Annex B1. Results for countries and economies

Table I.B1.2.1. Mean score and variation in mathematics performance [1/2]

		Mean score		Standard deviation		Percentiles										Difference (90th - 10th)	
						10th		25th		Median (50th)		75th		90th			
		Mean score	S.E.	S.D.	S.E.	Score	S.E.	Score	S.E.	Score	S.E.	Score	S.E.	Score	S.E.	Score dif.	S.E.
OECD	Australia*	487	(1.8)	99	(1.0)	358	(2.0)	416	(2.1)	485	(2.0)	556	(2.7)	619	(3.3)	261	(3.4)
	Austria	487	(2.3)	94	(1.2)	362	(3.7)	420	(3.6)	489	(2.7)	554	(2.7)	608	(2.7)	246	(4.1)
	Belgium	489	(2.2)	96	(1.1)	359	(3.0)	420	(3.0)	492	(3.0)	559	(2.9)	614	(2.7)	254	(3.6)
	Canada*	497	(1.6)	94	(0.8)	375	(2.3)	430	(1.7)	496	(1.8)	562	(2.2)	619	(2.2)	244	(2.7)
	Chile	412	(2.1)	77	(1.1)	315	(2.9)	358	(2.5)	409	(2.6)	464	(2.4)	514	(2.8)	198	(3.3)
	Colombia	383	(3.0)	73	(1.5)	293	(3.1)	332	(3.2)	378	(3.5)	429	(3.7)	481	(4.4)	187	(4.2)
	Costa Rica	385	(1.9)	66	(1.4)	302	(2.3)	339	(2.1)	382	(2.2)	427	(2.5)	470	(3.1)	168	(3.4)
	Czech Republic	487	(2.1)	93	(1.2)	365	(2.7)	418	(3.0)	486	(2.8)	553	(2.7)	610	(2.9)	245	(3.8)
	Denmark*	489	(1.9)	82	(1.1)	383	(2.5)	433	(2.4)	489	(2.5)	545	(2.5)	595	(3.0)	213	(3.5)
	Estonia	510	(2.0)	85	(1.1)	401	(2.5)	450	(2.5)	509	(2.4)	569	(2.5)	620	(3.0)	219	(3.1)
	Finland	484	(1.9)	89	(0.9)	366	(2.5)	420	(2.2)	486	(2.3)	547	(2.4)	600	(2.7)	234	(3.1)
	France	474	(2.5)	91	(1.1)	353	(3.0)	408	(3.3)	475	(2.9)	539	(3.1)	593	(3.1)	239	(3.6)
	Germany	475	(3.1)	95	(1.3)	351	(4.2)	407	(3.9)	474	(3.8)	541	(3.4)	599	(3.7)	248	(4.5)
	Greece	430	(2.3)	83	(1.3)	326	(3.0)	370	(2.8)	426	(2.7)	487	(2.6)	542	(3.2)	216	(3.5)
	Hungary	473	(2.5)	94	(1.7)	348	(3.2)	406	(3.3)	474	(3.3)	538	(3.4)	595	(4.2)	247	(5.1)
	Iceland	459	(1.6)	88	(1.2)	344	(2.9)	396	(2.5)	458	(2.2)	520	(2.6)	574	(3.3)	230	(4.2)
	Ireland*	492	(2.0)	80	(0.9)	387	(2.8)	437	(2.9)	493	(2.3)	547	(2.1)	594	(2.7)	207	(3.2)
	Israel	458	(3.3)	107	(1.9)	317	(4.3)	380	(3.9)	458	(4.1)	534	(3.8)	597	(4.6)	280	(5.9)
	Italy	471	(3.1)	89	(1.6)	357	(3.0)	408	(3.0)	469	(3.5)	533	(4.4)	589	(5.1)	232	(5.1)
	Japan	536	(2.9)	93	(1.9)	410	(4.9)	473	(4.2)	540	(3.2)	601	(3.3)	652	(4.3)	243	(6.1)
	Korea	527	(3.9)	105	(2.6)	388	(6.4)	456	(5.1)	531	(4.3)	600	(4.2)	660	(5.0)	272	(7.7)
	Latvia*	483	(2.0)	80	(1.2)	381	(3.4)	428	(2.5)	481	(2.4)	537	(2.6)	587	(3.0)	207	(4.0)
	Lithuania	475	(1.8)	87	(1.3)	364	(2.9)	413	(2.4)	473	(2.3)	535	(2.5)	591	(3.0)	227	(4.0)
	Mexico	395	(2.3)	69	(1.4)	310	(2.8)	347	(2.3)	391	(2.6)	440	(2.9)	487	(3.8)	178	(4.2)
	Netherlands*	493	(3.8)	106	(2.1)	348	(5.7)	411	(6.6)	497	(4.9)	574	(3.4)	630	(2.8)	282	(5.8)
	New Zealand*	479	(2.0)	99	(1.4)	350	(3.2)	408	(3.2)	478	(2.7)	547	(2.9)	609	(3.7)	258	(5.0)
	Norway	468	(2.1)	93	(0.9)	345	(2.6)	401	(2.5)	469	(2.8)	535	(2.6)	589	(2.6)	244	(3.2)
	Poland	489	(2.3)	89	(1.4)	370	(3.1)	426	(3.2)	490	(2.9)	552	(2.6)	604	(3.1)	234	(4.2)
	Portugal	472	(2.4)	90	(1.5)	356	(4.1)	408	(3.0)	471	(2.8)	536	(2.7)	589	(2.2)	233	(4.3)
	Slovak Republic	464	(2.9)	101	(1.8)	327	(5.2)	392	(4.4)	468	(3.6)	536	(3.0)	591	(3.6)	263	(5.9)
	Slovenia	485	(1.2)	89	(1.0)	369	(2.7)	421	(1.9)	482	(1.9)	546	(2.3)	604	(2.6)	234	(3.7)
	Spain	473	(1.5)	86	(0.8)	359	(2.2)	414	(1.9)	474	(1.8)	533	(1.6)	584	(1.8)	225	(2.5)
	Sweden	482	(2.1)	96	(1.1)	356	(2.9)	413	(2.9)	483	(2.7)	550	(2.8)	607	(2.8)	251	(3.6)
	Switzerland	508	(2.1)	96	(1.2)	379	(3.0)	439	(3.1)	509	(2.8)	578	(2.6)	632	(2.7)	253	(3.8)
	Türkiye	453	(1.6)	90	(1.0)	341	(2.3)	387	(2.4)	447	(2.4)	515	(2.2)	576	(2.6)	236	(3.4)
	United Kingdom*	489	(2.2)	96	(1.3)	363	(3.1)	422	(2.8)	489	(2.7)	555	(2.9)	614	(4.1)	251	(4.7)
	United States*	465	(4.0)	95	(1.8)	345	(4.0)	396	(4.2)	462	(4.7)	531	(4.5)	590	(5.9)	246	(5.6)
	OECD average	472	(0.4)	90	(0.2)	355	(0.6)	408	(0.5)	472	(0.5)	535	(0.5)	590	(0.6)	235	(0.7)

* Caution is required when interpreting estimates because one or more PISA sampling standards were not met (see Reader's Guide, Annexes A2 and A4).
Note: Values that are statistically significant are indicated in bold (see Annex A3).

Table I.B1.2.1. Mean score and variation in mathematics performance [2/2]

| | | | | | Percentiles | | | | | | | | | Difference | |
| | Mean score | | Standard deviation | | 10th | | 25th | | Median (50th) | | 75th | | 90th | | (90th - 10th) | |
	Mean score	S.E.	S.D.	S.E.	Score	S.E.	Score	S.E.	Score	S.E.	Score	S.E.	Score	S.E.	Score dif.	S.E.
Albania	368	(2.1)	85	(1.3)	266	(2.5)	308	(2.2)	361	(2.6)	423	(2.9)	481	(3.5)	**216**	(3.8)
Argentina	378	(2.3)	74	(1.1)	287	(2.8)	325	(2.3)	372	(2.5)	425	(2.8)	477	(3.3)	**190**	(3.5)
Baku (Azerbaijan)	397	(2.4)	85	(1.1)	290	(2.5)	336	(2.7)	393	(2.7)	455	(3.0)	511	(3.6)	**221**	(3.4)
Brazil	379	(1.6)	77	(1.2)	288	(1.6)	325	(1.2)	370	(1.7)	425	(2.4)	482	(3.1)	**194**	(3.2)
Brunei Darussalam	442	(0.9)	84	(0.7)	337	(2.0)	383	(1.2)	437	(1.5)	499	(1.6)	556	(2.3)	**219**	(3.3)
Bulgaria	417	(3.3)	97	(2.1)	298	(3.5)	346	(3.2)	4 11	(3.8)	483	(4.9)	549	(6.5)	**251**	(6.8)
Cambodia	336	(2.7)	73	(1.6)	244	(3.1)	288	(3.0)	336	(2.7)	383	(3.4)	428	(4.5)	**184**	(4.6)
Croatia	463	(2.4)	88	(1.4)	352	(3.2)	400	(2.9)	459	(2.9)	524	(3.5)	582	(3.7)	**230**	(4.5)
Cyprus	418	(1.2)	101	(0.9)	294	(2.0)	343	(1.9)	4 11	(1.8)	487	(2.1)	556	(2.8)	**262**	(3.3)
Dominican Republic	339	(1.6)	54	(1.3)	273	(2.1)	302	(1.8)	335	(1.5)	373	(2.3)	410	(2.9)	**137**	(3.3)
El Salvador	343	(2.0)	59	(1.1)	272	(2.3)	303	(1.9)	338	(2.0)	380	(2.7)	423	(3.9)	**151**	(3.9)
Georgia	390	(2.4)	85	(2.2)	288	(2.7)	330	(2.1)	383	(2.2)	444	(3.2)	502	(4.9)	**214**	(5.3)
Guatemala	344	(2.2)	69	(1.7)	256	(3.1)	299	(2.4)	343	(2.1)	389	(2.5)	432	(4.3)	**176**	(5.0)
Hong Kong (China)*	540	(3.0)	105	(1.7)	398	(5.2)	469	(4.4)	545	(3.2)	614	(3.0)	672	(4.1)	**274**	(5.7)
Indonesia	366	(2.4)	62	(1.3)	290	(2.4)	323	(2.1)	361	(2.5)	404	(3.3)	448	(3.8)	**158**	(3.6)
Jamaica*	377	(3.1)	71	(1.4)	291	(2.8)	326	(3.1)	371	(3.6)	423	(4.9)	475	(5.0)	**185**	(4.9)
Jordan	361	(2.0)	62	(1.0)	284	(2.0)	318	(2.1)	358	(2.2)	402	(2.7)	442	(3.1)	**158**	(3.2)
Kazakhstan	425	(1.7)	78	(1.0)	329	(1.9)	371	(1.8)	421	(1.9)	477	(2.1)	529	(2.6)	**201**	(2.7)
Kosovo	355	(1.0)	62	(0.7)	280	(1.7)	311	(1.4)	349	(1.3)	394	(1.8)	438	(2.6)	**159**	(2.8)
Macao (China)	552	(1.1)	92	(1.0)	429	(2.7)	489	(2.1)	554	(1.8)	616	(1.8)	670	(2.6)	**241**	(3.7)
Malaysia	409	(2.4)	76	(2.4)	317	(2.3)	355	(2.1)	403	(2.4)	456	(3.0)	509	(5.1)	**193**	(5.4)
Malta	466	(1.6)	99	(1.4)	333	(3.4)	395	(2.9)	469	(2.2)	537	(2.5)	592	(3.7)	**259**	(5.3)
Moldova	414	(2.3)	80	(1.3)	317	(2.5)	359	(1.9)	408	(2.4)	465	(3.4)	521	(4.3)	**205**	(4.1)
Mongolia	425	(2.6)	83	(1.6)	323	(2.9)	366	(2.2)	418	(2.5)	479	(3.3)	537	(4.5)	**214**	(4.6)
Montenegro	406	(1.1)	82	(0.9)	306	(1.7)	346	(1.7)	399	(1.8)	460	(2.1)	517	(2.4)	**211**	(3.1)
Morocco	365	(3.4)	63	(2.1)	289	(2.6)	321	(2.6)	359	(3.3)	404	(4.2)	449	(6.3)	**160**	(5.9)
North Macedonia	389	(0.9)	83	(0.9)	287	(1.9)	329	(1.4)	382	(1.7)	444	(1.8)	500	(2.2)	**213**	(3.0)
Palestinian Authority	366	(1.8)	66	(1.1)	285	(2.2)	319	(1.9)	361	(2.0)	408	(2.5)	452	(3.1)	**167**	(3.1)
Panama*	357	(2.8)	65	(2.1)	278	(2.5)	311	(2.4)	351	(2.8)	396	(3.8)	443	(6.7)	**165**	(6.6)
Paraguay	338	(2.2)	77	(1.1)	241	(2.9)	283	(2.6)	335	(2.8)	389	(2.8)	439	(3.4)	**199**	(3.9)
Peru	391	(2.3)	78	(1.2)	295	(2.6)	335	(2.3)	386	(2.6)	442	(2.9)	497	(3.6)	**201**	(3.6)
Philippines	355	(2.6)	65	(1.8)	279	(2.2)	308	(2.1)	347	(2.7)	395	(3.5)	443	(4.8)	**164**	(4.8)
Qatar	414	(1.1)	89	(1.0)	307	(2.0)	350	(1.6)	405	(1.7)	469	(2.0)	536	(2.7)	**229**	(3.5)
Romania	428	(4.0)	99	(2.0)	303	(3.8)	356	(4.1)	424	(4.9)	495	(5.6)	559	(6.1)	**257**	(6.3)
Saudi Arabia	389	(1.8)	66	(1.0)	308	(2.1)	343	(2.0)	385	(1.9)	431	(2.3)	474	(2.8)	**166**	(3.0)
Serbia	440	(3.0)	90	(2.7)	329	(3.6)	377	(2.7)	436	(2.9)	499	(3.6)	558	(5.8)	**229**	(6.4)
Singapore	575	(1.2)	103	(0.9)	433	(2.8)	505	(2.3)	582	(1.7)	649	(2.0)	702	(2.3)	**268**	(3.6)
Chinese Taipei	547	(3.8)	112	(2.3)	393	(5.1)	470	(4.6)	554	(4.5)	628	(4.5)	687	(5.5)	**294**	(6.8)
Thailand	394	(2.7)	76	(2.0)	306	(2.3)	342	(2.2)	385	(2.4)	437	(3.9)	495	(6.5)	**189**	(6.2)
Ukrainian regions (18 of 27)	441	(4.1)	88	(2.1)	329	(5.4)	378	(5.2)	438	(4.8)	501	(4.7)	557	(5.3)	**228**	(6.4)
United Arab Emirates	431	(0.9)	101	(0.6)	306	(1.5)	356	(1.4)	423	(1.3)	500	(1.6)	570	(1.4)	**264**	(1.7)
Uruguay	409	(2.0)	83	(1.3)	303	(2.6)	349	(2.7)	405	(2.7)	466	(2.7)	520	(3.2)	**217**	(3.8)
Uzbekistan	364	(2.0)	67	(1.0)	283	(2.2)	318	(1.9)	360	(2.1)	406	(2.8)	453	(3.6)	**170**	(3.3)
Viet Nam	469	(3.9)	86	(2.3)	360	(5.5)	412	(4.3)	469	(4.0)	527	(4.6)	580	(4.8)	**220**	(6.2)

* Caution is required when interpreting estimates because one or more PISA sampling standards were not met (see Reader's Guide, Annexes A2 and A4).
Note: Values that are statistically significant are indicated in bold (see Annex A3).

Table I.B1.2.2. Mean score and variation in reading performance [1/2]

