

Appendix 4C: Summary Statistics and Standard Errors for Proficiency in Mathematics at the Eighth Grade

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

Country	Sample Size	Overall Mathematics				
		Mean Proficiency	Jackknife Sampling Variance	Imputation Variance	Total Variance	Overall Standard Error
Australia	10338	504.958	8.854	0.810	9.664	3.109
Bahrain	4918	453.953	1.887	0.178	2.066	1.437
Botswana (9)	5964	390.835	3.528	0.650	4.178	2.044
Canada	8757	527.279	4.485	0.155	4.640	2.154
Chile	4849	427.426	8.530	1.825	10.354	3.218
Chinese Taipei	5711	599.105	5.636	0.232	5.869	2.423
Egypt	7822	392.227	15.262	1.752	17.014	4.125
England	4814	518.255	16.718	0.633	17.352	4.166
Georgia	4035	453.195	11.144	0.721	11.865	3.445
Hong Kong SAR	4155	594.253	20.803	0.519	21.323	4.618
Hungary	4893	514.414	13.953	0.321	14.274	3.778
Iran, Islamic Rep. of	6130	436.349	19.233	2.323	21.555	4.643
Ireland	4704	523.494	7.035	0.431	7.466	2.732
Israel	5512	510.899	16.592	0.226	16.818	4.101
Italy	4481	494.394	6.238	0.137	6.374	2.525
Japan	4745	586.469	4.966	0.186	5.152	2.270
Jordan	7865	385.551	9.941	0.494	10.435	3.230
Kazakhstan	4887	527.807	27.489	0.387	27.876	5.280
Korea, Rep. of	5309	605.742	6.105	0.674	6.779	2.604
Kuwait	4503	392.471	19.663	1.921	21.584	4.646
Lebanon	3873	442.425	12.780	0.424	13.204	3.634
Lithuania	4347	511.313	7.007	0.639	7.646	2.765
Malaysia	9726	465.313	12.350	0.381	12.731	3.568
Malta	3817	493.541	0.847	0.133	0.980	0.990
Morocco	13035	384.387	3.671	1.406	5.077	2.253
New Zealand	8142	492.720	10.499	0.766	11.266	3.356
Norway (9)	4697	511.542	4.699	0.364	5.063	2.250
Oman	8883	403.156	5.193	0.701	5.894	2.428

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

Country	Sample Size	Overall Mathematics				
		Mean Proficiency	Jackknife Sampling Variance	Imputation Variance	Total Variance	Overall Standard Error
Qatar	5403	437.109	7.449	1.502	8.951	2.992
Russian Federation	4780	537.996	21.058	0.644	21.702	4.659
Saudi Arabia	3759	367.717	15.791	5.263	21.054	4.588
Singapore	6116	620.956	9.345	0.879	10.224	3.198
Slovenia	4257	516.341	4.241	0.112	4.353	2.086
South Africa (9)	12514	372.373	19.635	0.871	20.505	4.528
Sweden	4090	500.722	7.320	0.284	7.604	2.758
Thailand	6482	431.417	22.145	0.555	22.700	4.764
Turkey	6079	457.629	20.377	2.112	22.489	4.742
United Arab Emirates	18012	464.783	3.692	0.315	4.007	2.002
United States	10221	518.296	9.365	0.092	9.457	3.075
Benchmarking Participants						
Buenos Aires, Argentina	3253	396.117	17.284	0.298	17.582	4.193
Ontario, Canada	4520	522.302	7.858	0.270	8.128	2.851
Quebec, Canada	3950	543.356	14.628	0.235	14.863	3.855
Norway (8)	4795	486.767	3.751	0.123	3.873	1.968
Abu Dhabi, UAE	4838	441.673	20.771	1.291	22.062	4.697
Dubai, UAE	6149	511.852	4.190	0.148	4.338	2.083
Florida, US	2074	493.464	41.455	0.100	41.556	6.446

