195	80.844	5.264	5.306
North Carolina, US	2103	546.951	88.271	7.178	7.278

Exhibit 3: Summary Statistics and Standard Errors for Proficiency in Algebra at the Eighth Grade

Country	Sample Size	Algebra			
		Mean Proficiency	Standard Deviation	Jackknife Sampling Error	Overall Standard Error
Armenia	5846	495.564	94.812	2.584	2.801
Australia	7556	488.949	88.796	5.210	5.283
Bahrain	4640	424.418	95.860	1.615	1.711
Chile	5835	402.638	82.893	2.630	3.649
Chinese Taipei	5042	628.056	121.689	3.544	3.795
England	3842	489.459	91.739	5.582	5.668
Finland	4266	492.376	73.898	2.779	2.891
Georgia	4563	450.239	109.980	3.755	3.840
Ghana	7323	358.390	87.260	3.883	3.977
Hong Kong SAR	4015	582.722	90.518	3.789	3.898
Hungary	5178	496.482	90.517	3.544	3.959
Indonesia	5795	392.240	85.586	3.778	3.827
Iran, Islamic Rep. of	6029	422.036	92.813	4.021	4.279
Israel	4699	520.672	106.581	4.530	4.742
Italy	3979	490.864	74.852	2.490	2.667
Japan	4414	570.110	95.546	2.590	2.997
Jordan	7694	431.546	100.947	3.867	3.912
Kazakhstan	4390	505.756	88.251	4.344	4.410
Korea, Rep. of	5166	616.546	107.949	2.973	3.195
Lebanon	3974	470.912	76.199	3.692	3.784
Lithuania	4747	492.117	88.266	2.627	2.796
Macedonia, Rep. of	4062	448.240	108.176	5.199	5.327
Malaysia	5733	429.813	90.194	5.162	5.228
Morocco	8986	356.510	100.970	2.070	2.717
New Zealand	5336	472.193	88.192	5.435	5.486
Norway	3862	432.003	72.213	2.636	2.683
Oman	9542	383.239	112.199	2.691	2.764
Palestinian Nat'l Auth.	7812	418.634	98.505	3.210	3.344
Qatar	4422	424.912	108.961	2.632	2.770
Romania	5523	477.276	108.996	4.195	4.315
Russian Federation	4893	556.256	84.968	3.453	3.718
Saudi Arabia	4344	399.403	99.639	4.724	4.914
Singapore	5927	614.473	90.816	4.034	4.127
Slovenia	4415	493.063	70.672	2.164	2.617
Sweden	5573	458.753	76.746	2.025	2.209
Syrian Arab Republic	4413	391.485	106.257	4.757	4.916
Thailand	6124	425.082	89.116	4.304	4.343

Exhibit 3: Summary Statistics and Standard Errors for Proficiency in Algebra at the Eighth Grade (Continued)

Country	Sample Size	Algebra			
		Mean Proficiency	Standard Deviation	Jackknife Sampling Error	Overall Standard Error
Tunisia	5128	418.881	83.051	2.793	2.932
Turkey	6928	454.914	120.451	4.049	4.176
Ukraine	3378	487.072	95.538	4.234	4.407
United Arab Emirates	14089	467.976	87.054	2.052	2.233
United States	10477	511.827	74.392	2.533	2.576
Ninth Grade Participants					
Botswana	5400	406.807	70.918	2.224	3.209
Honduras	4418	326.875	88.602	3.943	4.537
South Africa	11969	361.247	84.273	2.031	2.513
Benchmarking Participants					
Alberta, Canada	4799	485.397	67.110	2.607	2.704
Ontario, Canada	4756	496.690	72.830	2.351	2.354
Quebec, Canada	6149	515.772	70.024	2.791	2.895
Abu Dhabi, UAE	4373	459.048	86.480	3.411	3.763
Dubai, UAE	5571	488.567	91.048	2.189	2.429
Alabama, US	2113	470.642	73.693	5.308	5.337
California, US	2614	509.394	76.333	4.734	5.202
Colorado, US	2167	511.771	78.779	4.858	5.122
Connecticut, US	2099	510.299	88.603	5.167	5.368
Florida, US	1712	512.667	74.136	6.197	6.425
Indiana, US	2260	519.616	70.038	5.032	5.339
Massachusetts, US	2075	559.421	73.141	5.537	5.647
Minnesota, US	2500	542.777	71.709	4.897	4.926
North Carolina, US	2103	537.107	77.928	6.772	6.840