		Mean score		Standard deviation		Percentiles										Difference (90th - 10th)	
						10th		25th		Median (50th)		75th		90th			
		Mean score	S.E.	S.D.	S.E.	Score	S.E.	Score	S.E.	Score	S.E.	Score	S.E.	Score	S.E.	Score dif.	S.E.
OECD	Australia*	498	(2.0)	111	(1.2)	351	(2.7)	422	(2.2)	502	(2.2)	576	(2.7)	638	(3.1)	**288**	(3.6)
	Austria	480	(2.7)	104	(1.4)	340	(4.3)	406	(4.0)	485	(3.4)	557	(2.7)	613	(3.4)	**273**	(4.9)
	Belgium	479	(2.5)	105	(1.4)	337	(3.9)	407	(3.4)	484	(3.2)	555	(2.7)	610	(3.2)	**274**	(4.6)
	Canada*	507	(2.0)	109	(1.4)	365	(2.7)	434	(2.5)	511	(2.4)	583	(2.7)	643	(2.9)	**278**	(3.8)
	Chile	448	(2.6)	93	(1.4)	329	(3.7)	384	(3.2)	448	(3.2)	513	(3.3)	568	(3.4)	**239**	(4.2)
	Colombia	409	(3.8)	93	(1.5)	291	(3.8)	342	(3.7)	404	(4.5)	473	(4.9)	534	(4.6)	**243**	(4.2)
	Costa Rica	415	(2.7)	86	(1.2)	305	(3.1)	354	(3.0)	414	(3.4)	474	(3.5)	528	(4.2)	**222**	(4.3)
	Czech Republic	489	(2.2)	98	(1.4)	359	(3.5)	420	(3.1)	490	(2.7)	558	(2.7)	615	(3.0)	**256**	(4.4)
	Denmark*	489	(2.6)	92	(1.3)	368	(3.5)	427	(3.4)	491	(3.1)	554	(3.0)	605	(3.6)	**238**	(4.5)
	Estonia	511	(2.4)	92	(1.1)	388	(4.0)	449	(3.3)	514	(2.6)	576	(2.4)	628	(3.0)	**240**	(3.7)
	Finland	490	(2.3)	104	(1.1)	350	(3.9)	421	(3.0)	497	(2.7)	565	(2.4)	619	(3.0)	**270**	(4.1)
	France	474	(3.1)	106	(1.4)	331	(4.5)	400	(4.5)	479	(3.4)	549	(3.1)	608	(3.6)	**277**	(4.3)
	Germany	480	(3.6)	106	(1.5)	340	(5.1)	406	(4.5)	482	(4.5)	556	(3.7)	616	(3.8)	**276**	(5.0)
	Greece	438	(2.8)	94	(1.3)	315	(4.4)	372	(3.5)	439	(3.3)	505	(3.1)	561	(3.3)	**245**	(4.3)
	Hungary	473	(2.8)	101	(1.9)	336	(4.3)	404	(4.2)	479	(3.9)	546	(3.3)	599	(3.5)	**264**	(5.1)
	Iceland	436	(2.1)	103	(1.3)	298	(4.3)	362	(2.9)	437	(3.4)	511	(3.0)	569	(3.8)	**271**	(5.4)
	Ireland*	516	(2.3)	88	(1.2)	400	(3.8)	458	(3.2)	521	(2.6)	578	(2.8)	627	(2.6)	**227**	(3.9)
	Israel	474	(3.5)	122	(1.6)	306	(4.6)	388	(5.0)	481	(4.3)	564	(3.4)	628	(3.7)	**323**	(5.1)
	Italy	482	(2.7)	92	(1.3)	357	(3.8)	420	(3.6)	487	(3.1)	547	(3.1)	597	(3.5)	**240**	(4.3)
	Japan	516	(3.2)	96	(1.9)	387	(5.5)	451	(4.2)	522	(3.7)	585	(3.3)	636	(3.4)	**249**	(5.7)
	Korea	515	(3.6)	103	(2.5)	379	(6.3)	451	(4.8)	523	(4.0)	587	(3.6)	641	(4.2)	**262**	(6.4)
	Latvia*	475	(2.5)	90	(1.5)	358	(3.9)	414	(3.4)	476	(2.7)	537	(3.0)	590	(3.5)	**233**	(4.4)
	Lithuania	472	(2.2)	94	(1.5)	348	(4.3)	408	(2.7)	474	(2.8)	538	(2.8)	592	(3.5)	**244**	(5.3)
	Mexico	415	(2.9)	84	(1.8)	308	(3.7)	357	(3.1)	414	(3.2)	473	(3.9)	526	(4.8)	**218**	(5.4)
	Netherlands*	459	(4.3)	115	(2.1)	304	(6.6)	371	(7.3)	462	(5.7)	548	(4.5)	608	(3.8)	**303**	(6.7)
	New Zealand*	501	(2.1)	109	(1.4)	354	(3.8)	424	(3.3)	504	(2.8)	580	(3.1)	641	(3.3)	**287**	(4.8)
	Norway	477	(2.5)	112	(1.3)	323	(3.7)	398	(3.7)	482	(3.2)	558	(3.1)	618	(3.0)	**295**	(4.2)
	Poland	489	(2.7)	104	(1.9)	347	(5.2)	418	(4.5)	495	(3.2)	563	(3.4)	619	(3.7)	**272**	(6.2)
	Portugal	477	(2.7)	94	(1.7)	352	(4.9)	413	(3.5)	480	(3.0)	543	(2.6)	594	(2.8)	**243**	(4.9)
	Slovak Republic	447	(3.1)	105	(1.7)	306	(5.0)	372	(4.4)	451	(3.9)	524	(3.3)	580	(3.3)	**275**	(5.4)
	Slovenia	469	(1.6)	97	(1.2)	340	(3.6)	404	(2.3)	473	(2.0)	536	(2.5)	591	(3.2)	**252**	(4.2)
	Spain	474	(1.7)	97	(1.0)	346	(2.7)	409	(2.4)	478	(1.9)	542	(1.7)	597	(2.0)	**250**	(2.9)
	Sweden	487	(2.5)	111	(1.5)	337	(4.2)	410	(3.5)	493	(3.1)	568	(2.9)	627	(3.2)	**290**	(4.7)
	Switzerland	483	(2.3)	105	(1.5)	345	(3.7)	409	(3.2)	486	(3.2)	560	(3.2)	618	(3.0)	**273**	(4.6)
	Türkiye	456	(1.9)	87	(1.1)	341	(2.9)	396	(3.1)	458	(2.6)	518	(2.3)	568	(2.6)	**227**	(3.7)
	United Kingdom*	494	(2.4)	105	(1.6)	357	(3.6)	425	(3.0)	496	(2.8)	567	(2.7)	626	(3.5)	**269**	(4.2)
	United States*	504	(4.3)	111	(1.9)	356	(6.1)	428	(5.6)	506	(4.5)	583	(5.0)	648	(5.5)	**292**	(6.8)
	OECD average	476	(0.5)	101	(0.3)	342	(0.7)	406	(0.6)	479	(0.5)	547	(0.5)	603	(0.6)	**262**	(0.8)

* Caution is required when interpreting estimates because one or more PISA sampling standards were not met (see Reader's Guide, Annexes A2 and A4).

** Caution is required when comparing estimates based on PISA 2022 with other countries/economies as a strong linkage to the international PISA reading scale could not be established (see Reader's Guide and Annex A4).

Note: Values that are statistically significant are indicated in bold (see Annex A3).

Table I.B1.2.2. Mean score and variation in reading performance [2/2]

| | | Mean score | | Standard deviation | | Percentiles | | | | | | | | | | | Difference (90th - 10th) | |
| | | | | | | 10th | | 25th | | Median (50th) | | 75th | | 90th | | | | | |
		Mean score	S.E.	S.D.	S.E.	Score	S.E.	Score	S.E.	Score	S.E.	Score	S.E.	Score	S.E.			Score dif.	S.E.
Partners	Albania	358	(1.9)	80	(1.3)	260	(2.3)	302	(2.1)	354	(2.4)	411	(2.8)	465	(3.3)			205	(3.4)
	Argentina	401	(2.6)	92	(1.2)	285	(2.9)	334	(2.9)	397	(3.0)	462	(3.4)	523	(4.2)			239	(4.1)
	Baku (Azerbaijan)	365	(2.5)	85	(1.2)	257	(2.7)	304	(2.8)	363	(2.8)	423	(2.8)	478	(3.4)			221	(3.4)
	Brazil	410	(2.1)	100	(1.4)	284	(2.8)	339	(2.4)	407	(2.4)	478	(3.0)	544	(3.5)			260	(4.3)
	Brunei Darussalam	429	(1.2)	99	(1.1)	300	(2.3)	358	(2.0)	429	(1.5)	500	(2.1)	561	(3.0)			261	(3.8)
	Bulgaria	404	(3.4)	107	(2.3)	268	(3.5)	326	(3.6)	399	(4.3)	479	(5.2)	550	(5.8)			282	(6.5)
	Cambodia	329	(2.1)	57	(1.0)	256	(2.6)	292	(2.4)	330	(2.3)	367	(2.5)	400	(3.3)			144	(3.3)
	Croatia	475	(2.4)	89	(1.6)	358	(4.2)	415	(3.0)	477	(2.8)	539	(3.1)	590	(3.8)			232	(5.2)
	Cyprus	381	(1.2)	108	(1.0)	245	(2.2)	300	(1.8)	374	(2.3)	456	(2.3)	527	(2.7)			281	(3.0)
	Dominican Republic	351	(2.4)	84	(1.6)	249	(2.5)	291	(2.6)	345	(3.0)	406	(3.3)	464	(4.1)			215	(4.3)
	El Salvador	365	(2.8)	79	(1.7)	268	(3.0)	309	(2.8)	358	(3.0)	416	(3.7)	473	(4.9)			204	(5.3)
	Georgia	374	(2.3)	83	(1.6)	270	(2.7)	314	(2.7)	370	(2.2)	429	(3.3)	486	(4.4)			216	(4.7)
	Guatemala	374	(2.4)	73	(1.6)	283	(2.9)	323	(2.6)	372	(2.7)	422	(3.2)	469	(4.3)			186	(4.9)
	Hong Kong (China)*	500	(2.8)	99	(1.5)	366	(5.1)	437	(4.0)	507	(2.9)	569	(2.8)	621	(3.3)			255	(5.2)
	Indonesia	359	(2.9)	76	(1.4)	264	(3.1)	306	(2.9)	355	(3.1)	409	(3.9)	459	(4.1)			195	(4.0)
	Jamaica*	410	(4.2)	98	(1.8)	284	(5.0)	340	(4.7)	407	(5.1)	480	(5.3)	540	(5.0)			255	(5.5)
	Jordan	342	(2.4)	77	(1.4)	245	(2.6)	287	(2.5)	339	(2.6)	395	(3.1)	443	(4.2)			198	(4.5)
	Kazakhstan	386	(1.7)	82	(1.1)	288	(2.0)	330	(1.6)	380	(1.8)	435	(2.1)	495	(3.2)			207	(3.2)
	Kosovo	342	(1.1)	67	(0.8)	259	(2.0)	295	(1.5)	338	(1.5)	386	(1.7)	432	(2.7)			173	(3.2)
	Macao (China)	510	(1.3)	90	(1.0)	393	(2.9)	453	(2.4)	515	(1.5)	574	(1.9)	621	(2.6)			228	(3.8)
	Malaysia	388	(2.7)	86	(1.6)	275	(3.0)	326	(3.0)	389	(3.3)	449	(3.2)	499	(3.8)			224	(4.2)
	Malta	445	(1.9)	111	(1.5)	293	(4.0)	366	(3.4)	450	(2.8)	526	(2.4)	588	(3.5)			295	(5.7)
	Moldova	411	(2.5)	87	(1.6)	297	(3.2)	349	(2.8)	410	(3.1)	472	(3.2)	525	(4.3)			228	(5.0)
	Mongolia	378	(2.3)	77	(1.2)	279	(3.4)	327	(2.5)	379	(2.4)	431	(2.7)	477	(3.0)			199	(3.7)
	Montenegro	405	(1.3)	89	(1.0)	293	(2.2)	341	(2.1)	401	(2.1)	467	(2.0)	525	(2.8)			232	(3.4)
	Morocco	339	(4.0)	76	(1.9)	245	(3.5)	285	(3.4)	336	(4.4)	391	(5.0)	440	(6.3)			195	(5.8)
	North Macedonia	359	(0.8)	76	(0.8)	263	(1.6)	304	(1.6)	355	(1.2)	411	(1.8)	460	(2.0)			196	(2.7)
	Palestinian Authority	349	(2.0)	77	(1.1)	251	(2.6)	295	(2.3)	349	(2.5)	402	(2.4)	449	(2.8)			198	(3.4)
	Panama*	392	(3.4)	94	(1.9)	274	(3.8)	325	(3.8)	388	(4.6)	455	(4.5)	516	(5.4)			243	(5.6)
	Paraguay	373	(2.4)	83	(1.2)	268	(3.1)	315	(2.8)	370	(2.9)	430	(3.0)	484	(3.7)			216	(4.1)
	Peru	408	(2.7)	91	(1.7)	291	(3.7)	343	(3.1)	406	(3.1)	472	(3.2)	529	(4.0)			238	(5.2)
	Philippines	347	(3.4)	85	(2.2)	246	(2.1)	283	(2.4)	335	(3.5)	403	(5.5)	466	(6.3)			220	(5.9)
	Qatar	419	(1.4)	106	(1.3)	284	(2.6)	342	(2.2)	415	(2.2)	492	(2.7)	561	(3.7)			277	(4.4)
	Romania	428	(4.0)	100	(1.7)	297	(4.2)	357	(4.3)	430	(5.0)	500	(5.1)	559	(5.1)			262	(5.7)
	Saudi Arabia	383	(2.0)	79	(1.1)	281	(3.1)	328	(2.7)	381	(2.5)	437	(2.3)	485	(2.8)			204	(3.8)
	Serbia	440	(2.8)	91	(2.0)	323	(3.6)	377	(3.0)	440	(3.2)	504	(2.9)	558	(4.5)			236	(5.2)
	Singapore	543	(1.9)	106	(1.2)	400	(3.7)	474	(3.1)	551	(2.2)	619	(2.1)	671	(2.2)			271	(3.7)
	Chinese Taipei	515	(3.3)	105	(2.2)	374	(5.3)	447	(4.4)	523	(3.6)	589	(3.7)	643	(4.5)			269	(6.3)
	Thailand	379	(2.8)	80	(2.0)	279	(3.0)	322	(3.0)	374	(3.1)	431	(3.8)	486	(5.2)			206	(5.5)
	Ukrainian regions (18 of 27)	428	(3.9)	93	(2.0)	304	(6.6)	363	(5.8)	429	(4.4)	492	(3.8)	546	(4.1)			242	(6.5)
	United Arab Emirates	417	(1.3)	125	(0.7)	256	(1.7)	324	(1.8)	414	(2.0)	508	(1.9)	584	(1.8)			328	(2.0)
	Uruguay	430	(2.4)	99	(1.7)	299	(3.5)	359	(3.2)	432	(3.2)	502	(3.1)	559	(3.4)			260	(5.0)
	Uzbekistan	336	(2.0)	66	(1.0)	252	(2.1)	290	(2.1)	333	(2.4)	379	(2.3)	422	(3.1)			170	(3.0)
	Viet Nam**	462	(3.9)	77	(2.2)	361	(6.2)	413	(4.6)	465	(3.9)	515	(3.9)	558	(4.7)			197	(6.6)

* Caution is required when interpreting estimates because one or more PISA sampling standards were not met (see Reader's Guide, Annexes A2 and A4).

** Caution is required when comparing estimates based on PISA 2022 with other countries/economies as a strong linkage to the international PISA reading scale could not be established (see Reader's Guide and Annex A4).

Note: Values that are statistically significant are indicated in bold (see Annex A3).

Table I.B1.2.3. Mean score and variation in science performance [1/2]

		Mean score		Standard deviation		Percentiles										Difference (90th - 10th)	
						10th		25th		Median (50th)		75th		90th			
		Mean score	S.E.	S.D.	S.E.	Score	S.E.	Score	S.E.	Score	S.E.	Score	S.E.	Score	S.E.	Score dif.	S.E.
OECD	Australia*	507	(1.9)	109	(1.4)	364	(2.7)	430	(2.4)	508	(2.2)	583	(2.5)	647	(3.1)	283	(3.9)
	Austria	491	(2.7)	101	(1.4)	356	(3.6)	418	(3.8)	495	(3.3)	565	(3.4)	622	(3.1)	266	(4.1)
	Belgium	491	(2.5)	101	(1.3)	352	(3.7)	419	(3.5)	496	(2.8)	564	(2.8)	618	(3.2)	266	(4.4)
	Canada*	515	(1.9)	101	(1.1)	383	(2.6)	446	(2.2)	516	(2.3)	584	(2.4)	643	(2.9)	260	(3.4)
	Chile	444	(2.5)	92	(1.4)	326	(3.5)	379	(3.4)	443	(3.0)	508	(3.0)	564	(3.1)	238	(4.3)
	Colombia	411	(3.3)	87	(1.7)	303	(3.6)	349	(3.3)	406	(3.7)	469	(4.4)	528	(4.7)	225	(5.0)
	Costa Rica	411	(2.4)	80	(1.3)	309	(3.0)	355	(2.8)	408	(2.8)	464	(3.0)	515	(3.5)	206	(3.8)
	Czech Republic	498	(2.3)	99	(1.4)	368	(3.4)	427	(3.3)	498	(2.9)	568	(3.0)	628	(3.4)	260	(4.0)
	Denmark*	494	(2.5)	95	(1.6)	370	(3.8)	427	(3.6)	495	(3.0)	560	(3.1)	615	(3.5)	246	(4.3)
	Estonia	526	(2.1)	89	(1.3)	409	(3.2)	465	(2.8)	527	(2.4)	588	(3.0)	641	(3.2)	232	(4.3)
	Finland	511	(2.5)	106	(1.1)	370	(3.2)	437	(3.1)	514	(3.2)	586	(2.9)	647	(3.3)	278	(3.8)
	France	487	(2.7)	103	(1.5)	350	(4.0)	414	(4.0)	490	(3.4)	561	(3.1)	620	(3.4)	270	(4.4)
	Germany	492	(3.5)	106	(1.5)	352	(5.0)	417	(4.6)	493	(4.5)	567	(3.8)	631	(4.2)	279	(5.6)
	Greece	441	(2.8)	91	(1.6)	323	(4.0)	376	(3.3)	441	(3.0)	505	(3.0)	560	(3.5)	236	(4.7)
	Hungary	486	(2.7)	96	(1.6)	357	(3.3)	417	(3.8)	487	(3.7)	555	(3.6)	611	(3.9)	254	(5.1)
	Iceland	447	(1.8)	95	(1.4)	324	(3.7)	378	(2.5)	446	(2.4)	514	(3.0)	571	(3.3)	248	(4.9)
	Ireland*	504	(2.3)	91	(1.1)	384	(3.9)	441	(3.1)	506	(2.7)	569	(2.5)	621	(2.8)	237	(4.6)
	Israel	465	(3.4)	109	(1.7)	320	(4.3)	385	(4.1)	466	(4.1)	544	(3.9)	605	(4.6)	285	(5.3)
	Italy	477	(3.2)	93	(1.7)	356	(3.9)	413	(3.8)	480	(3.8)	543	(4.3)	597	(4.3)	241	(4.7)
	Japan	547	(2.8)	93	(1.7)	421	(4.6)	484	(4.3)	552	(3.2)	614	(3.1)	663	(3.4)	241	(5.4)
	Korea	528	(3.6)	105	(2.7)	387	(6.4)	459	(4.9)	535	(4.1)	603	(4.1)	657	(5.0)	270	(7.5)
	Latvia*	494	(2.3)	85	(1.2)	385	(3.3)	434	(2.8)	493	(2.7)	553	(2.9)	604	(3.2)	219	(4.2)
	Lithuania	484	(2.3)	92	(1.3)	364	(3.3)	419	(3.0)	484	(2.7)	548	(2.8)	605	(3.4)	241	(4.2)
	Mexico	410	(2.4)	75	(1.7)	315	(3.3)	357	(2.7)	408	(2.9)	461	(3.0)	508	(3.8)	193	(4.8)
	Netherlands*	488	(4.1)	112	(2.2)	340	(5.4)	401	(6.4)	489	(5.1)	574	(4.3)	636	(3.7)	296	(6.0)
	New Zealand*	504	(2.2)	107	(1.5)	362	(4.1)	428	(3.6)	506	(2.7)	581	(3.0)	643	(3.1)	281	(5.1)
	Norway	478	(2.4)	106	(1.2)	338	(3.2)	401	(3.2)	480	(3.0)	555	(3.2)	614	(3.1)	276	(3.7)
	Poland	499	(2.5)	96	(1.5)	370	(4.0)	432	(3.9)	502	(3.2)	568	(3.0)	623	(3.4)	253	(4.7)
	Portugal	484	(2.6)	92	(1.4)	364	(4.2)	419	(3.5)	485	(3.3)	550	(3.0)	603	(2.7)	239	(4.5)
	Slovak Republic	462	(3.0)	103	(1.9)	324	(5.1)	391	(4.1)	465	(3.6)	536	(3.6)	593	(3.6)	269	(5.8)
	Slovenia	500	(1.4)	94	(1.6)	376	(2.9)	434	(2.3)	500	(2.1)	566	(2.3)	622	(3.3)	246	(4.9)
	Spain	485	(1.6)	92	(0.8)	363	(2.3)	422	(2.0)	486	(2.0)	548	(1.8)	601	(1.9)	238	(2.3)
	Sweden	494	(2.4)	108	(1.7)	350	(4.0)	414	(3.7)	497	(3.0)	572	(2.7)	633	(3.3)	284	(5.5)
	Switzerland	503	(2.2)	99	(1.3)	370	(3.5)	429	(3.0)	504	(2.9)	575	(2.7)	631	(2.8)	261	(4.4)
	Türkiye	476	(1.9)	89	(1.1)	361	(2.7)	4 11	(2.8)	474	(2.7)	540	(2.3)	595	(3.1)	234	(3.8)
	United Kingdom*	500	(2.4)	104	(1.4)	363	(3.0)	427	(2.9)	500	(2.9)	572	(3.1)	634	(3.8)	271	(4.5)
	United States*	499	(4.3)	108	(1.8)	357	(5.1)	421	(5.0)	502	(5.3)	577	(4.8)	639	(5.2)	282	(5.8)
	OECD average	485	(0.4)	97	(0.3)	356	(0.6)	416	(0.6)	486	(0.5)	554	(0.5)	611	(0.6)	254	(0.8)

* Caution is required when interpreting estimates because one or more PISA sampling standards were not met (see Reader's Guide, Annexes A2 and A4).
Note: Values that are statistically significant are indicated in bold (see Annex A3).