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

Country	Sample Size	Algebra				Overall Standard Error
		Mean Proficiency	Jackknife Sampling Variance	Imputation Variance	Total Variance	
Australia	10338	490.523	9.589	1.745	11.334	3.367
Bahrain	4918	482.761	1.961	2.404	4.365	2.089
Botswana (9)	5964	399.825	3.327	1.789	5.116	2.262
Canada	8757	513.149	4.630	0.245	4.875	2.208
Chile	4849	413.446	8.902	2.490	11.393	3.375
Chinese Taipei	5711	613.240	7.111	0.906	8.017	2.831
Egypt	7822	419.700	16.671	2.079	18.750	4.330
England	4814	492.424	20.357	1.609	21.966	4.687
Georgia	4035	468.702	13.696	0.573	14.268	3.777
Hong Kong SAR	4155	593.003	20.614	1.470	22.084	4.699
Hungary	4893	502.822	14.660	2.304	16.964	4.119
Iran, Islamic Rep. of	6130	437.363	22.725	3.604	26.329	5.131
Ireland	4704	500.995	7.448	0.458	7.906	2.812
Israel	5512	517.072	19.507	2.125	21.632	4.651
Italy	4481	481.338	7.275	1.594	8.869	2.978
Japan	4745	595.902	6.459	1.440	7.899	2.810
Jordan	7865	417.572	11.343	1.048	12.391	3.520
Kazakhstan	4887	554.755	31.008	0.759	31.767	5.636
Korea, Rep. of	5309	612.084	7.453	0.922	8.375	2.894
Kuwait	4503	384.030	20.301	2.407	22.708	4.765
Lebanon	3873	465.704	12.817	2.825	15.642	3.955
Lithuania	4347	497.342	10.371	0.254	10.625	3.260
Malaysia	9726	466.857	10.748	0.736	11.484	3.389
Malta	3817	492.445	0.987	2.260	3.247	1.802
Morocco	13035	372.068	4.994	0.510	5.504	2.346
New Zealand	8142	474.775	11.813	0.291	12.104	3.479
Norway (9)	4697	471.239	6.656	0.521	7.176	2.679
Oman	8883	426.333	6.471	1.003	7.473	2.734
Qatar	5403	452.126	6.336	0.439	6.775	2.603
Russian Federation	4780	558.163	25.377	1.245	26.621	5.160
Saudi Arabia	3759	390.954	14.991	4.160	19.151	4.376
Singapore	6116	622.539	10.608	1.138	11.746	3.427
Slovenia	4257	498.243	3.997	2.095	6.092	2.468
South Africa (9)	12514	393.739	17.553	0.786	18.339	4.282

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

Country	Sample Size	Algebra				Overall Standard Error
		Mean Proficiency	Jackknife Sampling Variance	Imputation Variance	Total Variance	
Sweden	4090	482.127	9.168	1.205	10.372	3.221
Thailand	6482	429.091	24.392	1.789	26.181	5.117
Turkey	6079	459.112	19.672	1.379	21.051	4.588
United Arab Emirates	18012	485.031	3.491	0.651	4.142	2.035
United States	10221	524.861	9.690	0.193	9.884	3.144
Benchmarking Participants						
Buenos Aires, Argentina	3253	370.845	24.589	1.737	26.326	5.131
Ontario, Canada	4520	507.420	8.400	0.575	8.975	2.996
Quebec, Canada	3950	530.393	13.896	5.064	18.960	4.354
Norway (8)	4795	423.282	5.623	1.669	7.292	2.700
Abu Dhabi, UAE	4838	462.161	19.838	0.738	20.576	4.536
Dubai, UAE	6149	528.476	3.921	3.275	7.196	2.683
Florida, US	2074	502.144	45.296	1.210	46.506	6.820