Exhibit 4: Summary Statistics and Standard Errors for Proficiency in Geometry at the Eighth Grade

Country	Sample Size	Geometry			
		Mean Proficiency	Standard Deviation	Jackknife Sampling Error	Overall Standard Error
Armenia	5846	450.295	105.786	2.859	3.287
Australia	7556	498.892	89.643	5.250	5.379
Bahrain	4640	397.976	97.649	2.034	2.629
Chile	5835	418.970	82.330	2.714	3.090
Chinese Taipei	5042	624.917	115.638	3.427	3.660
England	3842	497.855	90.265	5.415	5.714
Finland	4266	501.984	76.189	2.711	2.914
Georgia	4563	406.285	118.925	3.968	4.213
Ghana	7323	315.170	93.562	3.814	4.287
Hong Kong SAR	4015	597.396	90.609	3.834	4.303
Hungary	5178	501.441	95.932	3.600	4.131
Indonesia	5795	376.843	100.873	4.845	5.268
Iran, Islamic Rep. of	6029	437.278	96.923	4.294	4.793
Israel	4699	496.149	103.516	4.494	4.578
Italy	3979	511.911	79.720	2.620	3.519
Japan	4414	585.808	81.205	2.465	3.534
Jordan	7694	406.982	94.676	3.681	3.735
Kazakhstan	4390	490.631	84.869	4.339	4.426
Korea, Rep. of	5166	611.750	90.117	2.362	2.708
Lebanon	3974	447.482	79.532	3.732	3.846
Lithuania	4747	499.654	92.516	2.698	3.130
Macedonia, Rep. of	4062	419.288	122.700	5.708	5.975
Malaysia	5733	431.802	110.783	6.321	6.363
Morocco	8986	390.232	85.457	1.806	2.519
New Zealand	5336	482.936	88.227	5.258	5.526
Norway	3862	460.669	78.955	3.178	3.514
Oman	9542	376.798	107.181	2.598	2.681
Palestinian Nat'l Auth.	7812	415.819	105.685	3.501	3.633
Qatar	4422	387.368	119.063	3.290	3.565
Romania	5523	453.251	103.146	4.263	4.468
Russian Federation	4893	533.013	92.442	3.794	3.968
Saudi Arabia	4344	364.261	109.210	5.084	5.334
Singapore	5927	609.286	84.811	3.576	3.907
Slovenia	4415	504.010	79.398	2.509	3.133
Sweden	5573	455.814	83.698	2.210	2.308
Syrian Arab Republic	4413	386.483	104.994	4.742	4.992
Thailand	6124	414.907	92.689	4.582	5.436

Exhibit 4: Summary Statistics and Standard Errors for Proficiency in Geometry at the Eighth Grade (Continued)

Country	Sample Size	Geometry			
		Mean Proficiency	Standard Deviation	Jackknife Sampling Error	Overall Standard Error
Tunisia	5128	426.013	83.101	2.703	3.162
Turkey	6928	454.319	122.751	4.156	4.299
Ukraine	3378	475.738	97.875	4.180	4.276
United Arab Emirates	14089	430.896	101.380	2.365	2.411
United States	10477	484.777	81.554	2.694	2.722
Ninth Grade Participants					
Botswana	5400	380.683	86.273	2.592	2.975
Honduras	4418	308.519	79.222	3.522	4.125
South Africa	11969	315.474	101.548	2.524	3.112
Benchmarking Participants					
Alberta, Canada	4799	484.505	72.388	2.647	2.951
Ontario, Canada	4756	511.672	80.731	2.435	2.708
Quebec, Canada	6149	528.511	69.403	2.655	2.674
Abu Dhabi, UAE	4373	424.003	99.828	4.036	4.400
Dubai, UAE	5571	452.769	107.310	2.558	3.040
Alabama, US	2113	443.423	88.041	5.607	6.011
California, US	2614	454.388	86.546	4.809	5.030
Colorado, US	2167	505.104	79.935	5.181	5.691
Connecticut, US	2099	490.384	89.364	4.606	5.097
Florida, US	1712	498.830	82.200	6.528	6.828
Indiana, US	2260	498.347	80.858	5.116	5.299
Massachusetts, US	2075	547.514	74.137	5.335	5.516
Minnesota, US	2500	515.381	86.863	5.652	6.202
North Carolina, US	2103	515.026	90.383	7.288	8.128