Table I.B1.2.3. Mean score and variation in science performance [2/2]

| | Mean score | | Standard deviation | | Percentiles | | | | | | | | | | Difference (90th - 10th) | |
| | | | | | 10th | | 25th | | Median (50th) | | 75th | | 90th | | | |
	Mean score	S.E.	S.D.	S.E.	Score	S.E.	Score	S.E.	Score	S.E.	Score	S.E.	Score	S.E.	Score dif.	S.E.
Albania	376	(2.2)	83	(1.4)	275	(2.5)	318	(2.5)	371	(2.5)	429	(3.0)	485	(3.8)	**210**	(4.4)
Argentina	406	(2.5)	86	(1.2)	301	(3.0)	345	(2.7)	401	(3.1)	463	(3.3)	521	(3.6)	**221**	(3.7)
Baku (Azerbaijan)	380	(2.2)	78	(1.3)	283	(2.8)	324	(2.5)	376	(2.5)	432	(2.7)	484	(3.4)	**201**	(3.8)
Brazil	403	(1.9)	94	(1.3)	288	(2.2)	337	(1.9)	396	(2.1)	463	(2.6)	529	(3.5)	**241**	(3.6)
Brunei Darussalam	446	(1.3)	94	(1.0)	327	(2.7)	378	(2.0)	442	(1.7)	512	(2.2)	571	(2.6)	**245**	(3.9)
Bulgaria	421	(3.2)	95	(1.9)	302	(3.1)	351	(3.3)	415	(4.0)	487	(4.7)	549	(5.0)	**247**	(5.5)
Cambodia	347	(2.1)	51	(1.2)	283	(2.5)	314	(2.1)	347	(2.2)	381	(2.5)	411	(3.2)	**128**	(3.1)
Croatia	483	(2.4)	93	(1.6)	362	(3.9)	417	(3.2)	482	(3.0)	548	(2.8)	605	(3.0)	**243**	(4.8)
Cyprus	411	(1.5)	105	(1.5)	280	(2.9)	332	(2.4)	404	(2.4)	485	(2.6)	553	(3.0)	**272**	(4.4)
Dominican Republic	360	(2.0)	69	(1.1)	275	(2.3)	312	(1.9)	356	(2.3)	405	(3.0)	452	(2.8)	**177**	(3.0)
El Salvador	373	(2.6)	74	(1.3)	284	(3.3)	322	(2.7)	367	(2.6)	419	(3.4)	472	(4.5)	**188**	(4.1)
Georgia	384	(2.3)	81	(1.9)	285	(2.4)	328	(2.3)	379	(2.3)	436	(2.8)	491	(5.1)	**207**	(5.2)
Guatemala	373	(2.2)	65	(1.7)	294	(2.6)	329	(2.3)	369	(2.3)	414	(2.7)	458	(4.4)	**163**	(4.5)
Hong Kong (China)*	520	(2.8)	93	(1.7)	394	(4.8)	458	(4.3)	526	(3.4)	586	(3.0)	636	(3.2)	**242**	(5.5)
Indonesia	383	(2.6)	71	(1.3)	296	(2.7)	336	(2.7)	381	(2.7)	429	(3.1)	474	(3.5)	**178**	(3.6)
Jamaica*	403	(3.9)	94	(1.8)	286	(4.1)	334	(4.1)	397	(4.8)	466	(5.1)	531	(5.8)	**245**	(5.9)
Jordan	375	(2.4)	74	(1.4)	282	(2.5)	322	(2.3)	371	(2.5)	424	(2.9)	473	(3.7)	**191**	(3.7)
Kazakhstan	423	(1.7)	78	(1.3)	329	(2.2)	371	(1.9)	419	(1.8)	471	(2.1)	524	(3.1)	**195**	(3.5)
Kosovo	357	(1.3)	66	(1.0)	278	(1.6)	311	(1.5)	351	(1.5)	399	(1.9)	446	(3.2)	**168**	(3.5)
Macao (China)	543	(1.1)	88	(1.5)	426	(2.8)	487	(2.1)	549	(1.9)	604	(1.9)	651	(2.5)	**225**	(4.3)
Malaysia	416	(2.3)	79	(2.2)	317	(2.9)	360	(2.7)	414	(2.6)	469	(3.0)	519	(4.5)	**202**	(5.6)
Malta	466	(1.7)	102	(1.4)	328	(3.6)	391	(3.1)	469	(2.8)	540	(2.7)	597	(4.1)	**269**	(5.7)
Moldova	417	(2.4)	83	(1.5)	314	(2.7)	358	(2.5)	412	(2.7)	473	(3.3)	528	(3.8)	**214**	(4.2)
Mongolia	412	(2.4)	76	(1.3)	316	(3.2)	359	(2.5)	410	(2.7)	464	(3.2)	513	(3.5)	**197**	(4.2)
Montenegro	403	(1.2)	84	(1.1)	298	(2.5)	343	(1.9)	399	(1.9)	461	(2.3)	515	(2.3)	**217**	(3.7)
Morocco	365	(3.4)	67	(1.7)	283	(2.8)	318	(2.9)	360	(3.5)	408	(4.6)	456	(5.3)	**173**	(5.0)
North Macedonia	380	(0.9)	82	(0.9)	279	(1.8)	321	(1.4)	374	(1.5)	435	(1.9)	490	(2.4)	**211**	(2.8)
Palestinian Authority	369	(2.1)	72	(1.3)	280	(2.4)	319	(2.2)	365	(2.1)	416	(2.7)	464	(3.6)	**184**	(3.7)
Panama*	388	(3.5)	88	(2.2)	281	(3.7)	327	(3.0)	382	(3.6)	444	(5.2)	504	(6.6)	**224**	(6.9)
Paraguay	368	(2.1)	77	(1.2)	273	(2.9)	314	(2.6)	364	(2.4)	419	(2.6)	469	(3.3)	**196**	(3.9)
Peru	408	(2.6)	86	(1.3)	300	(3.4)	347	(3.0)	404	(3.0)	466	(3.1)	522	(3.9)	**222**	(4.4)
Philippines	356	(3.1)	78	(2.1)	266	(2.4)	302	(2.4)	346	(2.7)	403	(4.6)	464	(6.4)	**197**	(6.2)
Qatar	432	(1.5)	97	(1.3)	313	(2.4)	361	(2.1)	425	(2.1)	496	(2.2)	564	(2.9)	**250**	(3.8)
Romania	428	(3.9)	96	(1.7)	303	(3.9)	356	(4.0)	426	(5.2)	496	(4.7)	556	(4.8)	**252**	(5.2)
Saudi Arabia	390	(2.0)	70	(1.4)	304	(3.1)	342	(2.2)	387	(2.3)	436	(2.6)	482	(3.1)	**179**	(4.4)
Serbia	447	(2.9)	91	(2.2)	332	(3.3)	383	(3.0)	445	(3.1)	510	(3.6)	567	(4.9)	**235**	(5.4)
Singapore	561	(1.3)	99	(1.1)	425	(3.1)	497	(2.7)	569	(2.0)	632	(1.6)	684	(2.2)	**258**	(3.9)
Chinese Taipei	537	(3.3)	103	(2.0)	397	(4.8)	469	(4.0)	544	(3.5)	611	(3.9)	664	(5.0)	**267**	(6.3)
Thailand	409	(2.8)	82	(1.9)	309	(3.3)	352	(2.9)	403	(3.0)	462	(3.8)	518	(4.9)	**209**	(5.4)
Ukrainian regions (18 of 27)	450	(3.8)	90	(2.0)	334	(5.4)	386	(5.0)	449	(5.0)	513	(4.2)	567	(4.4)	**234**	(5.7)
United Arab Emirates	432	(1.3)	110	(1.3)	296	(2.5)	350	(2.1)	424	(1.8)	510	(1.9)	582	(2.7)	**287**	(4.3)
Uruguay	435	(2.5)	92	(1.4)	318	(3.4)	369	(3.1)	433	(2.8)	500	(2.9)	557	(3.9)	**239**	(4.7)
Uzbekistan	355	(2.0)	63	(1.0)	276	(2.3)	312	(1.9)	353	(2.2)	396	(2.8)	437	(3.0)	**160**	(2.8)
Viet Nam	472	(3.6)	78	(1.8)	372	(4.8)	420	(3.9)	473	(3.6)	525	(3.8)	572	(4.5)	**199**	(5.3)

* Caution is required when interpreting estimates because one or more PISA sampling standards were not met (see Reader's Guide, Annexes A2 and A4).

Note: Values that are statistically significant are indicated in bold (see Annex A3).

Table I.B1.3.1. Percentage of students at each proficiency level in mathematics [1/2]

	All students																
	Below Level 1c (below 233.17 score points)		Level 1c (from 233.17 to less than 295.47 score points)		Level 1b (from 295.47 to less than 357.77 score points)		Level 1a (from 357.77 to less than 420.07 score points)		Level 2 (from 420.07 to less than 482.38 score points)		Level 3 (from 482.38 to less than 544.68 score points)		Level 4 (from 544.68 to less than 606.99 score points)		Level 5 (from 606.99 to less than 669.30 score points)		Level 6 (above 669.30 score points)	
	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
Australia*	0.2	(0.1)	1.7	(0.2)	7.9	(0.4)	16.5	(0.5)	22.8	(0.6)	22.3	(0.7)	16.2	(0.5)	8.8	(0.4)	3.5	(0.3)
Austria	0.1	(0.1)	1.5	(0.3)	7.5	(0.5)	15.7	(0.7)	22.5	(0.7)	24.2	(0.7)	18.1	(0.7)	8.1	(0.5)	2.2	(0.2)
Belgium	0.1	(0.1)	1.7	(0.2)	7.8	(0.5)	15.3	(0.6)	21.5	(0.7)	23.5	(0.8)	18.6	(0.7)	8.9	(0.5)	2.6	(0.2)
Canada*	0.1	(0.0)	1.0	(0.1)	5.7	(0.3)	14.7	(0.4)	22.7	(0.5)	24.8	(0.5)	18.5	(0.5)	9.1	(0.4)	3.3	(0.2)
Chile	0.5	(0.2)	5.2	(0.6)	19.3	(0.9)	30.7	(0.8)	26.0	(0.8)	13.5	(0.6)	4.1	(0.4)	0.6	(0.1)	0.0	(0.0)
Colombia	1.1	(0.3)	9.6	(0.8)	28.4	(1.4)	32.3	(1.0)	19.1	(1.0)	7.7	(0.6)	1.7	(0.3)	0.3	(0.1)	0.0	(0.0)
Costa Rica	0.5	(0.1)	7.6	(0.6)	27.3	(1.0)	36.5	(1.1)	20.9	(0.9)	6.0	(0.5)	1.1	(0.2)	0.2	(0.1)	0.0	(0.0)
Czech Republic	0.1	(0.1)	1.2	(0.2)	7.1	(0.5)	17.1	(0.7)	23.2	(0.7)	23.4	(0.8)	17.3	(0.7)	8.1	(0.5)	2.5	(0.3)
Denmark*	0.0	(0.0)	0.6	(0.2)	4.7	(0.4)	15.1	(0.7)	26.3	(0.9)	28.1	(0.8)	17.5	(0.8)	6.5	(0.5)	1.3	(0.2)
Estonia	0.0	(0.0)	0.3	(0.1)	3.0	(0.3)	11.6	(0.6)	23.3	(0.8)	27.3	(1.0)	21.3	(0.9)	9.9	(0.6)	3.2	(0.3)
Finland	0.1	(0.0)	1.2	(0.2)	7.1	(0.4)	16.4	(0.6)	23.7	(0.7)	25.5	(0.7)	17.4	(0.6)	7.0	(0.5)	1.5	(0.2)
France	0.2	(0.1)	1.9	(0.2)	8.9	(0.6)	17.8	(0.7)	24.2	(0.7)	23.9	(0.7)	15.7	(0.7)	6.2	(0.5)	1.1	(0.2)
Germany	0.2	(0.1)	2.2	(0.4)	9.2	(0.7)	18.0	(0.8)	23.6	(0.9)	23.0	(0.9)	15.3	(0.8)	6.7	(0.5)	1.9	(0.2)
Greece	0.5	(0.2)	3.8	(0.4)	16.2	(0.8)	26.8	(0.8)	26.0	(0.8)	17.3	(0.7)	7.5	(0.5)	1.8	(0.3)	0.1	(0.1)
Hungary	0.2	(0.1)	2.4	(0.3)	9.6	(0.6)	17.3	(0.9)	23.8	(0.9)	23.8	(0.9)	15.1	(0.7)	6.3	(0.5)	1.6	(0.3)
Iceland	0.2	(0.1)	2.4	(0.4)	10.5	(0.7)	21.0	(0.8)	26.2	(0.8)	22.4	(0.8)	12.4	(0.8)	4.2	(0.5)	0.7	(0.2)
Ireland*	0.0	(0.0)	0.5	(0.1)	4.2	(0.4)	14.2	(0.7)	25.9	(0.8)	29.0	(0.9)	18.8	(0.7)	6.2	(0.5)	1.0	(0.2)
Israel	1.2	(0.2)	5.2	(0.5)	12.4	(0.7)	18.4	(0.8)	21.1	(0.8)	19.7	(0.8)	13.6	(0.8)	6.2	(0.5)	2.2	(0.4)
Italy	0.2	(0.1)	1.6	(0.3)	8.3	(0.6)	19.5	(0.9)	26.0	(0.9)	23.2	(0.8)	14.2	(0.9)	5.7	(0.6)	1.2	(0.2)
Japan	0.0	(0.0)	0.4	(0.1)	2.7	(0.4)	8.8	(0.7)	16.0	(0.8)	24.0	(0.9)	25.1	(1.0)	16.2	(0.8)	6.8	(0.7)
Korea	0.3	(0.1)	1.2	(0.3)	4.5	(0.6)	10.2	(0.8)	16.7	(0.8)	22.0	(0.9)	22.2	(1.0)	14.4	(0.9)	8.5	(0.8)
Latvia*	0.0	(0.0)	0.6	(0.1)	4.8	(0.5)	16.7	(0.7)	28.4	(0.9)	27.2	(0.9)	15.8	(0.8)	5.2	(0.4)	1.2	(0.2)
Lithuania	0.1	(0.1)	1.1	(0.2)	7.5	(0.6)	19.1	(0.8)	26.5	(0.7)	24.0	(0.8)	14.5	(0.6)	5.8	(0.5)	1.4	(0.2)
Mexico	0.6	(0.2)	5.8	(0.6)	24.3	(1.0)	35.1	(1.1)	23.0	(0.9)	9.0	(0.7)	2.0	(0.3)	0.2	(0.1)	0.0	(0.0)
Netherlands*	0.2	(0.1)	2.2	(0.4)	9.8	(1.0)	15.2	(0.9)	18.2	(0.8)	19.8	(1.0)	19.2	(0.9)	11.7	(0.7)	3.7	(0.4)
New Zealand*	0.2	(0.1)	2.1	(0.3)	9.3	(0.6)	17.2	(0.8)	22.9	(0.7)	22.6	(0.8)	15.4	(0.7)	7.4	(0.6)	2.9	(0.3)
Norway	0.3	(0.1)	2.4	(0.3)	10.1	(0.5)	18.7	(0.7)	23.8	(0.7)	23.0	(0.8)	14.9	(0.6)	5.5	(0.4)	1.4	(0.2)
Poland	0.1	(0.1)	1.1	(0.2)	6.4	(0.5)	15.4	(0.8)	23.8	(0.9)	25.6	(0.9)	18.2	(0.7)	7.5	(0.5)	1.9	(0.3)
Portugal	0.2	(0.1)	1.9	(0.4)	8.3	(0.6)	19.3	(0.7)	25.0	(0.8)	23.0	(0.8)	15.6	(0.7)	5.5	(0.4)	1.1	(0.2)
Slovak Republic	0.9	(0.2)	4.4	(0.5)	10.9	(0.8)	17.1	(0.9)	22.0	(1.0)	22.6	(0.8)	14.9	(0.7)	5.7	(0.4)	1.6	(0.2)
Slovenia	0.1	(0.0)	1.0	(0.2)	6.7	(0.6)	16.9	(0.7)	25.7	(0.9)	24.2	(0.9)	16.1	(0.7)	7.5	(0.4)	1.9	(0.3)
Spain	0.2	(0.1)	1.7	(0.2)	7.8	(0.4)	17.6	(0.5)	26.2	(0.5)	25.4	(0.5)	15.2	(0.4)	5.0	(0.3)	0.9	(0.1)
Sweden	0.2	(0.1)	1.9	(0.2)	8.3	(0.5)	16.8	(0.6)	22.6	(0.7)	23.5	(0.8)	16.7	(0.8)	7.8	(0.5)	2.1	(0.3)
Switzerland	0.0	(0.0)	0.8	(0.1)	5.4	(0.4)	13.2	(0.7)	20.5	(0.7)	23.5	(0.8)	20.4	(0.8)	11.9	(0.7)	4.2	(0.4)
Türkiye	0.1	(0.1)	2.3	(0.2)	12.3	(0.6)	23.9	(0.7)	25.3	(0.7)	19.2	(0.7)	11.3	(0.6)	4.6	(0.4)	0.9	(0.2)
United Kingdom*	0.2	(0.1)	1.7	(0.3)	7.2	(0.5)	15.3	(0.7)	23.1	(0.7)	24.2	(0.8)	17.1	(0.7)	8.2	(0.6)	3.1	(0.4)
United States*	0.2	(0.1)	2.5	(0.4)	10.4	(0.8)	20.8	(1.0)	23.9	(0.8)	21.5	(0.9)	13.3	(0.8)	5.7	(0.7)	1.6	(0.3)
OECD average	0.3	(0.0)	2.3	(0.1)	9.8	(0.1)	18.7	(0.1)	23.3	(0.1)	22.0	(0.1)	14.9	(0.1)	6.7	(0.1)	2.0	(0.0)

* Caution is required when interpreting estimates because one or more PISA sampling standards were not met (see Reader's Guide, Annexes A2 and A4).