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

Country	Sample Size	Geometry				
		Mean Proficiency	Jackknife Sampling Variance	Imputation Variance	Total Variance	Overall Standard Error
Australia	10338	500.112	8.570	1.015	9.584	3.096
Bahrain	4918	449.266	2.737	3.336	6.073	2.464
Botswana (9)	5964	376.868	3.538	2.786	6.324	2.515
Canada	8757	526.593	5.469	1.003	6.472	2.544
Chile	4849	427.534	8.332	2.964	11.296	3.361
Chinese Taipei	5711	606.788	5.958	1.009	6.967	2.640
Egypt	7822	392.824	15.105	2.041	17.146	4.141
England	4814	514.222	16.574	0.353	16.927	4.114
Georgia	4035	440.545	14.942	0.192	15.134	3.890
Hong Kong SAR	4155	601.775	23.819	2.133	25.952	5.094
Hungary	4893	518.216	17.259	0.578	17.837	4.223
Iran, Islamic Rep. of	6130	447.776	20.127	2.409	22.536	4.747
Ireland	4704	503.478	7.666	2.027	9.693	3.113
Israel	5512	487.304	19.939	1.246	21.185	4.603
Italy	4481	503.944	9.966	2.635	12.601	3.550
Japan	4745	597.600	5.319	1.259	6.579	2.565
Jordan	7865	380.748	8.705	3.097	11.802	3.435
Kazakhstan	4887	529.265	39.595	1.143	40.738	6.383
Korea, Rep. of	5309	612.210	6.125	5.492	11.618	3.408
Kuwait	4503	381.922	23.397	4.734	28.131	5.304
Lebanon	3873	443.560	12.849	2.931	15.781	3.972
Lithuania	4347	514.657	9.170	0.301	9.471	3.078
Malaysia	9726	455.281	14.429	0.541	14.970	3.869
Malta	3817	484.018	0.996	1.818	2.814	1.678
Morocco	13035	410.001	2.837	5.990	8.827	2.971
New Zealand	8142	488.092	9.307	0.753	10.060	3.172
Norway (9)	4697	497.733	5.550	0.902	6.452	2.540
Oman	8883	414.633	5.508	2.537	8.045	2.836
Qatar	5403	432.771	7.437	1.392	8.829	2.971
Russian Federation	4780	535.564	30.109	1.338	31.448	5.608
Saudi Arabia	3759	342.398	16.103	11.912	28.015	5.293
Singapore	6116	616.974	9.985	2.540	12.525	3.539
Slovenia	4257	522.142	4.300	3.373	7.672	2.770
South Africa (9)	12514	363.807	18.173	2.126	20.299	4.505

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

Country	Sample Size	Geometry				Overall Standard Error
		Mean Proficiency	Jackknife Sampling Variance	Imputation Variance	Total Variance	
Sweden	4090	477.830	7.555	3.968	11.523	3.395
Thailand	6482	429.008	22.595	1.103	23.698	4.868
Turkey	6079	462.566	21.504	2.777	24.280	4.928
United Arab Emirates	18012	447.423	4.511	1.415	5.926	2.434
United States	10221	500.102	9.723	0.440	10.163	3.188
Benchmarking Participants						
Buenos Aires, Argentina	3253	358.491	23.897	0.933	24.830	4.983
Ontario, Canada	4520	523.817	9.085	2.825	11.909	3.451
Quebec, Canada	3950	540.202	18.078	0.201	18.279	4.275
Norway (8)	4795	477.270	4.543	1.155	5.697	2.387
Abu Dhabi, UAE	4838	425.275	25.757	3.197	28.955	5.381
Dubai, UAE	6149	496.292	5.624	1.355	6.979	2.642
Florida, US	2074	469.663	37.704	5.120	42.824	6.544

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

Country	Sample Size	Number				Overall Standard Error
		Mean Proficiency	Jackknife Sampling Variance	Imputation Variance	Total Variance	
Australia	10338	511.324	9.704	0.270	9.974	3.158
Bahrain	4918	435.770	2.223	1.828	4.051	2.013
Botswana (9)	5964	393.427	4.176	6.177	10.353	3.218
Canada	8757	536.811	5.294	0.580	5.874	2.424
Chile	4849	427.319	9.703	1.001	10.703	3.272
Chinese Taipei	5711	589.739	5.685	0.250	5.934	2.436
Egypt	7822	393.093	13.020	0.751	13.771	3.711
England	4814	527.575	19.606	0.876	20.482	4.526
Georgia	4035	456.827	11.443	0.137	11.580	3.403
Hong Kong SAR	4155	594.334	20.776	2.980	23.755	4.874
Hungary	4893	517.500	14.924	1.096	16.020	4.002
Iran, Islamic Rep. of	6130	431.704	19.727	2.504	22.230	4.715
Ireland	4704	544.482	8.608	2.545	11.153	3.340
Israel	5512	517.678	13.818	2.116	15.934	3.992
Italy	4481	493.925	6.318	0.807	7.125	2.669
Japan	4745	572.052	4.172	1.580	5.752	2.398
Jordan	7865	380.465	8.467	1.861	10.327	3.214
Kazakhstan	4887	516.401	25.458	0.822	26.281	5.126
Korea, Rep. of	5309	601.180	5.656	0.175	5.830	2.415
Kuwait	4503	394.823	18.738	4.011	22.749	4.770
Lebanon	3873	440.196	11.912	5.051	16.963	4.119
Lithuania	4347	510.970	7.041	1.011	8.052	2.838
Malaysia	9726	471.617	12.490	0.392	12.883	3.589
Malta	3817	500.625	1.036	1.668	2.704	1.644
Morocco	13035	382.389	3.719	0.750	4.469	2.114
New Zealand	8142	499.647	12.217	0.238	12.456	3.529
Norway (9)	4697	528.688	5.580	1.012	6.592	2.567
Oman	8883	388.968	4.655	2.277	6.933	2.633
Qatar	5403	435.139	7.655	1.041	8.696	2.949
Russian Federation	4780	533.008	19.522	0.471	19.994	4.471
Saudi Arabia	3759	352.028	16.851	3.042	19.892	4.460
Singapore	6116	628.949	9.511	0.702	10.213	3.196
Slovenia	4257	523.789	5.021	0.709	5.730	2.394
South Africa (9)	12514	368.479	20.486	1.258	21.745	4.663