Exhibit 5: Summary Statistics and Standard Errors for Proficiency in Data and Chance at the Eighth Grade

Country	Sample Size	Data and Chance			
		Mean Proficiency	Standard Deviation	Jackknife Sampling Error	Overall Standard Error
Armenia	5846	376.243	123.413	3.023	3.684
Australia	7556	534.366	106.223	5.802	5.926
Bahrain	4640	407.406	113.878	2.247	2.576
Chile	5835	425.590	86.223	2.595	3.133
Chinese Taipei	5042	583.917	96.962	2.715	2.962
England	3842	543.157	107.934	6.489	6.768
Finland	4266	542.093	81.181	2.855	3.118
Georgia	4563	391.769	125.806	4.020	4.508
Ghana	7323	295.618	92.661	4.303	4.512
Hong Kong SAR	4015	581.436	91.297	3.783	4.060
Hungary	5178	517.041	98.536	3.826	4.308
Indonesia	5795	375.998	88.661	4.221	4.791
Iran, Islamic Rep. of	6029	393.175	100.205	4.145	4.945
Israel	4699	515.394	114.881	4.528	4.779
Italy	3979	499.011	85.195	2.629	3.207
Japan	4414	579.443	86.774	2.311	3.037
Jordan	7694	379.418	106.463	3.536	3.744
Kazakhstan	4390	444.217	93.049	4.481	4.523
Korea, Rep. of	5166	615.600	88.690	2.139	2.498
Lebanon	3974	393.061	93.459	4.626	5.221
Lithuania	4747	515.363	83.716	2.420	2.785
Macedonia, Rep. of	4062	388.761	129.931	5.282	5.862
Malaysia	5733	429.277	94.230	5.160	5.316
Morocco	8986	332.434	90.785	1.760	2.047
New Zealand	5336	513.415	108.395	5.997	6.658
Norway	3862	513.446	93.832	3.139	3.615
Oman	9542	341.876	118.521	3.050	3.119
Palestinian Nat'l Auth.	7812	367.810	110.461	3.494	3.626
Qatar	4422	389.851	123.950	3.504	3.625
Romania	5523	428.763	108.773	3.882	4.012
Russian Federation	4893	511.103	88.973	3.782	3.925
Saudi Arabia	4344	386.581	99.647	4.395	5.075
Singapore	5927	606.919	101.390	4.276	4.362
Slovenia	4415	517.999	77.208	2.553	3.337
Sweden	5573	504.260	99.365	2.478	2.685
Syrian Arab Republic	4413	343.179	102.386	4.398	4.678
Thailand	6124	430.514	82.404	3.744	4.078

Exhibit 5: Summary Statistics and Standard Errors for Proficiency in Data and Chance at the Eighth Grade (Continued)

Country	Sample Size	Data and Chance			
		Mean Proficiency	Standard Deviation	Jackknife Sampling Error	Overall Standard Error
Tunisia	5128	398.200	85.489	2.916	3.311
Turkey	6928	467.349	123.324	3.902	4.005
Ukraine	3378	470.789	91.556	3.600	3.971
United Arab Emirates	14089	440.263	100.478	2.328	2.371
United States	10477	527.263	103.074	3.148	3.273
Ninth Grade Participants					
Botswana	5400	390.673	85.475	2.706	3.201
Honduras	4418	319.069	94.990	3.799	4.954
South Africa	11969	332.620	104.207	2.609	3.445
Benchmarking Participants					
Alberta, Canada	4799	529.024	92.622	3.584	3.838
Ontario, Canada	4756	530.902	105.509	3.433	4.129
Quebec, Canada	6149	548.577	77.267	2.757	2.846
Abu Dhabi, UAE	4373	434.117	98.041	4.269	4.322
Dubai, UAE	5571	467.659	106.693	2.314	2.760
Alabama, US	2113	479.771	105.077	7.394	7.879
California, US	2614	494.588	106.744	5.660	6.045
Colorado, US	2167	540.396	100.991	5.427	5.661
Connecticut, US	2099	546.442	114.863	6.032	6.310
Florida, US	1712	528.118	104.092	8.781	9.011
Indiana, US	2260	544.673	96.218	5.487	6.005
Massachusetts, US	2075	584.306	107.761	7.229	7.271
Minnesota, US	2500	570.982	96.854	6.071	6.221
North Carolina, US	2103	547.968	109.099	7.961	8.317