Table I.B1.3.1. Percentage of students at each proficiency level in mathematics [2/2]

	All students															
	Below Level 1c (below 233.17 score points)		Level 1c (from 233.17 to less than 295.47 score points)		Level 1b (from 295.47 to less than 357.77 score points)		Level 1a (from 357.77 to less than 420.07 score points)		Level 2 (from 420.07 to less than 482.38 score points)		Level 3 (from 482.38 to less than 544.68 score points)		Level 4 (from 544.68 to less than 606.99 score points)		Level 5 (from 606.99 to less than 669.30 score points)		Level 6 (above 669.30 score points)	
	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
Albania	4.0	(0.4)	15.7	(0.7)	28.8	(0.9)	25.4	(0.7)	16.2	(0.7)	7.1	(0.4)	2.1	(0.3)	0.6	(0.2)	0.1	(0.1)
Argentina	1.4	(0.3)	11.3	(0.8)	29.4	(1.0)	30.8	(0.8)	18.1	(0.8)	6.9	(0.5)	1.7	(0.2)	0.3	(0.1)	0.0	(0.0)
Baku (Azerbaijan)	1.8	(0.2)	9.7	(0.6)	22.9	(0.7)	27.6	(0.8)	21.7	(0.8)	11.7	(0.6)	3.9	(0.4)	0.7	(0.2)	0.1	(0.0)
Brazil	1.2	(0.2)	11.2	(0.5)	30.7	(0.8)	30.3	(0.7)	16.7	(0.6)	7.0	(0.4)	2.4	(0.3)	0.5	(0.1)	0.1	(0.0)
Brunei Darussalam	0.2	(0.1)	2.8	(0.3)	12.9	(0.5)	26.0	(0.7)	27.3	(0.6)	18.6	(0.6)	9.2	(0.5)	2.8	(0.3)	0.3	(0.1)
Bulgaria	1.6	(0.3)	7.9	(0.6)	20.0	(0.9)	24.2	(0.9)	21.2	(0.9)	14.5	(0.8)	7.5	(0.7)	2.5	(0.4)	0.6	(0.2)
Cambodia	7.6	(0.6)	20.6	(1.0)	33.7	(1.0)	26.1	(1.1)	9.5	(0.9)	2.2	(0.5)	0.3	(0.2)	0.0	(0.0)	0.0	(0.0)
Croatia	0.2	(0.1)	1.9	(0.3)	9.3	(0.6)	21.5	(0.8)	26.8	(0.8)	21.7	(0.9)	12.7	(0.7)	4.9	(0.5)	1.0	(0.2)
Cyprus	1.7	(0.3)	8.6	(0.4)	20.2	(0.6)	22.7	(0.7)	20.5	(0.7)	14.5	(0.5)	8.0	(0.5)	3.1	(0.3)	0.8	(0.1)
Dominican Republic	1.5	(0.3)	19.5	(1.0)	45.1	(1.4)	26.4	(1.0)	6.7	(0.6)	0.8	(0.2)	0.1	(0.1)	0.0	c	0.0	c
El Salvador	1.9	(0.3)	19.0	(0.9)	42.0	(1.1)	26.5	(1.0)	8.8	(0.7)	1.7	(0.3)	0.2	(0.1)	0.0	c	0.0	c
Georgia	1.8	(0.2)	10.3	(0.7)	25.9	(0.9)	28.4	(0.8)	19.6	(0.7)	9.4	(0.5)	3.4	(0.4)	1.0	(0.3)	0.2	(0.1)
Guatemala	5.1	(0.6)	18.3	(1.0)	35.2	(1.2)	28.2	(1.0)	10.5	(0.8)	2.3	(0.5)	0.3	(0.2)	0.0	(0.0)	0.0	(0.0)
Hong Kong (China)*	0.1	(0.0)	0.9	(0.2)	3.8	(0.4)	9.1	(0.6)	14.8	(0.8)	21.0	(0.8)	23.1	(0.9)	16.7	(0.7)	10.6	(0.8)
Indonesia	1.0	(0.2)	10.9	(0.8)	36.0	(1.2)	33.8	(1.2)	14.1	(0.9)	3.8	(0.5)	0.5	(0.1)	0.0	(0.0)	0.0	(0.0)
Jamaica*	0.9	(0.2)	10.7	(0.9)	30.9	(1.5)	31.3	(1.3)	17.5	(1.2)	7.1	(0.7)	1.4	(0.3)	0.1	(0.1)	0.0	c
Jordan	1.2	(0.2)	13.0	(0.8)	35.4	(1.1)	33.2	(1.0)	13.9	(0.9)	3.0	(0.4)	0.3	(0.1)	0.0	(0.0)	0.0	c
Kazakhstan	0.4	(0.1)	3.4	(0.3)	15.7	(0.5)	30.1	(0.6)	27.5	(0.7)	15.6	(0.5)	5.7	(0.3)	1.4	(0.2)	0.2	(0.1)
Kosovo	1.4	(0.3)	15.1	(0.7)	38.9	(0.9)	29.6	(0.9)	11.7	(0.6)	2.9	(0.3)	0.3	(0.1)	0.0	(0.0)	0.0	c
Macao (China)	0.0	(0.0)	0.2	(0.1)	1.7	(0.3)	6.5	(0.5)	14.4	(0.7)	23.2	(0.8)	25.4	(1.1)	18.4	(0.8)	10.2	(0.5)
Malaysia	0.2	(0.1)	4.7	(0.4)	21.6	(0.9)	32.5	(0.9)	24.8	(0.9)	11.4	(0.6)	3.7	(0.4)	0.9	(0.3)	0.2	(0.2)
Malta	0.5	(0.2)	3.6	(0.4)	11.4	(0.7)	17.0	(0.8)	22.3	(1.1)	22.7	(0.9)	15.2	(1.0)	5.7	(0.6)	1.5	(0.2)
Moldova	0.5	(0.2)	5.0	(0.4)	19.1	(0.8)	31.1	(0.9)	24.8	(0.7)	13.3	(0.8)	4.9	(0.5)	1.1	(0.2)	0.1	(0.1)
Mongolia	0.4	(0.1)	4.2	(0.4)	17.0	(0.7)	29.5	(0.8)	25.1	(0.7)	15.1	(0.7)	6.4	(0.5)	1.9	(0.4)	0.3	(0.1)
Montenegro	0.7	(0.1)	6.9	(0.4)	22.6	(0.8)	29.3	(0.8)	22.4	(0.8)	12.5	(0.5)	4.7	(0.3)	0.9	(0.1)	0.1	(0.1)
Morocco	0.7	(0.2)	11.7	(0.9)	36.7	(1.6)	32.5	(1.2)	14.0	(1.1)	3.9	(0.7)	0.6	(0.3)	0.0	(0.0)	0.0	c
North Macedonia	1.7	(0.3)	10.6	(0.5)	26.2	(0.8)	27.7	(0.8)	19.9	(0.6)	10.1	(0.4)	3.1	(0.3)	0.6	(0.1)	0.1	(0.0)
Palestinian Authority	1.3	(0.2)	12.4	(0.7)	34.1	(0.9)	32.1	(0.9)	15.2	(0.7)	4.1	(0.4)	0.7	(0.2)	0.1	(0.1)	0.0	(0.0)
Panama*	1.6	(0.3)	15.4	(0.9)	37.1	(1.3)	29.7	(1.3)	12.1	(1.0)	3.3	(0.7)	0.7	(0.3)	0.0	(0.0)	0.0	c
Paraguay	8.3	(0.7)	22.2	(0.9)	30.7	(1.0)	24.3	(1.0)	11.0	(0.7)	3.0	(0.4)	0.6	(0.2)	0.0	(0.0)	0.0	c
Peru	1.1	(0.3)	9.0	(0.6)	25.6	(0.9)	30.5	(0.7)	20.8	(0.8)	9.7	(0.6)	2.8	(0.3)	0.5	(0.1)	0.0	(0.0)
Philippines	1.1	(0.2)	16.7	(1.0)	38.6	(1.3)	27.7	(0.9)	12.2	(0.9)	3.2	(0.4)	0.5	(0.2)	0.1	(0.1)	0.0	c
Qatar	0.6	(0.2)	6.6	(0.5)	21.2	(0.6)	28.0	(1.0)	22.3	(0.7)	12.5	(0.6)	6.0	(0.4)	2.1	(0.2)	0.6	(0.1)
Romania	1.5	(0.3)	7.0	(0.6)	17.1	(1.0)	22.9	(1.0)	22.3	(0.9)	16.4	(0.9)	8.7	(0.7)	3.2	(0.5)	0.8	(0.2)
Saudi Arabia	0.4	(0.1)	6.1	(0.4)	26.9	(0.8)	36.6	(0.9)	21.7	(0.8)	6.7	(0.5)	1.3	(0.2)	0.2	(0.1)	0.0	(0.0)
Serbia	0.7	(0.2)	3.6	(0.5)	13.8	(0.8)	25.0	(0.8)	26.3	(0.9)	18.1	(0.8)	8.8	(0.5)	3.0	(0.5)	0.8	(0.4)
Singapore	0.0	(0.0)	0.3	(0.1)	1.9	(0.2)	5.9	(0.4)	11.2	(0.6)	17.6	(0.6)	22.6	(0.7)	22.0	(0.7)	18.6	(0.5)
Chinese Taipei	0.2	(0.1)	0.9	(0.2)	4.3	(0.4)	9.2	(0.6)	13.5	(0.8)	18.7	(0.9)	21.5	(0.8)	18.0	(0.9)	13.7	(1.2)
Thailand	0.5	(0.1)	6.6	(0.6)	27.0	(1.0)	34.2	(1.0)	19.4	(0.8)	8.1	(0.7)	3.2	(0.4)	0.8	(0.2)	0.2	(0.1)
Ukrainian regions (18 of 27)	0.4	(0.2)	3.6	(0.6)	14.2	(1.3)	24.3	(1.3)	25.9	(1.2)	19.2	(1.2)	9.3	(0.8)	2.7	(0.4)	0.6	(0.2)
United Arab Emirates	1.0	(0.1)	6.6	(0.3)	18.0	(0.4)	23.3	(0.4)	21.1	(0.4)	15.3	(0.4)	9.2	(0.3)	4.0	(0.2)	1.3	(0.1)
Uruguay	1.0	(0.2)	7.3	(0.5)	20.4	(0.8)	27.9	(0.8)	24.1	(0.7)	13.6	(0.6)	4.9	(0.4)	0.9	(0.2)	0.1	(0.0)
Uzbekistan	1.7	(0.3)	12.8	(0.7)	34.4	(0.9)	31.8	(0.8)	14.4	(0.8)	4.2	(0.5)	0.7	(0.2)	0.0	(0.0)	0.0	(0.0)
Viet Nam	0.3	(0.1)	1.9	(0.4)	7.3	(0.8)	18.6	(1.1)	28.1	(1.2)	24.7	(1.0)	13.6	(0.9)	4.5	(0.6)	0.9	(0.3)

Partners (side label)

* Caution is required when interpreting estimates because one or more PISA sampling standards were not met (see Reader's Guide, Annexes A2 and A4).

Table I.B1.3.2. Percentage of students at each proficiency level in reading [1/2]

	All students																	
	Below Level 1c (less than 189.33 score points)		Level 1c (from 189.33 to less than 262.04 score points)		Level 1b (from 262.04 to less than 334.75 score points)		Level 1a (from 334.75 to less than 407.47 score points)		Level 2 (from 407.47 to less than 480.18 score points)		Level 3 (from 480.18 to less than 552.89 score points)		Level 4 (from 552.89 to less than 625.61 score points)		Level 5 (from 625.61 to less than 698.32 score points)		Level 6 (above 698.32 score points)	
	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
Australia*	0.3	(0.1)	1.5	(0.2)	6.0	(0.4)	13.4	(0.4)	21.4	(0.5)	25.0	(0.7)	20.1	(0.5)	9.5	(0.4)	2.9	(0.3)
Austria	0.1	(0.1)	1.7	(0.2)	7.4	(0.6)	16.1	(0.8)	23.1	(0.8)	25.5	(0.8)	18.5	(0.8)	6.7	(0.5)	1.0	(0.2)
Belgium	0.2	(0.1)	2.0	(0.3)	7.5	(0.5)	15.5	(0.7)	23.2	(0.8)	25.9	(0.9)	18.2	(0.7)	6.3	(0.4)	1.0	(0.2)
Canada*	0.2	(0.1)	1.2	(0.1)	4.7	(0.2)	12.0	(0.4)	21.2	(0.5)	25.6	(0.7)	21.4	(0.5)	10.3	(0.4)	3.3	(0.3)
Chile	0.4	(0.1)	1.8	(0.3)	8.8	(0.6)	22.6	(0.8)	29.1	(0.9)	23.9	(0.9)	10.9	(0.7)	2.3	(0.3)	0.2	(0.1)
Colombia	0.4	(0.2)	4.6	(0.5)	17.3	(1.0)	29.1	(1.1)	25.9	(1.0)	15.8	(1.0)	5.9	(0.6)	1.0	(0.2)	0.1	(0.0)
Costa Rica	0.3	(0.1)	3.1	(0.3)	14.7	(0.8)	29.0	(0.9)	30.0	(0.8)	17.3	(1.0)	4.9	(0.5)	0.7	(0.2)	0.1	(0.0)
Czech Republic	0.1	(0.1)	0.8	(0.2)	5.0	(0.4)	15.4	(0.6)	24.8	(0.8)	27.0	(0.8)	18.8	(0.8)	6.9	(0.4)	1.1	(0.2)
Denmark*	0.1	(0.0)	0.8	(0.2)	4.4	(0.4)	13.8	(0.7)	26.3	(0.9)	29.3	(0.9)	19.1	(0.8)	5.6	(0.5)	0.7	(0.2)
Estonia	0.0	(0.0)	0.4	(0.1)	3.0	(0.4)	10.4	(0.7)	22.4	(0.8)	30.0	(0.8)	23.2	(0.7)	9.1	(0.5)	1.5	(0.3)
Finland	0.2	(0.1)	1.7	(0.2)	6.1	(0.4)	13.5	(0.6)	22.6	(0.7)	26.8	(0.7)	20.4	(0.9)	7.5	(0.5)	1.2	(0.2)
France	0.2	(0.1)	2.4	(0.3)	8.1	(0.6)	16.2	(0.7)	23.6	(0.8)	25.5	(0.9)	16.9	(0.8)	6.1	(0.5)	1.0	(0.2)
Germany	0.2	(0.1)	1.9	(0.3)	7.2	(0.6)	16.2	(0.8)	23.8	(0.9)	24.7	(0.8)	17.8	(0.9)	6.7	(0.5)	1.4	(0.2)
Greece	0.3	(0.1)	2.7	(0.4)	11.2	(0.8)	23.4	(0.9)	28.3	(0.8)	22.4	(0.9)	9.7	(0.6)	1.9	(0.2)	0.1	(0.1)
Hungary	0.3	(0.1)	2.0	(0.3)	7.5	(0.6)	16.0	(0.9)	24.4	(0.9)	27.0	(1.1)	17.3	(0.8)	4.9	(0.5)	0.5	(0.1)
Iceland	0.5	(0.1)	4.1	(0.5)	13.1	(0.7)	22.1	(0.9)	24.9	(1.0)	22.0	(0.8)	10.7	(0.8)	2.4	(0.4)	0.3	(0.1)
Ireland*	0.0	(0.0)	0.3	(0.1)	2.3	(0.3)	8.7	(0.6)	21.4	(0.7)	31.8	(0.9)	25.2	(0.8)	9.1	(0.6)	1.1	(0.2)
Israel	0.9	(0.2)	4.0	(0.4)	9.5	(0.6)	15.3	(0.7)	20.2	(0.7)	22.1	(0.8)	17.5	(0.7)	8.3	(0.6)	2.2	(0.3)
Italy	0.1	(0.0)	1.0	(0.2)	5.5	(0.5)	14.8	(0.7)	26.0	(0.9)	29.8	(0.8)	17.8	(0.8)	4.6	(0.5)	0.4	(0.1)
Japan	0.1	(0.0)	0.5	(0.1)	3.2	(0.4)	10.0	(0.7)	20.7	(0.9)	27.9	(1.1)	25.2	(1.0)	10.6	(0.7)	1.8	(0.3)
Korea	0.3	(0.2)	1.0	(0.3)	3.6	(0.4)	9.7	(0.8)	19.4	(1.0)	28.0	(1.0)	24.7	(1.1)	10.8	(0.8)	2.5	(0.4)
Latvia*	0.1	(0.0)	0.9	(0.2)	5.3	(0.5)	16.6	(0.8)	29.1	(0.9)	28.6	(0.8)	15.3	(0.8)	3.8	(0.5)	0.4	(0.1)
Lithuania	0.1	(0.1)	1.2	(0.2)	6.6	(0.5)	16.9	(0.7)	27.8	(0.9)	27.1	(0.9)	15.5	(0.7)	4.2	(0.4)	0.5	(0.1)
Mexico	0.2	(0.1)	2.8	(0.4)	14.2	(0.9)	29.8	(1.1)	30.8	(1.0)	16.7	(0.9)	5.0	(0.6)	0.6	(0.2)	0.0	(0.0)
Netherlands*	0.3	(0.1)	3.4	(0.5)	12.5	(1.1)	18.3	(0.9)	20.4	(1.0)	21.5	(1.1)	16.6	(0.9)	6.0	(0.5)	1.0	(0.2)
New Zealand*	0.1	(0.1)	1.1	(0.2)	6.0	(0.5)	13.5	(0.7)	21.1	(0.8)	24.8	(0.9)	20.3	(0.7)	10.4	(0.7)	2.7	(0.3)
Norway	0.3	(0.1)	2.7	(0.3)	8.8	(0.5)	15.6	(0.7)	21.9	(0.8)	24.2	(0.7)	17.7	(0.8)	7.1	(0.4)	1.6	(0.2)
Poland	0.2	(0.1)	1.6	(0.3)	6.5	(0.6)	14.0	(0.7)	22.4	(0.9)	26.9	(1.1)	19.7	(0.9)	7.5	(0.6)	1.3	(0.2)
Portugal	0.1	(0.1)	1.2	(0.3)	6.0	(0.5)	15.8	(0.7)	26.8	(0.8)	28.5	(0.9)	16.8	(0.8)	4.3	(0.4)	0.4	(0.1)
Slovak Republic	0.5	(0.2)	3.7	(0.5)	11.3	(0.8)	19.9	(0.8)	25.0	(0.9)	23.0	(0.8)	13.2	(0.7)	3.1	(0.3)	0.3	(0.1)
Slovenia	0.2	(0.1)	1.8	(0.2)	7.3	(0.5)	16.8	(0.6)	26.9	(1.0)	27.3	(0.9)	15.3	(0.7)	4.0	(0.4)	0.4	(0.2)
Spain	0.2	(0.1)	1.5	(0.2)	6.5	(0.3)	16.2	(0.5)	26.6	(0.5)	27.5	(0.5)	16.1	(0.5)	4.7	(0.3)	0.6	(0.1)
Sweden	0.2	(0.1)	2.1	(0.3)	7.4	(0.5)	14.6	(0.6)	21.5	(0.8)	24.7	(1.0)	19.3	(0.9)	8.4	(0.6)	1.8	(0.3)
Switzerland	0.1	(0.1)	1.5	(0.2)	6.8	(0.5)	16.2	(0.7)	23.5	(0.8)	24.7	(0.9)	18.6	(0.8)	7.2	(0.5)	1.4	(0.2)
Türkiye	0.1	(0.0)	1.1	(0.2)	7.5	(0.5)	20.6	(0.8)	30.5	(0.9)	26.4	(0.8)	12.0	(0.6)	1.8	(0.2)	0.0	(0.0)
United Kingdom*	0.2	(0.1)	1.3	(0.3)	5.3	(0.5)	13.3	(0.6)	23.9	(0.7)	26.4	(0.8)	19.5	(0.7)	7.9	(0.5)	2.2	(0.3)
United States*	0.1	(0.1)	1.3	(0.3)	5.7	(0.7)	13.0	(0.8)	20.9	(0.9)	25.0	(0.9)	19.8	(1.0)	10.6	(0.8)	3.6	(0.5)
OECD average	0.2	(0.0)	1.9	(0.0)	7.6	(0.1)	16.6	(0.1)	24.4	(0.1)	25.3	(0.1)	16.9	(0.1)	6.0	(0.1)	1.2	(0.0)