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

Country	Sample Size	Number				Overall Standard Error
		Mean Proficiency	Jackknife Sampling Variance	Imputation Variance	Total Variance	
Sweden	4090	512.658	6.854	1.386	8.240	2.871
Thailand	6482	430.478	23.770	1.222	24.992	4.999
Turkey	6079	447.424	20.315	1.046	21.361	4.622
United Arab Emirates	18012	463.684	3.397	0.132	3.529	1.879
United States	10221	519.731	9.134	0.329	9.463	3.076
Benchmarking Participants						
Buenos Aires, Argentina	3253	414.676	15.691	2.055	17.746	4.213
Ontario, Canada	4520	529.695	8.952	0.185	9.137	3.023
Quebec, Canada	3950	556.967	17.179	1.490	18.669	4.321
Norway (8)	4795	503.787	4.258	0.750	5.008	2.238
Abu Dhabi, UAE	4838	442.576	18.278	0.683	18.961	4.354
Dubai, UAE	6149	508.555	4.916	1.316	6.233	2.497
Florida, US	2074	498.089	43.085	1.086	44.171	6.646

**Summary Statistics and Standard Errors for Proficiency in Data and Chance
at the Eighth Grade**

Country	Sample Size	Data and Chance				Overall Standard Error
		Mean Proficiency	Jackknife Sampling Variance	Imputation Variance	Total Variance	
Australia	10338	518.833	8.784	0.974	9.757	3.124
Bahrain	4918	452.908	2.411	2.643	5.054	2.248
Botswana (9)	5964	373.556	4.734	5.164	9.898	3.146
Canada	8757	533.838	6.184	2.102	8.286	2.879
Chile	4849	429.468	9.887	4.262	14.150	3.762
Chinese Taipei	5711	587.930	5.511	0.617	6.128	2.476
Egypt	7822	338.098	17.400	2.361	19.761	4.445
England	4814	541.417	18.576	3.065	21.641	4.652
Georgia	4035	421.394	12.064	1.478	13.541	3.680
Hong Kong SAR	4155	597.122	25.329	9.463	34.793	5.899
Hungary	4893	518.888	14.434	0.580	15.015	3.875
Iran, Islamic Rep. of	6130	417.001	23.788	1.546	25.333	5.033
Ireland	4704	533.814	11.407	3.310	14.717	3.836
Israel	5512	503.211	18.951	5.530	24.481	4.948
Italy	4481	496.317	6.177	1.024	7.201	2.683
Japan	4745	589.045	5.146	0.370	5.516	2.349
Jordan	7865	346.120	11.274	4.750	16.024	4.003
Kazakhstan	4887	492.125	27.906	2.114	30.020	5.479
Korea, Rep. of	5309	600.133	4.921	0.678	5.599	2.366
Kuwait	4503	377.071	22.396	3.030	25.426	5.042
Lebanon	3873	395.057	18.917	2.634	21.552	4.642
Lithuania	4347	521.495	6.625	0.734	7.359	2.713
Malaysia	9726	451.491	13.888	0.751	14.639	3.826
Malta	3817	486.607	1.226	5.564	6.790	2.606
Morocco	13035	353.269	3.543	4.768	8.311	2.883
New Zealand	8142	508.560	12.670	0.769	13.439	3.666
Norway (9)	4697	542.242	7.575	2.607	10.182	3.191
Oman	8883	376.220	6.447	2.762	9.208	3.035
Qatar	5403	416.941	9.593	5.617	15.210	3.900
Russian Federation	4780	507.042	18.385	6.224	24.608	4.961
Saudi Arabia	3759	361.268	17.906	6.251	24.157	4.915
Singapore	6116	617.045	11.039	0.420	11.459	3.385