Exhibit 6: Summary Statistics and Standard Errors for Proficiency in Mathematics Knowing at the Eighth Grade

Country	Sample Size	Mathematics Knowing			
		Mean Proficiency	Standard Deviation	Jackknife Sampling Error	Overall Standard Error
Armenia	5846	475.768	97.246	2.742	2.916
Australia	7556	503.887	87.264	5.048	5.065
Bahrain	4640	411.330	104.915	1.667	2.392
Chile	5835	405.474	76.023	2.520	2.887
Chinese Taipei	5042	611.203	117.920	3.599	3.706
England	3842	501.380	84.446	5.287	5.396
Finland	4266	508.180	63.388	2.370	2.461
Georgia	4563	437.633	114.772	4.016	4.167
Ghana	7323	331.341	95.375	4.200	4.414
Hong Kong SAR	4015	591.221	88.052	3.693	3.906
Hungary	5178	506.860	96.158	3.611	3.780
Indonesia	5795	377.731	94.975	4.745	4.767
Iran, Islamic Rep. of	6029	410.242	94.935	4.334	4.448
Israel	4699	515.837	97.854	4.052	4.086
Italy	3979	493.919	77.550	2.494	2.608
Japan	4414	557.997	87.579	2.500	2.733
Jordan	7694	404.981	107.732	4.154	4.304
Kazakhstan	4390	489.361	88.795	4.303	4.355
Korea, Rep. of	5166	615.857	97.057	2.605	2.924
Lebanon	3974	463.956	77.096	3.698	3.873
Lithuania	4747	501.538	85.515	2.483	2.554
Macedonia, Rep. of	4062	430.084	112.541	5.319	5.560
Malaysia	5733	444.095	96.584	5.682	5.718
Morocco	8986	362.969	95.855	1.830	2.204
New Zealand	5336	480.888	86.259	5.514	5.578
Norway	3862	464.695	59.288	2.309	2.503
Oman	9542	364.575	115.341	2.757	3.011
Palestinian Nat'l Auth.	7812	406.483	105.317	3.283	3.503
Qatar	4422	418.047	111.508	2.784	2.874
Romania	5523	460.052	114.449	4.376	4.428
Russian Federation	4893	548.394	88.053	3.546	3.590
Saudi Arabia	4344	401.857	96.737	4.579	4.628
Singapore	5927	617.397	83.372	3.530	3.827
Slovenia	4415	507.988	72.791	2.213	2.399
Sweden	5573	477.597	61.638	1.703	1.963
Syrian Arab Republic	4413	374.480	105.169	4.366	4.404
Thailand	6124	423.286	88.750	4.670	4.703

Exhibit 6: Summary Statistics and Standard Errors for Proficiency in Mathematics Knowing at the Eighth Grade (Continued)

Country	Sample Size	Mathematics Knowing			
		Mean Proficiency	Standard Deviation	Jackknife Sampling Error	Overall Standard Error
Tunisia	5128	424.982	79.223	2.763	2.831
Turkey	6928	440.599	120.064	4.072	4.130
Ukraine	3378	480.773	96.089	4.255	4.364
United Arab Emirates	14089	466.711	89.225	2.095	2.201
United States	10477	519.300	78.522	2.635	2.690
Ninth Grade Participants					
Botswana	5400	403.895	78.742	2.372	2.643
Honduras	4418	334.516	76.852	3.907	4.466
South Africa	11969	352.196	87.443	2.225	2.309
Benchmarking Participants					
Alberta, Canada	4799	500.050	60.543	2.328	2.514
Ontario, Canada	4756	502.993	71.894	2.419	2.585
Quebec, Canada	6149	528.144	64.587	2.501	2.878
Abu Dhabi, UAE	4373	459.493	87.977	3.691	3.768
Dubai, UAE	5571	488.248	93.841	2.147	2.310
Alabama, US	2113	476.195	82.364	6.128	6.159
California, US	2614	507.307	84.160	5.085	5.157
Colorado, US	2167	519.401	77.831	4.711	4.917
Connecticut, US	2099	528.014	88.491	5.060	5.327
Florida, US	1712	523.529	80.253	6.935	7.052
Indiana, US	2260	533.784	72.643	5.138	5.188
Massachusetts, US	2075	568.582	75.187	5.630	5.911
Minnesota, US	2500	555.891	70.889	4.582	4.895
North Carolina, US	2103	548.189	84.382	7.205	7.371