* Caution is required when interpreting estimates because one or more PISA sampling standards were not met (see Reader's Guide, Annexes A2 and A4).

** Caution is required when comparing estimates based on PISA 2022 with other countries/economies as a strong linkage to the international PISA reading scale could not be established (see Reader's Guide and Annex A4).

Table I.B1.3.2. Percentage of students at each proficiency level in reading [2/2]

		All students															
		Below Level 1c (less than 189.33 score points)		Level 1c (from 189.33 to less than 262.04 score points)		Level 1b (from 262.04 to less than 334.75 score points)		Level 1a (from 334.75 to less than 407.47 score points)		Level 2 (from 407.47 to less than 480.18 score points)		Level 3 (from 480.18 to less than 552.89 score points)		Level 4 (from 552.89 to less than 625.61 score points)		Level 5 (from 625.61 to less than 698.32 score points)		Level 6 (above 698.32 score points)	
		%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
Partners	Albania	0.9	(0.2)	9.7	(0.6)	30.3	(0.9)	32.8	(1.0)	19.0	(0.8)	6.2	(0.5)	1.0	(0.2)	0.1	(0.1)	0.0	(0.0)
	Argentina	0.5	(0.1)	5.2	(0.4)	19.4	(0.8)	29.4	(0.8)	25.8	(0.8)	14.0	(0.7)	4.8	(0.4)	0.9	(0.2)	0.1	(0.0)
	Baku (Azerbaijan)	1.2	(0.3)	10.0	(0.6)	26.4	(0.8)	31.6	(0.7)	21.3	(0.9)	8.1	(0.5)	1.3	(0.2)	0.1	(0.0)	0.0	(0.0)
	Brazil	0.8	(0.1)	5.4	(0.4)	17.3	(0.6)	26.8	(0.7)	25.3	(0.6)	15.8	(0.6)	6.7	(0.5)	1.6	(0.2)	0.2	(0.1)
	Brunei Darussalam	0.4	(0.1)	4.1	(0.3)	13.8	(0.6)	23.9	(0.6)	26.2	(0.6)	20.2	(0.7)	9.4	(0.5)	1.9	(0.2)	0.2	(0.1)
	Bulgaria	1.3	(0.2)	7.6	(0.6)	19.0	(1.0)	25.0	(1.1)	22.5	(1.0)	15.1	(0.9)	7.3	(0.7)	1.9	(0.4)	0.2	(0.1)
	Cambodia	0.9	(0.2)	11.0	(0.8)	41.6	(1.3)	38.6	(1.4)	7.6	(0.8)	0.3	(0.2)	0.0	c	0.0	c	0.0	c
	Croatia	0.0	(0.0)	0.8	(0.2)	5.4	(0.5)	16.5	(0.8)	28.8	(0.9)	28.4	(1.0)	16.0	(0.8)	3.9	(0.5)	0.3	(0.1)
	Cyprus	2.3	(0.2)	11.4	(0.4)	22.6	(0.7)	24.3	(0.7)	20.2	(0.7)	12.8	(0.6)	5.0	(0.4)	1.3	(0.2)	0.1	(0.1)
	Dominican Republic	1.5	(0.2)	12.5	(0.7)	31.2	(1.0)	30.3	(1.3)	17.2	(0.7)	6.1	(0.5)	1.2	(0.3)	0.1	(0.0)	0.0	(0.0)
	El Salvador	0.5	(0.2)	7.9	(0.6)	29.5	(1.2)	34.2	(1.1)	19.4	(0.8)	7.1	(0.7)	1.4	(0.3)	0.1	(0.1)	0.0	(0.0)
	Georgia	0.7	(0.2)	7.3	(0.6)	25.7	(0.9)	33.1	(1.1)	22.1	(0.8)	8.9	(0.6)	1.9	(0.3)	0.1	(0.1)	0.0	(0.0)
	Guatemala	0.4	(0.1)	5.3	(0.6)	24.6	(1.0)	38.2	(1.1)	23.7	(0.9)	6.9	(0.7)	0.9	(0.3)	0.1	(0.0)	0.0	c
	Hong Kong (China)*	0.2	(0.1)	1.2	(0.2)	4.6	(0.5)	11.4	(0.7)	21.8	(0.9)	29.7	(0.9)	22.1	(0.8)	7.8	(0.6)	1.2	(0.2)
	Indonesia	0.9	(0.2)	8.6	(0.7)	29.6	(1.2)	35.4	(1.0)	19.3	(1.1)	5.4	(0.5)	0.7	(0.2)	0.0	(0.0)	0.0	(0.0)
	Jamaica*	0.9	(0.2)	5.3	(0.7)	17.1	(1.2)	26.9	(1.1)	25.1	(1.1)	17.0	(1.1)	6.9	(0.8)	1.0	(0.3)	0.0	(0.1)
	Jordan	1.3	(0.3)	14.0	(0.7)	32.6	(1.0)	31.6	(0.9)	16.4	(0.8)	3.6	(0.5)	0.4	(0.1)	0.0	(0.0)	0.0	c
	Kazakhstan	0.4	(0.1)	4.4	(0.3)	22.3	(0.7)	36.6	(0.7)	23.6	(0.6)	9.1	(0.4)	3.0	(0.3)	0.5	(0.1)	0.0	(0.0)
	Kosovo	0.4	(0.1)	10.4	(0.6)	37.2	(1.0)	35.0	(0.8)	14.4	(0.7)	2.4	(0.3)	0.1	(0.1)	0.0	(0.0)	0.0	c
	Macao (China)	0.1	(0.0)	0.6	(0.2)	2.7	(0.3)	9.2	(0.6)	22.4	(0.8)	31.6	(0.8)	24.4	(0.8)	8.0	(0.5)	0.9	(0.2)
	Malaysia	0.6	(0.1)	6.7	(0.5)	20.7	(0.9)	30.1	(0.9)	27.2	(1.0)	12.2	(0.7)	2.3	(0.4)	0.2	(0.1)	0.0	(0.0)
	Malta	0.8	(0.2)	4.9	(0.5)	12.1	(0.7)	18.5	(0.9)	23.8	(0.8)	22.2	(0.9)	13.3	(0.7)	4.0	(0.4)	0.5	(0.2)
	Moldova	0.3	(0.1)	3.9	(0.4)	15.9	(0.9)	28.8	(0.9)	29.2	(1.2)	16.8	(0.8)	4.8	(0.5)	0.5	(0.2)	0.0	(0.0)
	Mongolia	0.7	(0.2)	6.2	(0.5)	21.6	(0.8)	35.7	(0.8)	26.7	(0.8)	8.3	(0.6)	0.9	(0.2)	0.0	(0.0)	0.0	c
	Montenegro	0.3	(0.1)	4.2	(0.4)	18.3	(0.7)	30.0	(1.0)	26.1	(0.9)	15.6	(0.6)	4.9	(0.4)	0.6	(0.1)	0.0	(0.0)
	Morocco	1.5	(0.3)	13.8	(1.0)	34.2	(1.4)	31.6	(1.1)	15.1	(1.2)	3.5	(0.7)	0.3	(0.1)	0.0	(0.0)	0.0	c
	North Macedonia	0.6	(0.1)	8.9	(0.4)	30.4	(0.7)	33.7	(0.7)	20.3	(0.7)	5.5	(0.4)	0.5	(0.1)	0.0	(0.0)	0.0	c
	Palestinian Authority	1.5	(0.2)	11.7	(0.7)	30.0	(1.0)	34.0	(0.8)	18.5	(0.8)	4.0	(0.4)	0.3	(0.1)	0.0	(0.0)	0.0	c
	Panama*	0.8	(0.2)	6.9	(0.6)	20.9	(1.2)	29.1	(1.2)	24.4	(1.2)	12.8	(0.9)	4.2	(0.6)	0.7	(0.2)	0.1	(0.1)
	Paraguay	1.0	(0.2)	7.7	(0.6)	24.9	(1.0)	32.6	(0.9)	22.9	(0.9)	9.1	(0.7)	1.7	(0.2)	0.1	(0.0)	0.0	c
	Peru	0.5	(0.1)	4.6	(0.6)	16.8	(0.8)	28.5	(0.8)	27.2	(0.8)	16.6	(0.8)	5.2	(0.5)	0.7	(0.1)	0.0	(0.0)
	Philippines	1.0	(0.2)	15.0	(0.9)	33.7	(1.2)	26.6	(1.0)	15.9	(0.9)	6.4	(0.7)	1.3	(0.3)	0.1	(0.1)	0.0	c
	Qatar	0.6	(0.1)	5.5	(0.5)	16.6	(0.6)	24.6	(0.7)	24.3	(0.8)	17.1	(0.7)	8.4	(0.5)	2.5	(0.3)	0.4	(0.1)
	Romania	0.7	(0.2)	4.3	(0.4)	13.6	(0.9)	23.2	(1.2)	26.6	(1.0)	20.6	(1.1)	9.1	(0.8)	1.9	(0.4)	0.1	(0.0)
	Saudi Arabia	0.4	(0.1)	5.7	(0.5)	22.0	(0.8)	34.5	(0.8)	26.2	(0.9)	9.6	(0.6)	1.5	(0.2)	0.1	(0.1)	0.0	(0.0)
	Serbia	0.3	(0.2)	2.0	(0.3)	10.3	(0.7)	23.8	(0.8)	29.7	(0.9)	22.7	(0.9)	9.3	(0.6)	1.7	(0.4)	0.1	(0.1)
	Singapore	0.2	(0.1)	0.6	(0.1)	2.7	(0.3)	7.7	(0.5)	15.6	(0.6)	23.8	(0.7)	26.9	(0.7)	17.2	(0.6)	5.4	(0.4)
	Chinese Taipei	0.2	(0.1)	0.9	(0.2)	4.0	(0.4)	10.7	(0.7)	19.0	(0.8)	26.9	(1.1)	24.3	(1.1)	11.4	(0.9)	2.6	(0.4)
	Thailand	0.4	(0.1)	5.8	(0.5)	24.6	(1.0)	34.6	(1.2)	23.5	(1.0)	8.9	(0.7)	2.0	(0.4)	0.2	(0.1)	0.0	(0.0)
	Ukrainian regions (18 of 27)	0.4	(0.2)	3.5	(0.6)	12.7	(1.2)	24.3	(1.3)	29.7	(1.3)	20.6	(1.1)	7.1	(0.6)	1.4	(0.3)	0.1	(0.1)
	United Arab Emirates	2.3	(0.2)	8.8	(0.3)	16.8	(0.4)	20.1	(0.4)	20.2	(0.5)	16.5	(0.4)	10.3	(0.3)	4.0	(0.2)	1.0	(0.1)
	Uruguay	0.4	(0.1)	3.9	(0.4)	13.7	(0.6)	23.1	(0.8)	26.8	(0.9)	20.9	(0.7)	9.2	(0.5)	2.0	(0.3)	0.1	(0.1)
	Uzbekistan	0.9	(0.2)	12.3	(0.8)	37.7	(1.0)	35.0	(1.1)	12.2	(0.8)	1.8	(0.3)	0.1	(0.1)	0.0	(0.0)	0.0	c
	Viet Nam**	0.0	(0.0)	0.7	(0.2)	5.0	(0.7)	17.2	(1.1)	35.3	(1.2)	30.5	(1.4)	10.0	(1.0)	1.2	(0.3)	0.0	(0.0)

* Caution is required when interpreting estimates because one or more PISA sampling standards were not met (see Reader's Guide, Annexes A2 and A4).

** Caution is required when comparing estimates based on PISA 2022 with other countries/economies as a strong linkage to the international PISA reading scale could not be established (see Reader's Guide and Annex A4).

Table I.B1.3.3. Percentage of students at each proficiency level in science [1/2]