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

Country	Sample Size	Data and Chance				
		Mean Proficiency	Jackknife Sampling Variance	Imputation Variance	Total Variance	Overall Standard Error
Slovenia	4257	524.614	5.406	1.808	7.215	2.686
South Africa (9)	12514	356.926	21.357	3.066	24.423	4.942
Sweden	4090	511.909	12.311	1.568	13.879	3.725
Thailand	6482	424.885	20.808	0.750	21.558	4.643
Turkey	6079	466.565	24.949	2.545	27.493	5.243
United Arab Emirates	18012	448.972	4.714	1.349	6.064	2.462
United States	10221	521.848	11.813	0.258	12.070	3.474
Benchmarking Participants						
Buenos Aires, Argentina	3253	372.981	26.761	1.325	28.085	5.300
Ontario, Canada	4520	531.233	10.643	4.281	14.924	3.863
Quebec, Canada	3950	546.109	22.834	2.509	25.343	5.034
Norway (8)	4795	519.419	6.831	2.181	9.012	3.002
Abu Dhabi, UAE	4838	425.722	25.981	3.930	29.910	5.469
Dubai, UAE	6149	503.513	5.444	3.692	9.135	3.022
Florida, US	2074	489.318	52.656	12.160	64.816	8.051

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

Country	Sample Size	Mathematics Knowing				Overall Standard Error
		Mean Proficiency	Jackknife Sampling Variance	Imputation Variance	Total Variance	
Australia	10338	504.368	8.165	1.309	9.474	3.078
Bahrain	4918	463.186	2.335	2.919	5.253	2.292
Botswana (9)	5964	393.558	4.056	4.688	8.745	2.957
Canada	8757	520.322	4.703	0.647	5.349	2.313
Chile	4849	422.594	8.385	3.375	11.760	3.429
Chinese Taipei	5711	598.180	6.609	1.855	8.464	2.909
Egypt	7822	399.144	18.123	0.393	18.516	4.303
England	4814	513.144	16.263	0.244	16.507	4.063
Georgia	4035	455.982	13.976	2.790	16.766	4.095
Hong Kong SAR	4155	599.748	22.422	3.871	26.293	5.128
Hungary	4893	511.208	14.605	0.912	15.517	3.939
Iran, Islamic Rep. of	6130	435.396	21.659	2.073	23.732	4.872
Ireland	4704	527.348	7.140	2.007	9.147	3.024
Israel	5512	511.124	17.102	0.875	17.977	4.240
Italy	4481	488.636	6.163	0.903	7.066	2.658
Japan	4745	577.630	5.434	1.424	6.857	2.619
Jordan	7865	390.547	9.725	0.372	10.097	3.178
Kazakhstan	4887	533.246	38.945	1.074	40.019	6.326
Korea, Rep. of	5309	606.806	7.154	0.621	7.776	2.788
Kuwait	4503	397.569	21.014	1.284	22.298	4.722
Lebanon	3873	455.722	13.690	0.567	14.258	3.776
Lithuania	4347	501.908	7.702	1.668	9.370	3.061
Malaysia	9726	472.252	14.094	0.514	14.608	3.822
Malta	3817	498.996	0.933	1.253	2.186	1.479
Morocco	13035	382.117	4.357	1.610	5.966	2.443
New Zealand	8142	487.658	9.952	1.326	11.278	3.358
Norway (9)	4697	500.370	4.240	1.166	5.406	2.325
Oman	8883	401.284	6.394	2.962	9.357	3.059
Qatar	5403	439.871	8.557	1.256	9.814	3.133
Russian Federation	4780	543.105	30.444	1.456	31.900	5.648
Saudi Arabia	3759	359.402	21.180	3.312	24.492	4.949
Singapore	6116	633.054	9.865	1.615	11.480	3.388