Exhibit 7: Summary Statistics and Standard Errors for Proficiency in Mathematics Applying at the Eighth Grade

Country	Sample Size	Applying			
		Mean Proficiency	Standard Deviation	Jackknife Sampling Error	Overall Standard Error
Armenia	5846	458.290	96.901	2.730	3.045
Australia	7556	506.047	83.041	4.791	4.816
Bahrain	4640	400.310	99.465	1.753	2.391
Chile	5835	424.879	79.858	2.366	2.519
Chinese Taipei	5042	614.459	105.418	3.218	3.529
England	3842	508.381	86.642	5.434	5.471
Finland	4266	520.043	63.581	2.449	2.541
Georgia	4563	424.845	107.006	3.525	3.623
Ghana	7323	315.956	88.731	3.754	4.146
Hong Kong SAR	4015	587.372	85.070	3.587	3.653
Hungary	5178	504.830	86.414	3.294	3.501
Indonesia	5795	384.310	86.581	4.427	4.713
Iran, Islamic Rep. of	6029	411.282	95.917	4.245	4.576
Israel	4699	513.046	102.788	4.276	4.386
Italy	3979	502.655	70.541	2.112	2.194
Japan	4414	574.129	82.154	2.409	2.528
Jordan	7694	397.242	94.624	3.689	3.782
Kazakhstan	4390	484.445	80.376	4.160	4.218
Korea, Rep. of	5166	616.556	91.821	2.712	2.857
Lebanon	3974	435.886	81.291	4.057	4.076
Lithuania	4747	507.618	79.934	2.275	2.380
Macedonia, Rep. of	4062	417.461	111.368	4.991	5.184
Malaysia	5733	438.608	91.510	5.158	5.194
Morocco	8986	377.903	82.996	1.727	1.906
New Zealand	5336	491.229	81.993	4.974	5.016
Norway	3862	480.150	67.972	2.583	2.638
Oman	9542	359.924	106.107	2.546	2.981
Palestinian Nat'l Auth.	7812	396.987	101.164	3.200	3.465
Qatar	4422	396.271	115.479	3.010	3.293
Romania	5523	453.599	100.758	3.812	3.905
Russian Federation	4893	538.336	83.026	3.418	3.522
Saudi Arabia	4344	374.564	99.281	4.638	4.796
Singapore	5927	612.714	85.591	3.717	3.892
Slovenia	4415	502.351	69.619	2.010	2.080
Sweden	5573	489.358	70.720	1.915	2.180
Syrian Arab Republic	4413	378.984	95.323	4.083	4.240
Thailand	6124	428.247	84.229	4.065	4.070

Exhibit 7: Summary Statistics and Standard Errors for Proficiency in Mathematics Applying at the Eighth Grade (Continued)

Country	Sample Size	Applying			
		Mean Proficiency	Standard Deviation	Jackknife Sampling Error	Overall Standard Error
Tunisia	5128	421.229	79.301	2.675	2.911
Turkey	6928	458.636	110.657	3.842	3.978
Ukraine	3378	480.328	90.004	3.982	4.259
United Arab Emirates	14089	441.734	95.253	2.136	2.207
United States	10477	503.057	81.467	2.682	2.809
Ninth Grade Participants					
Botswana	5400	383.227	82.171	2.532	2.822
Honduras	4418	339.529	76.210	3.136	3.580
South Africa	11969	336.242	91.273	2.364	2.657
Benchmarking Participants					
Alberta, Canada	4799	504.914	62.176	2.358	2.775
Ontario, Canada	4756	509.952	69.880	2.323	2.353
Quebec, Canada	6149	535.517	59.516	2.387	2.717
Abu Dhabi, UAE	4373	434.462	93.626	3.977	4.304
Dubai, UAE	5571	465.404	101.007	2.247	2.421
Alabama, US	2113	457.611	82.572	6.400	6.563
California, US	2614	480.377	89.791	5.476	5.633
Colorado, US	2167	514.843	80.012	4.946	5.091
Connecticut, US	2099	510.516	89.762	4.833	4.937
Florida, US	1712	504.038	82.497	7.017	7.262
Indiana, US	2260	515.710	78.938	5.507	5.568
Massachusetts, US	2075	554.810	76.122	5.585	5.633
Minnesota, US	2500	540.180	81.157	5.421	5.542
North Carolina, US	2103	530.662	87.806	7.396	7.541