	Below Level 1b (below 260.54 score points)		Level 1b (from 260.54 to less than 334.94 score points)		Level 1a (from 334.94 to less than 409.54 score points)		Level 2 (from 409.54 to less than 484.14 score points)		Level 3 (from 484.14 to less than 558.73 score points)		Level 4 (from 558.73 to less than 633.33 score points)		Level 5 (from 633.33 to less than 707.93 score points)		Level 6 (above 707.93 score points)	
	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
Australia*	1.0	(0.1)	4.8	(0.3)	13.7	(0.5)	22.2	(0.6)	25.3	(0.7)	20.3	(0.5)	9.6	(0.4)	3.0	(0.4)
Austria	0.8	(0.2)	5.8	(0.6)	16.0	(0.7)	23.6	(0.7)	26.7	(0.9)	19.2	(0.8)	6.9	(0.4)	1.0	(0.2)
Belgium	1.0	(0.2)	6.3	(0.6)	15.2	(0.7)	23.3	(0.7)	27.4	(0.7)	19.8	(0.7)	6.4	(0.5)	0.7	(0.1)
Canada*	0.5	(0.1)	3.3	(0.2)	11.5	(0.5)	22.3	(0.6)	28.5	(0.7)	22.0	(0.7)	9.4	(0.4)	2.5	(0.2)
Chile	2.1	(0.3)	9.9	(0.7)	24.4	(0.8)	30.3	(0.9)	22.3	(0.8)	9.2	(0.5)	1.7	(0.2)	0.1	(0.0)
Colombia	3.1	(0.4)	16.5	(1.0)	31.9	(1.0)	28.3	(1.0)	15.0	(1.0)	4.6	(0.5)	0.7	(0.1)	0.0	(0.0)
CostaRica	2.4	(0.4)	15.0	(0.8)	33.4	(1.2)	31.2	(0.9)	14.2	(0.9)	3.4	(0.4)	0.4	(0.1)	0.0	(0.0)
Czech Republic	0.6	(0.1)	4.2	(0.4)	15.1	(0.7)	24.9	(0.8)	27.4	(1.0)	18.9	(0.8)	7.5	(0.5)	1.5	(0.3)
Denmark*	0.5	(0.1)	4.1	(0.5)	14.9	(0.8)	26.4	(1.1)	28.7	(0.9)	18.5	(0.9)	6.0	(0.6)	1.0	(0.3)
Estonia	0.1	(0.1)	1.5	(0.3)	8.5	(0.6)	21.9	(0.8)	31.7	(0.9)	24.7	(0.8)	9.8	(0.6)	1.8	(0.2)
Finland	0.8	(0.1)	4.4	(0.3)	12.8	(0.6)	21.6	(0.7)	26.6	(0.8)	21.2	(0.7)	9.9	(0.5)	2.8	(0.3)
France	1.2	(0.2)	6.5	(0.6)	16.2	(0.9)	23.8	(0.8)	26.8	(0.9)	17.9	(0.8)	6.7	(0.4)	1.1	(0.2)
Germany	1.0	(0.2)	6.4	(0.6)	15.5	(0.9)	24.0	(0.8)	25.4	(0.8)	18.0	(0.8)	7.8	(0.6)	1.9	(0.3)
Greece	2.0	(0.4)	10.8	(0.8)	24.6	(0.9)	30.1	(0.9)	22.4	(0.8)	8.7	(0.7)	1.4	(0.3)	0.1	(0.0)
Hungary	0.6	(0.2)	5.5	(0.5)	16.8	(0.9)	25.9	(1.0)	27.3	(1.0)	17.7	(0.9)	5.5	(0.5)	0.6	(0.1)
Iceland	1.9	(0.3)	10.5	(0.8)	23.4	(1.1)	28.6	(1.1)	22.9	(1.0)	10.4	(0.8)	2.1	(0.4)	0.1	(0.1)
Ireland*	0.4	(0.1)	3.1	(0.3)	12.1	(0.7)	25.4	(0.9)	30.4	(0.8)	21.0	(0.7)	6.8	(0.4)	0.8	(0.2)
Israel	2.6	(0.4)	10.2	(0.7)	19.3	(0.8)	24.0	(0.9)	23.2	(0.9)	15.0	(0.8)	4.9	(0.5)	0.9	(0.2)
Italy	0.9	(0.2)	5.6	(0.5)	17.4	(0.9)	27.9	(1.0)	28.3	(0.8)	15.6	(0.9)	3.9	(0.4)	0.4	(0.1)
Japan	0.1	(0.1)	1.4	(0.2)	6.5	(0.6)	17.0	(0.9)	27.7	(0.9)	29.3	(1.0)	15.0	(0.9)	3.0	(0.4)
Korea	1.0	(0.3)	3.2	(0.4)	9.5	(0.8)	18.4	(0.8)	27.0	(0.8)	25.2	(1.1)	12.7	(0.9)	3.0	(0.5)
Latvia*	0.2	(0.1)	2.5	(0.4)	13.8	(0.7)	29.8	(0.9)	30.9	(0.9)	17.7	(0.8)	4.6	(0.5)	0.6	(0.1)
Lithuania	0.5	(0.1)	4.6	(0.5)	16.7	(0.8)	28.4	(0.9)	28.1	(0.8)	16.3	(0.7)	4.8	(0.5)	0.7	(0.1)
Mexico	2.0	(0.4)	13.9	(0.8)	35.0	(1.3)	32.7	(1.1)	13.9	(0.8)	2.5	(0.4)	0.1	(0.1)	0.0	(0.0)
Netherlands*	1.2	(0.2)	7.8	(0.9)	18.3	(1.0)	21.3	(1.0)	22.0	(1.1)	18.8	(1.0)	8.9	(0.6)	1.6	(0.2)
New Zealand*	0.9	(0.2)	5.1	(0.5)	14.3	(0.7)	21.8	(0.6)	25.9	(0.8)	20.0	(0.8)	9.8	(0.6)	2.2	(0.3)
Norway	1.5	(0.2)	8.0	(0.5)	18.2	(0.7)	23.8	(0.7)	24.5	(0.8)	17.0	(0.8)	5.8	(0.4)	1.2	(0.2)
Poland	0.4	(0.1)	4.4	(0.5)	13.8	(0.9)	24.3	(1.0)	28.9	(1.0)	20.1	(0.8)	7.0	(0.5)	1.0	(0.2)
Portugal	0.6	(0.2)	4.7	(0.4)	16.5	(0.8)	27.8	(0.9)	28.2	(0.9)	17.3	(0.8)	4.4	(0.4)	0.5	(0.1)
Slovak Republic	2.6	(0.4)	9.3	(0.7)	18.7	(0.8)	26.3	(1.1)	24.7	(1.1)	14.0	(0.8)	3.8	(0.4)	0.5	(0.1)
Slovenia	0.3	(0.1)	3.5	(0.4)	13.9	(0.5)	25.7	(0.9)	29.0	(0.9)	19.5	(0.7)	6.9	(0.4)	1.1	(0.2)
Spain	0.7	(0.1)	4.7	(0.3)	15.9	(0.5)	27.8	(0.6)	29.5	(0.7)	16.5	(0.5)	4.4	(0.3)	0.5	(0.1)
Sweden	1.2	(0.2)	6.3	(0.5)	16.2	(0.8)	22.1	(0.8)	25.0	(0.9)	19.2	(0.7)	8.2	(0.5)	1.8	(0.2)
Switzerland	0.4	(0.1)	4.1	(0.5)	14.8	(0.6)	23.7	(0.8)	26.6	(0.8)	21.0	(0.8)	8.1	(0.5)	1.5	(0.2)
Türkiye	0.4	(0.1)	4.8	(0.4)	19.5	(0.7)	29.4	(0.7)	26.7	(0.8)	15.2	(0.6)	3.7	(0.3)	0.2	(0.1)
UnitedKingdom*	0.7	(0.1)	5.0	(0.5)	14.4	(0.6)	24.3	(0.7)	26.4	(0.7)	19.2	(0.7)	8.1	(0.5)	2.0	(0.3)
UnitedStates*	1.1	(0.2)	5.6	(0.6)	15.3	(1.0)	22.4	(0.8)	24.8	(0.9)	19.9	(1.0)	8.8	(0.8)	2.2	(0.4)
OECD average	1.1	(0.0)	6.3	(0.1)	17.1	(0.1)	25.2	(0.1)	25.7	(0.1)	17.2	(0.1)	6.3	(0.1)	1.2	(0.0)

* Caution is required when interpreting estimates because one or more PISA sampling standards were not met (see Reader's Guide, Annexes A2 and A4).

Table I.B1.3.3. Percentage of students at each proficiency level in science [2/2]

	All students														
	Below Level 1b (below 260.54 score points)		Level 1b (from 260.54 to less than 334.94 score points)		Level 1a (from 334.94 to less than 409.54 score points)		Level 2 (from 409.54 to less than 484.14 score points)		Level 3 (from 484.14 to less than 558.73 score points)		Level 4 (from 558.73 to less than 633.33 score points)		Level 5 (from 633.33 to less than 707.93 score points)		Level 6 (above 707.93 score points)	
	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
Albania	6.9	(0.5)	25.6	(1.2)	34.8	(1.0)	22.5	(0.8)	8.1	(0.6)	1.8	(0.3)	0.2	(0.1)	0.0	(0.0)
Argentina	3.4	(0.4)	17.5	(0.9)	33.0	(0.9)	27.5	(0.9)	13.8	(0.7)	4.1	(0.4)	0.5	(0.1)	0.0	(0.0)
Baku (Azerbaijan)	5.2	(0.5)	24.5	(0.9)	36.1	(0.8)	24.2	(0.9)	8.4	(0.5)	1.4	(0.3)	0.1	(0.1)	0.0	(0.0)
Brazil	5.1	(0.3)	19.1	(0.6)	31.2	(0.7)	25.4	(0.6)	13.2	(0.6)	4.8	(0.4)	1.0	(0.2)	0.2	(0.1)
Brunei Darussalam	1.5	(0.2)	10.5	(0.5)	25.1	(0.7)	28.6	(0.8)	21.7	(0.7)	10.2	(0.6)	2.2	(0.3)	0.2	(0.1)
Bulgaria	3.1	(0.4)	16.3	(0.9)	28.6	(1.0)	26.2	(0.9)	17.4	(0.9)	6.9	(0.6)	1.4	(0.3)	0.1	(0.1)
Cambodia	4.5	(0.6)	35.6	(1.5)	49.5	(1.2)	9.9	(1.0)	0.5	(0.2)	0.0	(0.0)	0.0	c	0.0	c
Croatia	0.6	(0.1)	5.0	(0.5)	16.9	(0.7)	28.5	(0.8)	27.4	(0.9)	16.2	(0.7)	4.9	(0.4)	0.5	(0.1)
Cyprus	6.3	(0.4)	19.7	(0.6)	25.8	(0.7)	23.0	(0.9)	16.2	(0.6)	7.0	(0.4)	1.8	(0.3)	0.2	(0.1)
Dominican Republic	6.2	(0.5)	31.4	(1.0)	39.0	(1.0)	18.7	(0.9)	4.2	(0.4)	0.4	(0.1)	0.0	(0.0)	0.0	c
El Salvador	5.0	(0.6)	26.5	(1.2)	39.4	(1.0)	21.2	(1.0)	6.8	(0.6)	1.0	(0.2)	0.1	(0.1)	0.0	c
Georgia	5.1	(0.4)	23.2	(0.8)	36.3	(0.9)	24.0	(0.8)	9.0	(0.6)	2.2	(0.4)	0.2	(0.1)	0.0	(0.0)
Guatemala	3.1	(0.5)	25.5	(1.1)	44.4	(1.1)	21.7	(0.9)	4.7	(0.7)	0.5	(0.2)	0.0	(0.0)	0.0	c
Hong Kong (China)*	0.2	(0.1)	2.6	(0.4)	10.0	(0.7)	20.8	(0.9)	30.2	(1.1)	25.4	(0.9)	9.3	(0.6)	1.4	(0.2)
Indonesia	3.6	(0.4)	21.2	(1.1)	41.1	(1.1)	26.3	(1.1)	7.0	(0.6)	0.8	(0.2)	0.0	(0.0)	0.0	c
Jamaica*	5.2	(0.7)	20.1	(1.3)	29.4	(1.2)	25.5	(1.1)	13.8	(1.1)	5.2	(0.7)	0.9	(0.2)	0.0	(0.0)
Jordan	5.3	(0.5)	25.9	(1.0)	37.7	(0.8)	23.3	(0.9)	6.8	(0.6)	0.9	(0.2)	0.0	(0.0)	0.0	(0.0)
Kazakhstan	1.3	(0.2)	10.3	(0.6)	33.6	(0.7)	34.6	(0.7)	15.2	(0.6)	4.2	(0.3)	0.8	(0.1)	0.1	(0.0)
Kosovo	5.2	(0.5)	34.7	(1.1)	39.3	(1.1)	16.7	(0.7)	3.7	(0.4)	0.3	(0.1)	0.0	(0.0)	0.0	c
Macao (China)	0.2	(0.1)	1.2	(0.2)	6.1	(0.5)	16.6	(0.8)	30.5	(0.9)	30.7	(0.9)	12.7	(0.6)	2.0	(0.3)
Malaysia	1.5	(0.3)	14.0	(0.9)	32.4	(1.0)	32.6	(1.0)	15.7	(0.8)	3.3	(0.5)	0.4	(0.2)	0.1	(0.1)
Malta	1.8	(0.3)	9.5	(0.7)	19.0	(0.9)	25.3	(0.9)	25.1	(0.9)	14.8	(0.7)	4.1	(0.5)	0.5	(0.2)
Moldova	2.1	(0.3)	14.2	(0.8)	32.3	(0.9)	30.1	(0.9)	16.0	(0.8)	4.8	(0.5)	0.5	(0.1)	0.0	(0.0)
Mongolia	1.8	(0.3)	13.6	(0.7)	34.3	(1.1)	32.5	(0.9)	14.7	(0.8)	2.9	(0.4)	0.2	(0.1)	0.0	c
Montenegro	3.4	(0.5)	18.5	(0.7)	33.0	(1.2)	27.4	(0.7)	14.1	(0.7)	3.3	(0.3)	0.3	(0.1)	0.0	(0.0)
Morocco	4.3	(0.5)	30.6	(1.5)	40.6	(1.1)	19.5	(1.3)	4.6	(0.7)	0.4	(0.1)	0.0	(0.0)	0.0	c
North Macedonia	5.9	(0.4)	25.7	(0.8)	33.8	(0.8)	23.3	(0.6)	9.4	(0.5)	1.8	(0.2)	0.1	(0.1)	0.0	(0.0)
Palestinian Authority	5.5	(0.4)	27.8	(0.9)	39.1	(0.9)	21.3	(0.9)	5.6	(0.5)	0.7	(0.2)	0.0	(0.0)	0.0	c
Panama*	6.1	(0.8)	22.5	(1.1)	33.6	(1.3)	23.7	(1.0)	10.8	(1.0)	2.8	(0.6)	0.5	(0.2)	0.0	(0.0)
Paraguay	6.9	(0.6)	28.2	(1.1)	36.0	(1.1)	21.5	(0.9)	6.3	(0.5)	1.0	(0.2)	0.0	(0.0)	0.0	c
Peru	3.4	(0.4)	17.0	(0.8)	32.2	(0.9)	28.2	(0.8)	14.8	(0.7)	4.0	(0.4)	0.5	(0.1)	0.0	(0.0)
Philippines	8.3	(0.7)	35.8	(1.1)	33.1	(0.9)	16.0	(0.9)	5.6	(0.7)	1.0	(0.2)	0.1	(0.1)	0.0	(0.0)
Qatar	2.2	(0.2)	13.9	(0.6)	27.6	(0.6)	27.7	(0.7)	17.8	(0.7)	8.0	(0.4)	2.4	(0.3)	0.4	(0.1)
Romania	3.2	(0.4)	14.9	(1.0)	25.9	(1.1)	27.0	(0.9)	19.6	(1.1)	8.0	(0.7)	1.3	(0.2)	0.1	(0.1)
Saudi Arabia	2.3	(0.4)	19.3	(0.9)	40.6	(1.1)	28.2	(1.1)	8.4	(0.6)	1.1	(0.2)	0.0	(0.0)	0.0	(0.0)
Serbia	1.6	(0.3)	9.1	(0.7)	24.5	(0.9)	30.7	(0.9)	22.5	(0.9)	9.5	(0.6)	2.0	(0.5)	0.2	(0.1)
Singapore	0.2	(0.1)	1.5	(0.2)	6.2	(0.5)	13.9	(0.6)	24.2	(0.6)	29.7	(0.7)	18.9	(0.6)	5.6	(0.4)
Chinese Taipei	0.4	(0.1)	2.6	(0.4)	9.1	(0.6)	17.2	(0.8)	26.4	(1.0)	26.6	(1.1)	14.2	(1.0)	3.6	(0.6)
Thailand	2.3	(0.3)	15.6	(1.0)	35.2	(1.1)	28.8	(1.0)	13.8	(0.8)	3.8	(0.5)	0.6	(0.2)	0.0	(0.0)
Ukrainian regions (18 of 27)	1.3	(0.3)	9.0	(1.0)	23.8	(1.2)	30.3	(1.1)	23.9	(1.2)	9.7	(0.7)	2.0	(0.4)	0.1	(0.1)
United Arab Emirates	4.4	(0.3)	15.8	(0.6)	24.8	(0.6)	23.2	(0.5)	17.7	(0.4)	10.2	(0.3)	3.3	(0.2)	0.6	(0.1)
Uruguay	2.2	(0.3)	11.9	(0.8)	26.4	(0.8)	29.3	(0.9)	20.6	(0.7)	8.1	(0.5)	1.5	(0.2)	0.1	(0.1)
Uzbekistan	6.0	(0.6)	32.5	(1.1)	42.6	(0.9)	16.5	(0.9)	2.2	(0.3)	0.1	(0.1)	0.0	(0.0)	0.0	c
Viet Nam	0.5	(0.2)	3.6	(0.6)	16.9	(1.1)	34.4	(1.1)	31.2	(1.2)	11.5	(0.9)	1.7	(0.3)	0.1	(0.1)

* Caution is required when interpreting estimates because one or more PISA sampling standards were not met (see Reader's Guide, Annexes A2 and A4).

Table I.B1.4.2. Students' socio-economic status [1/2]