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

Country	Sample Size	Mathematics Knowing				Overall Standard Error
		Mean Proficiency	Jackknife Sampling Variance	Imputation Variance	Total Variance	
Slovenia	4257	518.009	4.577	1.359	5.936	2.436
South Africa (9)	12514	371.225	24.887	2.573	27.459	5.240
Sweden	4090	484.301	6.875	1.165	8.040	2.835
Thailand	6482	425.315	25.000	1.032	26.031	5.102
Turkey	6079	447.118	22.774	1.171	23.944	4.893
United Arab Emirates	18012	475.660	3.940	0.749	4.689	2.165
United States	10221	527.972	10.425	1.478	11.903	3.450
Benchmarking Participants						
Buenos Aires, Argentina	3253	397.437	18.222	0.704	18.926	4.350
Ontario, Canada	4520	513.055	8.125	0.681	8.805	2.967
Quebec, Canada	3950	540.700	15.553	2.486	18.039	4.247
Norway (8)	4795	476.352	3.168	3.369	6.537	2.557
Abu Dhabi, UAE	4838	453.246	21.157	1.543	22.700	4.764
Dubai, UAE	6149	521.321	4.670	0.748	5.418	2.328
Florida, US	2074	501.238	48.357	5.511	53.868	7.339

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

Country	Sample Size	Mathematics Applying				Overall Standard Error
		Mean Proficiency	Jackknife Sampling Variance	Imputation Variance	Total Variance	
Australia	10338	502.031	9.145	0.121	9.266	3.044
Bahrain	4918	445.218	1.932	0.945	2.878	1.696
Botswana (9)	5964	385.384	3.996	1.522	5.518	2.349
Canada	8757	528.164	4.220	0.477	4.697	2.167
Chile	4849	426.649	9.123	1.808	10.932	3.306
Chinese Taipei	5711	602.105	5.787	0.705	6.492	2.548
Egypt	7822	384.985	14.494	0.653	15.148	3.892
England	4814	519.392	16.766	0.308	17.074	4.132
Georgia	4035	454.431	11.720	0.903	12.623	3.553
Hong Kong SAR	4155	595.227	19.220	1.137	20.357	4.512
Hungary	4893	515.986	13.993	0.701	14.693	3.833
Iran, Islamic Rep. of	6130	434.175	19.054	0.436	19.490	4.415
Ireland	4704	520.417	7.867	1.392	9.259	3.043
Israel	5512	511.867	15.709	0.411	16.119	4.015
Italy	4481	494.952	6.381	0.421	6.802	2.608
Japan	4745	591.560	4.748	0.573	5.321	2.307
Jordan	7865	378.362	9.829	0.387	10.216	3.196
Kazakhstan	4887	527.235	27.304	1.480	28.784	5.365
Korea, Rep. of	5309	606.193	6.573	1.416	7.988	2.826
Kuwait	4503	389.424	17.752	2.832	20.584	4.537
Lebanon	3873	438.615	13.450	2.128	15.577	3.947
Lithuania	4347	519.858	6.895	0.125	7.020	2.650
Malaysia	9726	463.043	11.934	0.986	12.919	3.594
Malta	3817	493.488	0.954	1.416	2.369	1.539
Morocco	13035	385.315	3.379	1.553	4.932	2.221
New Zealand	8142	493.100	10.345	0.704	11.049	3.324
Norway (9)	4697	516.316	4.744	0.557	5.301	2.302
Oman	8883	400.766	5.160	0.848	6.008	2.451
Qatar	5403	434.932	7.292	1.299	8.591	2.931
Russian Federation	4780	540.864	20.827	0.277	21.104	4.594
Saudi Arabia	3759	363.583	14.295	3.366	17.660	4.202
Singapore	6116	619.345	8.786	1.225	10.011	3.164

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

Country	Sample Size	Mathematics Applying				Overall Standard Error
		Mean Proficiency	Jackknife Sampling Variance	Imputation Variance	Total Variance	
Slovenia	4257	514.152	4.061	0.528	4.589	2.142
South Africa (9)	12514	362.243	20.678	0.593	21.271	4.612
Sweden	4090	506.669	6.963	0.630	7.592	2.755
Thailand	6482	431.459	21.691	0.708	22.399	4.733
Turkey	6079	459.544	18.267	0.302	18.569	4.309
United Arab Emirates	18012	457.307	3.715	0.621	4.336	2.082
United States	10221	514.657	10.137	0.127	10.263	3.204
Benchmarking Participants						
Buenos Aires, Argentina	3253	391.955	19.901	2.694	22.595	4.753
Ontario, Canada	4520	522.105	7.104	0.886	7.990	2.827
Quebec, Canada	3950	546.492	14.633	1.542	16.175	4.022
Norway (8)	4795	491.983	3.683	1.800	5.484	2.342
Abu Dhabi, UAE	4838	433.731	20.970	0.816	21.786	4.668
Dubai, UAE	6149	505.267	4.602	1.711	6.313	2.513
Florida, US	2074	488.443	43.976	1.571	45.547	6.749