Exhibit 8: Summary Statistics and Standard Errors for Proficiency in Mathematics Reasoning at the Eighth Grade

Country	Sample Size	Mathematics Reasoning			
		Mean Proficiency	Standard Deviation	Jackknife Sampling Error	Overall Standard Error
Armenia	5846	451.419	102.078	2.905	2.995
Australia	7556	505.754	89.266	4.887	4.942
Bahrain	4640	414.658	99.604	1.621	2.123
Chile	5835	421.601	84.879	2.530	2.823
Chinese Taipei	5042	608.974	104.159	3.094	3.399
England	3842	509.807	88.532	5.363	5.467
Finland	4266	511.727	75.270	2.658	2.737
Georgia	4563	413.764	118.817	4.093	4.201
Ghana	7323	324.069	92.346	4.206	4.759
Hong Kong SAR	4015	580.015	92.629	3.813	3.936
Hungary	5178	502.159	95.111	3.614	3.711
Indonesia	5795	387.569	86.486	3.577	3.839
Iran, Islamic Rep. of	6029	428.037	97.218	4.205	4.325
Israel	4699	519.803	98.891	3.859	4.036
Italy	3979	496.396	79.568	2.487	2.606
Japan	4414	578.780	87.085	2.584	3.050
Jordan	7694	415.528	101.443	3.389	3.809
Kazakhstan	4390	482.314	87.999	4.315	4.748
Korea, Rep. of	5166	612.480	90.931	2.278	2.531
Lebanon	3974	425.661	91.863	4.522	4.657
Lithuania	4747	492.530	82.306	2.248	2.545
Macedonia, Rep. of	4062	423.521	116.291	5.344	5.946
Malaysia	5733	426.284	96.801	5.334	5.547
Morocco	8986	356.711	96.307	1.758	2.682
New Zealand	5336	493.537	90.259	5.216	5.306
Norway	3862	477.837	74.959	2.588	2.892
Oman	9542	368.924	112.390	2.500	2.841
Palestinian Nat'l Auth.	7812	404.433	106.669	3.552	4.068
Qatar	4422	406.439	116.138	2.905	3.319
Romania	5523	455.096	105.624	3.831	4.024
Russian Federation	4893	531.298	87.661	3.621	3.744
Saudi Arabia	4344	387.556	102.850	4.430	4.666
Singapore	5927	604.339	96.230	4.130	4.300
Slovenia	4415	499.829	80.347	2.534	2.723
Sweden	5573	477.745	82.194	2.222	2.441
Syrian Arab Republic	4413	371.030	109.817	5.131	5.449
Thailand	6124	429.185	90.790	4.259	4.328

Exhibit 8: Summary Statistics and Standard Errors for Proficiency in Mathematics Reasoning at the Eighth Grade (Continued)

Country	Sample Size	Mathematics Reasoning			
		Mean Proficiency	Standard Deviation	Jackknife Sampling Error	Overall Standard Error
Tunisia	5128	422.573	79.837	2.631	2.741
Turkey	6928	464.651	108.925	3.480	3.511
Ukraine	3378	467.407	98.347	3.918	4.156
United Arab Emirates	14089	448.832	95.670	2.078	2.108
United States	10477	503.408	82.451	2.689	2.719
Ninth Grade Participants					
Botswana	5400	397.582	80.356	2.334	2.396
Honduras	4418	322.339	97.649	3.899	4.281
South Africa	11969	362.908	92.497	2.246	2.471
Benchmarking Participants					
Alberta, Canada	4799	511.851	71.286	2.840	3.005
Ontario, Canada	4756	524.260	76.456	2.563	2.835
Quebec, Canada	6149	528.994	70.285	2.415	2.679
Abu Dhabi, UAE	4373	441.966	94.350	3.756	4.066
Dubai, UAE	5571	469.500	100.160	2.201	2.661
Alabama, US	2113	453.897	89.265	6.651	7.167
California, US	2614	483.211	85.872	4.825	4.952
Colorado, US	2167	517.245	80.825	4.639	5.179
Connecticut, US	2099	510.712	89.151	4.851	5.060
Florida, US	1712	504.829	82.588	6.974	7.049
Indiana, US	2260	510.714	76.224	5.375	5.531
Massachusetts, US	2075	561.625	78.916	5.780	5.916
Minnesota, US	2500	536.156	81.242	5.161	5.422
North Carolina, US	2103	530.565	86.179	6.639	6.844