		All students		Variability in the index		Bottom quarter		Second quarter		Third quarter		Fourth quarter		Top - Bottom quarter		10th percentile		90th percentile		90th - 10th percentile	
		Mean index	S.E.	S.D.	S.E.	Mean index	S.E.	Mean index	S.E.	Mean index	S.E.	Mean index	S.E.	Dif.	S.E.	Value	S.E.	Value	S.E.	Dif.	S.E.
OECD	Australia*	0.38	(0.01)	0.84	(0.01)	-0.80	(0.02)	0.21	(0.02)	0.80	(0.01)	1.31	(0.01)	**2.10**	(0.02)	-0.80	(0.02)	1.31	(0.01)	**2.11**	(0.01)
	Austria	0.07	(0.02)	0.94	(0.01)	-1.18	(0.03)	-0.21	(0.02)	0.47	(0.03)	1.20	(0.02)	**2.37**	(0.03)	-1.15	(0.03)	1.23	(0.02)	**2.38**	(0.03)
	Belgium	0.08	(0.02)	0.93	(0.01)	-1.19	(0.03)	-0.15	(0.03)	0.53	(0.02)	1.14	(0.02)	**2.33**	(0.03)	-1.17	(0.03)	1.16	(0.01)	**2.34**	(0.03)
	Canada*	0.38	(0.01)	0.76	(0.01)	-0.66	(0.02)	0.19	(0.02)	0.74	(0.01)	1.25	(0.01)	**1.91**	(0.02)	-0.68	(0.02)	1.26	(0.01)	**1.94**	(0.02)
	Chile	-0.51	(0.03)	0.94	(0.01)	-1.71	(0.03)	-0.85	(0.03)	-0.18	(0.04)	0.70	(0.03)	**2.41**	(0.03)	-1.72	(0.03)	0.77	(0.03)	**2.49**	(0.04)
	Colombia	-1.07	(0.04)	1.20	(0.02)	-2.62	(0.04)	-1.47	(0.04)	-0.66	(0.05)	0.49	(0.05)	**3.10**	(0.06)	-2.68	(0.05)	0.58	(0.06)	**3.26**	(0.07)
	Costa Rica	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Czech Republic	-0.10	(0.02)	0.87	(0.01)	-1.19	(0.02)	-0.48	(0.02)	0.21	(0.02)	1.04	(0.01)	**2.23**	(0.02)	-1.20	(0.01)	1.09	(0.01)	**2.29**	(0.02)
	Denmark*	0.48	(0.02)	0.75	(0.01)	-0.58	(0.03)	0.38	(0.02)	0.84	(0.01)	1.26	(0.01)	**1.84**	(0.02)	-0.58	(0.02)	1.27	(0.01)	**1.85**	(0.02)
	Estonia	0.15	(0.02)	0.79	(0.01)	-0.93	(0.02)	-0.10	(0.03)	0.54	(0.02)	1.09	(0.01)	**2.02**	(0.02)	-0.95	(0.03)	1.11	(0.02)	**2.06**	(0.03)
	Finland	0.26	(0.01)	0.81	(0.01)	-0.85	(0.02)	0.03	(0.02)	0.66	(0.02)	1.19	(0.01)	**2.04**	(0.01)	-0.86	(0.02)	1.21	(0.01)	**2.07**	(0.02)
	France	0.00	(0.02)	0.92	(0.01)	-1.23	(0.02)	-0.26	(0.03)	0.42	(0.03)	1.08	(0.02)	**2.32**	(0.02)	-1.21	(0.02)	1.11	(0.02)	**2.32**	(0.03)
	Germany	-0.14	(0.03)	1.04	(0.01)	-1.53	(0.04)	-0.44	(0.03)	0.30	(0.03)	1.13	(0.02)	**2.66**	(0.03)	-1.54	(0.03)	1.17	(0.02)	**2.71**	(0.03)
	Greece	-0.15	(0.02)	0.92	(0.01)	-1.40	(0.03)	-0.45	(0.03)	0.26	(0.03)	0.96	(0.02)	**2.36**	(0.03)	-1.38	(0.03)	0.99	(0.02)	**2.37**	(0.03)
	Hungary	0.00	(0.02)	0.96	(0.01)	-1.28	(0.03)	-0.32	(0.03)	0.46	(0.03)	1.16	(0.01)	**2.43**	(0.03)	-1.29	(0.02)	1.18	(0.02)	**2.47**	(0.03)
	Iceland	0.38	(0.01)	0.78	(0.01)	-0.71	(0.03)	0.23	(0.02)	0.76	(0.01)	1.23	(0.01)	**1.95**	(0.03)	-0.73	(0.03)	1.24	(0.01)	**1.97**	(0.03)
	Ireland*	0.33	(0.03)	0.80	(0.01)	-0.79	(0.04)	0.15	(0.04)	0.74	(0.03)	1.24	(0.01)	**2.03**	(0.03)	-0.83	(0.04)	1.25	(0.01)	**2.09**	(0.03)
	Israel	0.28	(0.02)	0.92	(0.01)	-1.01	(0.03)	0.12	(0.03)	0.73	(0.02)	1.28	(0.01)	**2.30**	(0.03)	-1.03	(0.03)	1.29	(0.02)	**2.32**	(0.03)
	Italy	-0.10	(0.02)	0.93	(0.01)	-1.33	(0.03)	-0.40	(0.02)	0.27	(0.02)	1.06	(0.02)	**2.39**	(0.03)	-1.36	(0.04)	1.11	(0.01)	**2.47**	(0.04)
	Japan	-0.01	(0.01)	0.71	(0.01)	-0.96	(0.02)	-0.22	(0.02)	0.29	(0.02)	0.86	(0.02)	**1.82**	(0.02)	-0.99	(0.03)	0.88	(0.02)	**1.87**	(0.03)
	Korea	0.22	(0.03)	0.82	(0.01)	-0.87	(0.03)	-0.02	(0.03)	0.58	(0.03)	1.21	(0.02)	**2.09**	(0.03)	-0.92	(0.02)	1.22	(0.03)	**2.14**	(0.03)
	Latvia*	-0.01	(0.02)	0.83	(0.01)	-1.12	(0.02)	-0.28	(0.02)	0.36	(0.02)	1.00	(0.01)	**2.12**	(0.02)	-1.12	(0.02)	1.02	(0.02)	**2.15**	(0.02)
	Lithuania	0.05	(0.02)	0.89	(0.01)	-1.17	(0.02)	-0.22	(0.02)	0.50	(0.02)	1.10	(0.01)	**2.27**	(0.02)	-1.18	(0.02)	1.10	(0.01)	**2.29**	(0.02)
	Mexico	-0.95	(0.03)	1.16	(0.02)	-2.42	(0.03)	-1.44	(0.04)	-0.54	(0.05)	0.59	(0.04)	**3.01**	(0.04)	-2.43	(0.03)	0.66	(0.04)	**3.09**	(0.04)
	Netherlands*	0.25	(0.02)	0.87	(0.01)	-0.94	(0.03)	0.08	(0.03)	0.67	(0.02)	1.20	(0.02)	**2.15**	(0.03)	-0.91	(0.03)	1.22	(0.01)	**2.13**	(0.03)
	New Zealand*	0.22	(0.02)	0.92	(0.01)	-1.06	(0.04)	0.02	(0.03)	0.66	(0.02)	1.25	(0.02)	**2.31**	(0.04)	-1.10	(0.04)	1.26	(0.02)	**2.36**	(0.04)
	Norway	0.52	(0.02)	0.83	(0.01)	-0.62	(0.03)	0.39	(0.03)	0.92	(0.02)	1.40	(0.01)	**2.02**	(0.03)	-0.58	(0.04)	1.39	(0.01)	**1.97**	(0.03)
	Poland	-0.11	(0.02)	0.89	(0.01)	-1.21	(0.01)	-0.52	(0.02)	0.26	(0.03)	1.04	(0.02)	**2.25**	(0.02)	-1.19	(0.01)	1.07	(0.02)	**2.26**	(0.02)
	Portugal	-0.23	(0.03)	1.14	(0.01)	-1.77	(0.03)	-0.60	(0.04)	0.31	(0.04)	1.16	(0.02)	**2.93**	(0.03)	-1.83	(0.04)	1.20	(0.01)	**3.03**	(0.03)
	Slovak Republic	-0.30	(0.02)	0.96	(0.01)	-1.51	(0.03)	-0.68	(0.03)	0.05	(0.03)	0.93	(0.02)	**2.44**	(0.04)	-1.46	(0.04)	0.97	(0.02)	**2.43**	(0.04)
	Slovenia	0.23	(0.01)	0.84	(0.01)	-0.93	(0.02)	-0.01	(0.02)	0.65	(0.01)	1.20	(0.01)	**2.13**	(0.02)	-0.96	(0.03)	1.20	(0.01)	**2.16**	(0.03)
	Spain	-0.03	(0.02)	1.01	(0.01)	-1.43	(0.03)	-0.26	(0.02)	0.45	(0.02)	1.10	(0.01)	**2.53**	(0.03)	-1.50	(0.03)	1.13	(0.01)	**2.62**	(0.03)
	Sweden	0.33	(0.02)	0.85	(0.01)	-0.85	(0.03)	0.16	(0.02)	0.75	(0.02)	1.25	(0.02)	**2.10**	(0.03)	-0.84	(0.03)	1.25	(0.02)	**2.09**	(0.02)
	Switzerland	0.17	(0.02)	0.93	(0.01)	-1.10	(0.03)	-0.05	(0.03)	0.61	(0.02)	1.22	(0.01)	**2.32**	(0.03)	-1.06	(0.03)	1.24	(0.01)	**2.30**	(0.03)
	Türkiye	-1.19	(0.04)	1.17	(0.02)	-2.62	(0.03)	-1.67	(0.04)	-0.87	(0.05)	0.42	(0.06)	**3.04**	(0.05)	-2.64	(0.03)	0.56	(0.05)	**3.20**	(0.05)
	United Kingdom*	0.14	(0.02)	0.89	(0.01)	-1.06	(0.03)	-0.14	(0.03)	0.54	(0.02)	1.20	(0.02)	**2.26**	(0.03)	-1.06	(0.02)	1.22	(0.02)	**2.28**	(0.02)
	United States*	0.06	(0.04)	0.98	(0.02)	-1.27	(0.05)	-0.22	(0.06)	0.53	(0.05)	1.19	(0.03)	**2.47**	(0.04)	-1.24	(0.05)	1.21	(0.03)	**2.45**	(0.04)
	OECD average	0.00	(0.00)	0.91	(0.00)	-1.22	(0.00)	-0.26	(0.00)	0.41	(0.00)	1.09	(0.00)	**2.31**	(0.00)	-1.23	(0.00)	1.12	(0.00)	**2.34**	(0.01)

* Caution is required when interpreting estimates because one or more PISA sampling standards were not met (see Reader's Guide, Annexes A2 and A4). Note: Values that are statistically significant are indicated in bold (see Annex A3).

Table I.B1.4.2. Students' socio-economic status [2/2]

	All students		Variability in the index		Bottom quarter		Second quarter		Third quarter		Fourth quarter		Top - Bottom quarter		10th percentile		90th percentile		90th - 10th percentile	
	Mean index	S.E.	S.D.	S.E.	Mean index	S.E.	Mean index	S.E.	Mean index	S.E.	Mean index	S.E.	Dif.	S.E.	Value	S.E.	Value	S.E.	Dif.	S.E.
Albania	-0.75	(0.02)	1.09	(0.01)	-2.15	(0.02)	-1.17	(0.03)	-0.34	(0.03)	0.65	(0.03)	**2.81**	(0.04)	-2.20	(0.03)	0.69	(0.03)	**2.89**	(0.04)
Argentina	-0.80	(0.04)	1.15	(0.01)	-2.28	(0.04)	-1.19	(0.04)	-0.39	(0.05)	0.67	(0.04)	**2.95**	(0.04)	-2.32	(0.05)	0.75	(0.04)	**3.06**	(0.05)
Baku (Azerbaijan)	-0.51	(0.03)	0.93	(0.01)	-1.68	(0.02)	-0.86	(0.03)	-0.19	(0.03)	0.70	(0.03)	**2.38**	(0.03)	-1.69	(0.03)	0.73	(0.03)	**2.42**	(0.04)
Brazil	-0.99	(0.02)	1.13	(0.01)	-2.49	(0.03)	-1.32	(0.02)	-0.58	(0.02)	0.43	(0.03)	**2.91**	(0.04)	-2.52	(0.04)	0.47	(0.03)	**3.00**	(0.04)
Brunei Darussalam	-0.26	(0.01)	0.94	(0.01)	-1.47	(0.02)	-0.62	(0.02)	0.10	(0.02)	0.95	(0.01)	**2.42**	(0.02)	-1.48	(0.02)	0.98	(0.01)	**2.47**	(0.02)
Bulgaria	-0.27	(0.03)	1.05	(0.02)	-1.65	(0.05)	-0.61	(0.04)	0.21	(0.03)	0.96	(0.02)	**2.61**	(0.05)	-1.57	(0.05)	0.97	(0.01)	**2.54**	(0.04)
Cambodia	-2.01	(0.03)	1.24	(0.02)	-3.55	(0.03)	-2.47	(0.04)	-1.66	(0.04)	-0.36	(0.06)	**3.19**	(0.06)	-3.61	(0.04)	-0.27	(0.06)	**3.34**	(0.07)
Croatia	-0.15	(0.02)	0.83	(0.01)	-1.20	(0.02)	-0.53	(0.02)	0.19	(0.02)	0.92	(0.02)	**2.12**	(0.02)	-1.20	(0.01)	0.96	(0.01)	**2.16**	(0.02)
Cyprus	0.16	(0.01)	0.91	(0.01)	-1.09	(0.02)	-0.05	(0.02)	0.58	(0.01)	1.21	(0.01)	**2.30**	(0.02)	-1.10	(0.02)	1.22	(0.01)	**2.31**	(0.02)
Dominican Republic	-0.71	(0.02)	1.01	(0.01)	-2.04	(0.03)	-1.03	(0.03)	-0.31	(0.03)	0.54	(0.03)	**2.57**	(0.03)	-2.02	(0.03)	0.58	(0.03)	**2.60**	(0.04)
El Salvador	-1.39	(0.03)	1.23	(0.02)	-2.92	(0.03)	-1.85	(0.03)	-1.03	(0.04)	0.24	(0.05)	**3.16**	(0.05)	-2.95	(0.03)	0.36	(0.06)	**3.31**	(0.06)
Georgia	-0.47	(0.02)	0.94	(0.01)	-1.67	(0.02)	-0.81	(0.03)	-0.11	(0.03)	0.73	(0.02)	**2.39**	(0.03)	-1.68	(0.02)	0.76	(0.02)	**2.44**	(0.03)
Guatemala	-1.51	(0.05)	1.38	(0.02)	-3.24	(0.04)	-2.08	(0.05)	-1.04	(0.06)	0.32	(0.07)	**3.56**	(0.06)	-3.27	(0.04)	0.39	(0.07)	**3.66**	(0.06)
Hong Kong (China)*	-0.46	(0.04)	1.01	(0.01)	-1.73	(0.03)	-0.87	(0.03)	-0.12	(0.05)	0.86	(0.04)	**2.59**	(0.04)	-1.72	(0.03)	0.93	(0.04)	**2.65**	(0.04)
Indonesia	-1.56	(0.04)	1.06	(0.02)	-2.86	(0.03)	-1.95	(0.04)	-1.29	(0.04)	-0.13	(0.05)	**2.73**	(0.05)	-2.89	(0.04)	-0.04	(0.07)	**2.85**	(0.07)
Jamaica*	-0.55	(0.03)	0.95	(0.01)	-1.76	(0.03)	-0.85	(0.02)	-0.22	(0.03)	0.63	(0.03)	**2.39**	(0.03)	-1.73	(0.04)	0.70	(0.04)	**2.43**	(0.04)
Jordan	-0.82	(0.02)	1.10	(0.01)	-2.23	(0.03)	-1.20	(0.03)	-0.38	(0.03)	0.55	(0.02)	**2.78**	(0.03)	-2.21	(0.03)	0.58	(0.02)	**2.79**	(0.03)
Kazakhstan	-0.37	(0.02)	0.83	(0.01)	-1.49	(0.02)	-0.64	(0.02)	0.00	(0.02)	0.64	(0.01)	**2.13**	(0.02)	-1.52	(0.02)	0.67	(0.02)	**2.19**	(0.02)
Kosovo	-0.34	(0.01)	0.89	(0.01)	-1.51	(0.02)	-0.61	(0.02)	0.00	(0.02)	0.75	(0.02)	**2.26**	(0.02)	-1.53	(0.03)	0.78	(0.02)	**2.31**	(0.03)
Macao (China)	-0.45	(0.01)	0.91	(0.01)	-1.58	(0.02)	-0.80	(0.01)	-0.16	(0.01)	0.75	(0.02)	**2.33**	(0.02)	-1.58	(0.01)	0.81	(0.02)	**2.39**	(0.02)
Malaysia	-0.68	(0.03)	1.04	(0.02)	-1.98	(0.03)	-1.10	(0.03)	-0.33	(0.04)	0.67	(0.03)	**2.66**	(0.04)	-1.93	(0.02)	0.74	(0.04)	**2.67**	(0.04)
Malta	0.02	(0.02)	0.98	(0.01)	-1.30	(0.02)	-0.29	(0.02)	0.48	(0.02)	1.19	(0.02)	**2.49**	(0.03)	-1.37	(0.02)	1.20	(0.02)	**2.57**	(0.03)
Moldova	-0.52	(0.02)	0.96	(0.01)	-1.76	(0.02)	-0.89	(0.03)	-0.15	(0.03)	0.70	(0.02)	**2.46**	(0.03)	-1.77	(0.02)	0.74	(0.03)	**2.51**	(0.03)
Mongolia	-0.73	(0.03)	1.07	(0.01)	-2.14	(0.03)	-1.09	(0.04)	-0.28	(0.04)	0.59	(0.03)	**2.72**	(0.03)	-2.15	(0.04)	0.63	(0.02)	**2.78**	(0.04)
Montenegro	-0.21	(0.01)	0.86	(0.01)	-1.31	(0.02)	-0.50	(0.02)	0.12	(0.02)	0.87	(0.01)	**2.18**	(0.02)	-1.28	(0.02)	0.89	(0.01)	**2.17**	(0.02)
Morocco	-1.78	(0.06)	1.35	(0.03)	-3.49	(0.04)	-2.27	(0.05)	-1.39	(0.06)	0.01	(0.11)	**3.50**	(0.10)	-3.55	(0.04)	0.15	(0.12)	**3.71**	(0.11)
North Macedonia	-0.28	(0.01)	0.93	(0.01)	-1.51	(0.02)	-0.59	(0.01)	0.11	(0.01)	0.87	(0.01)	**2.37**	(0.02)	-1.51	(0.03)	0.90	(0.01)	**2.41**	(0.03)
Palestinian Authority	-0.91	(0.02)	1.06	(0.01)	-2.27	(0.03)	-1.29	(0.02)	-0.51	(0.03)	0.42	(0.02)	**2.68**	(0.03)	-2.25	(0.03)	0.44	(0.02)	**2.69**	(0.03)
Panama*	-0.95	(0.05)	1.30	(0.03)	-2.71	(0.05)	-1.33	(0.05)	-0.38	(0.07)	0.63	(0.06)	**3.34**	(0.06)	-2.74	(0.06)	0.67	(0.06)	**3.41**	(0.07)
Paraguay	-1.24	(0.03)	1.33	(0.02)	-2.96	(0.03)	-1.75	(0.03)	-0.74	(0.04)	0.47	(0.04)	**3.43**	(0.05)	-3.01	(0.04)	0.52	(0.05)	**3.53**	(0.06)
Peru	-1.15	(0.04)	1.24	(0.02)	-2.76	(0.04)	-1.55	(0.03)	-0.75	(0.05)	0.44	(0.04)	**3.20**	(0.05)	-2.85	(0.06)	0.55	(0.04)	**3.40**	(0.06)
Philippines	-1.34	(0.04)	1.13	(0.02)	-2.78	(0.04)	-1.74	(0.04)	-0.94	(0.04)	0.11	(0.04)	**2.89**	(0.05)	-2.77	(0.05)	0.17	(0.04)	**2.95**	(0.05)
Qatar	0.11	(0.01)	0.86	(0.01)	-1.08	(0.02)	0.01	(0.01)	0.48	(0.01)	1.02	(0.01)	**2.10**	(0.03)	-1.05	(0.04)	1.01	(0.02)	**2.06**	(0.04)
Romania	-0.36	(0.04)	1.03	(0.01)	-1.67	(0.04)	-0.77	(0.04)	0.03	(0.06)	0.96	(0.03)	**2.62**	(0.03)	-1.63	(0.03)	1.00	(0.03)	**2.63**	(0.03)
Saudi Arabia	-0.29	(0.03)	1.05	(0.02)	-1.73	(0.04)	-0.53	(0.04)	0.21	(0.03)	0.89	(0.02)	**2.61**	(0.04)	-1.71	(0.04)	0.89	(0.02)	**2.60**	(0.04)
Serbia	-0.20	(0.02)	0.84	(0.02)	-1.28	(0.04)	-0.51	(0.02)	0.13	(0.02)	0.86	(0.01)	**2.14**	(0.04)	-1.25	(0.02)	0.91	(0.01)	**2.16**	(0.02)
Singapore	0.31	(0.01)	0.83	(0.01)	-0.87	(0.02)	0.17	(0.02)	0.72	(0.01)	1.21	(0.01)	**2.08**	(0.02)	-0.92	(0.02)	1.22	(0.01)	**2.14**	(0.02)
Chinese Taipei	-0.19	(0.03)	0.90	(0.01)	-1.38	(0.03)	-0.47	(0.04)	0.19	(0.04)	0.91	(0.02)	**2.28**	(0.03)	-1.39	(0.03)	0.94	(0.02)	**2.34**	(0.03)
Thailand	-1.23	(0.04)	1.13	(0.02)	-2.68	(0.04)	-1.64	(0.04)	-0.84	(0.04)	0.24	(0.05)	**2.93**	(0.06)	-2.74	(0.05)	0.31	(0.05)	**3.05**	(0.07)
Ukrainian regions (18 of 27)	-0.35	(0.04)	0.86	(0.02)	-1.47	(0.05)	-0.64	(0.05)	-0.01	(0.04)	0.73	(0.02)	**2.20**	(0.05)	-1.49	(0.04)	0.76	(0.02)	**2.25**	(0.04)
United Arab Emirates	0.30	(0.01)	0.76	(0.01)	-0.72	(0.01)	0.20	(0.01)	0.60	(0.01)	1.11	(0.01)	**1.83**	(0.02)	-0.71	(0.02)	1.08	(0.01)	**1.79**	(0.01)
Uruguay	-0.83	(0.02)	1.13	(0.01)	-2.27	(0.02)	-1.27	(0.03)	-0.45	(0.03)	0.66	(0.04)	**2.93**	(0.04)	-2.30	(0.02)	0.76	(0.04)	**3.06**	(0.04)
Uzbekistan	-0.69	(0.02)	1.00	(0.01)	-2.02	(0.03)	-1.02	(0.03)	-0.27	(0.03)	0.55	(0.02)	**2.56**	(0.02)	-2.03	(0.03)	0.57	(0.02)	**2.60**	(0.03)
Viet Nam	-1.29	(0.05)	1.15	(0.03)	-2.70	(0.06)	-1.71	(0.04)	-1.03	(0.06)	0.28	(0.06)	**2.98**	(0.07)	-2.73	(0.07)	0.42	(0.07)	**3.15**	(0.09)

* Caution is required when interpreting estimates because one or more PISA sampling standards were not met (see Reader's Guide, Annexes A2 and A4).
Note: Values that are statistically significant are indicated in bold (see Annex A3).