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

Country	Sample Size	Mathematics Reasoning				Overall Standard Error
		Mean Proficiency	Jackknife Sampling Variance	Imputation Variance	Total Variance	
Australia	10338	511.998	8.387	0.941	9.328	3.054
Bahrain	4918	451.902	2.400	2.552	4.951	2.225
Botswana (9)	5964	388.986	3.410	0.565	3.974	1.994
Canada	8757	533.893	4.801	0.763	5.564	2.359
Chile	4849	431.854	9.183	1.551	10.733	3.276
Chinese Taipei	5711	602.351	5.660	0.474	6.134	2.477
Egypt	7822	378.866	17.333	0.820	18.153	4.261
England	4814	522.146	16.723	2.299	19.022	4.361
Georgia	4035	440.652	14.320	5.880	20.199	4.494
Hong Kong SAR	4155	591.369	24.076	1.752	25.828	5.082
Hungary	4893	514.927	14.266	0.899	15.165	3.894
Iran, Islamic Rep. of	6130	436.194	21.057	0.700	21.757	4.664
Ireland	4704	521.380	7.245	2.528	9.774	3.126
Israel	5512	509.852	16.543	2.568	19.111	4.372
Italy	4481	500.040	7.342	0.623	7.965	2.822
Japan	4745	590.552	5.882	0.879	6.761	2.600
Jordan	7865	379.646	9.884	0.914	10.798	3.286
Kazakhstan	4887	524.604	28.566	1.600	30.166	5.492
Korea, Rep. of	5309	607.643	5.799	1.429	7.228	2.689
Kuwait	4503	373.908	17.342	2.889	20.232	4.498
Lebanon	3873	405.768	18.084	2.525	20.610	4.540
Lithuania	4347	501.380	8.383	0.690	9.074	3.012
Malaysia	9726	452.956	12.100	1.912	14.012	3.743
Malta	3817	484.406	1.080	3.634	4.715	2.171
Morocco	13035	373.931	2.898	4.990	7.888	2.809
New Zealand	8142	498.549	10.594	1.377	11.971	3.460
Norway (9)	4697	515.873	5.070	0.969	6.039	2.457
Oman	8883	402.412	5.536	3.994	9.530	3.087
Qatar	5403	431.367	7.221	0.551	7.773	2.788
Russian Federation	4780	527.568	22.772	1.785	24.557	4.956
Saudi Arabia	3759	374.162	14.027	2.136	16.163	4.020
Singapore	6116	616.228	11.376	2.204	13.580	3.685

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

Country	Sample Size	Mathematics Reasoning				Overall Standard Error
		Mean Proficiency	Jackknife Sampling Variance	Imputation Variance	Total Variance	
Slovenia	4257	515.899	5.075	2.368	7.443	2.728
South Africa (9)	12514	383.131	15.878	2.113	17.991	4.242
Sweden	4090	509.436	8.910	3.290	12.200	3.493
Thailand	6482	435.431	22.017	0.681	22.699	4.764
Turkey	6079	472.147	21.271	2.027	23.298	4.827
United Arab Emirates	18012	460.985	3.531	1.251	4.782	2.187
United States	10221	514.041	8.673	0.653	9.326	3.054
Benchmarking Participants						
Buenos Aires, Argentina	3253	382.562	23.511	4.958	28.469	5.336
Ontario, Canada	4520	534.384	8.452	1.438	9.890	3.145
Quebec, Canada	3950	538.211	15.665	2.147	17.812	4.220
Norway (8)	4795	487.809	4.740	0.737	5.477	2.340
Abu Dhabi, UAE	4838	440.120	20.646	1.908	22.554	4.749
Dubai, UAE	6149	509.373	4.057	3.587	7.644	2.765
Florida, US	2074	490.882	36.604	6.687	43.291	6.580