Table I.B1.4.3. Socio-economic status and mathematics performance [1/2]

		Socio-economic gradient			Mathematics performance, by socio-economic status (ESCS[1])											
									National quarter of ESCS							
		Strength: Percentage of variance in mathematics performance explained by ESCS		Slope: Score-point difference in mathematics performance associated with a one-unit increase in ESCS		Bottom quarter of ESCS		Second quarter of ESCS		Third quarter of ESCS		Top quarter of ESCS		Top - Bottom quarter		Percentage of resilient students in mathematics[2]	
		%	S.E.	Score dif.	S.E.	Mean score	S.E.	Mean score	S.E.	Mean score	S.E.	Mean score	S.E.	Score dif.	S.E.	%	S.E.
OECD	Australia*	14.6	(0.8)	**45**	(1.5)	439	(2.1)	471	(2.4)	506	(2.7)	540	(3.1)	**101**	(3.5)	9.9	(0.7)
	Austria	19.4	(1.1)	**43**	(1.4)	435	(3.3)	473	(3.5)	510	(3.2)	542	(2.8)	**106**	(4.0)	8.2	(0.9)
	Belgium	21.8	(1.2)	**48**	(1.5)	434	(3.2)	470	(2.9)	509	(3.2)	551	(3.5)	**117**	(4.3)	8.2	(0.8)
	Canada*	10.2	(0.8)	**40**	(1.6)	460	(2.3)	487	(2.2)	512	(2.3)	536	(3.1)	**76**	(3.7)	12.7	(0.9)
	Chile	12.5	(1.2)	**29**	(1.4)	384	(2.5)	403	(3.0)	415	(3.4)	453	(3.5)	**69**	(4.2)	12.8	(1.3)
	Colombia	16.2	(2.1)	**25**	(1.7)	352	(3.3)	370	(3.2)	384	(4.2)	430	(5.9)	**79**	(6.5)	9.8	(1.4)
	Costa Rica	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Czech Republic	22.0	(1.2)	**51**	(1.8)	429	(3.3)	476	(3.3)	500	(2.9)	545	(3.2)	**116**	(4.4)	7.3	(0.8)
	Denmark*	12.2	(0.9)	**38**	(1.6)	451	(2.4)	480	(3.2)	507	(3.7)	525	(3.1)	**74**	(3.9)	10.2	(1.1)
	Estonia	13.4	(1.2)	**39**	(1.8)	472	(3.1)	496	(2.9)	520	(3.1)	553	(3.2)	**81**	(4.6)	10.3	(1.0)
	Finland	12.4	(0.8)	**38**	(1.4)	446	(2.4)	470	(2.4)	499	(2.9)	529	(2.5)	**83**	(2.9)	11.9	(0.8)
	France	21.5	(1.3)	**46**	(1.5)	422	(3.0)	457	(3.6)	489	(3.4)	535	(3.6)	**113**	(4.4)	7.4	(0.8)
	Germany	18.7	(1.3)	**40**	(1.5)	430	(3.8)	464	(4.1)	490	(3.9)	541	(4.3)	**111**	(5.1)	9.5	(1.1)
	Greece	11.8	(1.1)	**31**	(1.6)	398	(3.3)	415	(2.8)	436	(3.3)	474	(3.8)	**76**	(4.6)	12.0	(1.2)
	Hungary	25.1	(1.5)	**49**	(1.8)	414	(3.6)	455	(3.9)	490	(3.8)	535	(4.0)	**121**	(5.4)	8.2	(1.0)
	Iceland	9.3	(1.1)	**34**	(2.1)	422	(3.2)	455	(3.8)	469	(3.0)	495	(3.3)	**72**	(4.8)	11.3	(1.4)
	Ireland*	13.0	(1.2)	**35**	(1.5)	457	(3.2)	478	(3.0)	505	(2.7)	530	(3.0)	**74**	(3.8)	11.9	(1.0)
	Israel	19.6	(1.4)	**51**	(2.2)	398	(3.8)	439	(4.4)	483	(5.0)	522	(5.0)	**124**	(5.8)	7.7	(0.9)
	Italy	13.5	(1.5)	**35**	(2.2)	430	(3.1)	463	(3.5)	480	(3.9)	515	(5.5)	**85**	(5.9)	11.3	(1.1)
	Japan	11.9	(1.5)	**45**	(3.1)	494	(4.5)	526	(3.6)	549	(3.9)	575	(5.0)	**81**	(6.8)	11.5	(1.2)
	Korea	12.6	(1.4)	**45**	(3.0)	479	(5.7)	516	(5.2)	540	(4.8)	577	(6.0)	**97**	(8.0)	10.9	(1.2)
	Latvia*	13.2	(1.0)	**35**	(1.6)	448	(2.6)	471	(3.3)	494	(3.5)	522	(3.0)	**75**	(3.8)	11.7	(1.0)
	Lithuania	16.5	(1.2)	**40**	(1.7)	432	(2.7)	459	(2.8)	489	(3.2)	525	(3.2)	**92**	(4.1)	9.8	(0.9)
	Mexico	10.4	(1.3)	**19**	(1.3)	369	(2.4)	386	(2.5)	398	(3.9)	428	(4.2)	**58**	(4.6)	11.8	(1.1)
	Netherlands*	15.1	(1.3)	**47**	(2.2)	446	(4.9)	470	(5.6)	515	(4.8)	552	(3.8)	**106**	(6.3)	10.6	(1.3)
	New Zealand*	15.8	(1.4)	**42**	(2.0)	430	(2.9)	472	(3.3)	501	(3.0)	532	(3.9)	**102**	(5.2)	8.6	(1.0)
	Norway	9.6	(0.9)	**35**	(1.7)	431	(2.9)	460	(2.9)	482	(3.3)	512	(3.4)	**81**	(3.9)	12.6	(1.0)
	Poland	16.3	(1.3)	**40**	(1.9)	444	(3.0)	476	(3.5)	502	(3.3)	541	(3.5)	**96**	(4.5)	8.6	(1.0)
	Portugal	18.2	(1.3)	**34**	(1.4)	429	(3.6)	453	(3.3)	480	(3.3)	529	(3.2)	**101**	(4.7)	9.4	(1.0)
	Slovak Republic	25.7	(1.8)	**53**	(2.2)	394	(4.8)	455	(4.1)	481	(4.3)	528	(4.2)	**133**	(6.6)	6.1	(0.8)
	Slovenia	15.7	(1.1)	**42**	(1.5)	440	(2.5)	468	(2.8)	500	(3.0)	532	(2.4)	**91**	(3.6)	9.4	(1.1)
	Spain	14.2	(0.8)	**32**	(0.9)	434	(2.0)	459	(1.9)	485	(2.3)	520	(2.1)	**86**	(2.7)	11.7	(0.6)
	Sweden	15.0	(1.0)	**43**	(1.7)	436	(2.8)	467	(3.5)	500	(3.1)	535	(3.1)	**99**	(4.1)	9.9	(0.9)
	Switzerland	20.8	(1.2)	**47**	(1.5)	454	(3.3)	493	(3.8)	524	(3.3)	571	(3.0)	**117**	(4.4)	8.2	(0.9)
	Türkiye	12.6	(1.2)	**27**	(1.3)	420	(3.0)	438	(2.7)	453	(3.1)	502	(3.1)	**82**	(4.5)	11.7	(1.1)
	United Kingdom*	11.0	(1.3)	**36**	(2.5)	458	(3.3)	479	(3.5)	496	(3.3)	544	(5.0)	**86**	(6.0)	15.2	(1.2)
	United States*	14.9	(1.4)	**38**	(2.3)	421	(4.5)	445	(4.3)	473	(5.9)	523	(6.1)	**102**	(6.2)	10.6	(1.4)
	OECD average	15.5	(0.2)	**39**	(0.3)	431	(0.6)	462	(0.6)	488	(0.6)	525	(0.6)	**93**	(0.8)	10.2	(0.2)

1. ESCS refers to the PISA index of economic, social and cultural status.

2. Resilient students in mathematics are disadvantaged students who scored in the top quarter of performance in mathematics amongst students in their own country.

* Caution is required when interpreting estimates because one or more PISA sampling standards were not met (see Reader's Guide, Annexes A2 and A4).

Note: Values that are statistically significant are indicated in bold (see Annex A3).

Table I.B1.4.3. Socio-economic status and mathematics performance [2/2]

				Mathematics performance, by socio-economic status (ESCS[1])												
		Socio-economic gradient		National quarter of ESCS												
		Strength: Percentage of variance in mathematics performance explained by ESCS		Slope: Score-point difference in mathematics performance associated with a one-unit increase in ESCS		Bottom quarter of ESCS		Second quarter of ESCS		Third quarter of ESCS		Top quarter of ESCS		Top - Bottom quarter		Percentage of resilient students in mathematics[2]	
		%	S.E.	Score dif.	S.E.	Mean score	S.E.	Mean score	S.E.	Mean score	S.E.	Mean score	S.E.	Score dif.	S.E.	%	S.E.
Partners	Albania	4.5	(0.9)	17	(1.7)	353	(2.9)	358	(3.0)	363	(3.2)	402	(4.1)	49	(4.8)	17.1	(1.4)
	Argentina	15.4	(1.3)	26	(1.2)	345	(3.0)	363	(2.6)	385	(3.4)	420	(3.6)	75	(4.3)	10.2	(1.1)
	Baku (Azerbaijan)	5.2	(0.8)	21	(1.8)	371	(3.3)	395	(2.9)	402	(2.8)	425	(4.2)	54	(4.8)	14.5	(1.2)
	Brazil	14.8	(1.3)	26	(1.2)	348	(1.8)	365	(2.0)	379	(2.8)	425	(3.9)	77	(4.3)	10.2	(0.8)
	Brunei Darussalam	16.0	(0.9)	35	(1.0)	407	(2.1)	423	(2.1)	446	(2.4)	494	(2.1)	86	(2.9)	10.9	(0.9)
	Bulgaria	17.2	(1.8)	38	(2.3)	366	(3.9)	400	(3.3)	432	(5.4)	473	(6.0)	108	(7.1)	7.4	(1.1)
	Cambodia	1.9	(1.0)	8	(2.2)	329	(2.8)	334	(2.9)	333	(2.9)	350	(7.3)	21	(7.3)	18.2	(1.6)
	Croatia	13.0	(1.3)	38	(2.1)	427	(3.3)	446	(3.3)	471	(3.4)	509	(3.7)	82	(4.9)	10.7	(1.2)
	Cyprus	10.9	(0.8)	36	(1.5)	379	(2.3)	406	(2.7)	430	(2.3)	471	(3.0)	92	(4.0)	11.6	(1.0)
	Dominican Republic	10.1	(1.4)	17	(1.4)	322	(1.7)	330	(1.6)	339	(1.9)	367	(3.8)	45	(3.8)	12.6	(1.1)
	El Salvador	14.4	(1.8)	18	(1.3)	320	(2.4)	334	(2.2)	345	(2.6)	377	(4.7)	57	(4.8)	10.2	(1.2)
	Georgia	7.8	(1.0)	25	(2.0)	362	(3.0)	378	(2.9)	399	(3.3)	427	(4.6)	65	(5.0)	13.9	(1.4)
	Guatemala	12.1	(2.2)	17	(1.7)	319	(2.2)	333	(2.5)	346	(3.5)	379	(5.9)	60	(6.6)	11.2	(1.2)
	Hong Kong (China)*	5.8	(1.1)	25	(2.3)	511	(4.2)	535	(4.8)	543	(3.9)	576	(5.6)	65	(7.1)	16.7	(1.3)
	Indonesia	5.5	(1.3)	14	(1.7)	352	(2.8)	359	(2.5)	366	(2.8)	386	(5.0)	34	(5.1)	15.2	(1.6)
	Jamaica*	6.1	(0.9)	19	(1.7)	360	(3.3)	372	(3.9)	381	(4.5)	405	(4.6)	45	(4.3)	15.2	(1.9)
	Jordan	5.2	(1.0)	13	(1.3)	346	(2.3)	356	(2.1)	360	(2.8)	385	(3.4)	40	(3.7)	14.5	(1.5)
	Kazakhstan	3.9	(0.5)	19	(1.3)	410	(1.9)	416	(2.0)	425	(2.4)	451	(2.9)	41	(3.1)	16.8	(0.9)
	Kosovo	5.7	(0.7)	17	(1.1)	342	(2.0)	346	(1.9)	353	(2.0)	381	(2.4)	39	(3.1)	17.7	(1.4)
	Macao (China)	5.0	(0.7)	23	(1.6)	526	(3.0)	547	(2.8)	554	(3.0)	581	(2.7)	55	(4.1)	16.8	(1.4)
	Malaysia	18.1	(1.7)	31	(2.0)	375	(2.3)	393	(2.4)	410	(2.9)	458	(5.9)	82	(6.4)	9.3	(1.0)
	Malta	10.0	(1.0)	32	(1.8)	427	(3.4)	454	(4.1)	479	(4.0)	510	(3.8)	83	(5.0)	12.7	(1.3)
	Moldova	15.6	(1.4)	33	(1.7)	379	(2.1)	399	(3.0)	418	(3.6)	461	(4.4)	82	(4.9)	10.1	(0.9)
	Mongolia	18.1	(1.4)	33	(1.6)	384	(2.7)	405	(3.0)	431	(3.6)	478	(4.5)	94	(5.1)	8.8	(0.8)
	Montenegro	9.5	(0.9)	29	(1.4)	375	(2.4)	396	(2.4)	412	(2.4)	442	(2.7)	67	(3.7)	14.0	(1.2)
	Morocco	8.5	(2.6)	13	(2.2)	351	(2.7)	357	(2.8)	358	(3.3)	394	(9.2)	43	(9.2)	15.8	(1.5)
	North Macedonia	12.5	(0.8)	31	(1.2)	356	(2.1)	376	(2.1)	397	(2.2)	431	(2.2)	76	(3.2)	12.3	(0.9)
	Palestinian Authority	7.4	(1.0)	17	(1.2)	343	(2.0)	360	(2.4)	368	(2.5)	393	(3.6)	50	(3.9)	12.3	(1.0)
	Panama*	20.0	(2.5)	23	(1.8)	325	(2.4)	341	(2.8)	359	(5.0)	402	(6.9)	77	(7.2)	7.8	(1.1)
	Paraguay	11.2	(1.4)	20	(1.2)	315	(2.6)	324	(2.7)	333	(3.4)	381	(4.7)	66	(5.3)	12.4	(1.2)
	Peru	17.3	(1.5)	26	(1.1)	351	(2.4)	379	(3.0)	400	(3.7)	437	(3.8)	86	(4.2)	7.4	(0.8)
	Philippines	4.8	(1.3)	12	(1.8)	339	(2.4)	354	(1.8)	351	(4.1)	375	(5.3)	36	(5.6)	11.6	(1.1)
	Qatar	11.7	(0.8)	35	(1.4)	372	(2.4)	400	(2.3)	438	(3.2)	455	(2.7)	84	(3.6)	7.6	(1.0)
	Romania	25.8	(1.6)	49	(2.0)	368	(3.9)	408	(4.0)	437	(6.6)	500	(6.2)	132	(6.7)	6.6	(0.9)
	Saudi Arabia	6.4	(0.9)	16	(1.3)	369	(2.4)	377	(2.5)	395	(2.8)	416	(2.7)	47	(3.5)	14.2	(1.3)
	Serbia	13.4	(1.8)	39	(3.1)	401	(4.0)	429	(3.3)	449	(3.6)	482	(6.0)	81	(7.2)	12.3	(1.1)
	Singapore	17.0	(1.0)	51	(1.7)	515	(3.2)	560	(2.7)	600	(2.6)	626	(2.5)	112	(4.1)	10.2	(0.9)
	Chinese Taipei	15.7	(1.7)	49	(3.0)	490	(5.0)	533	(4.5)	559	(5.3)	609	(7.0)	119	(8.5)	10.1	(1.0)
	Thailand	10.1	(2.0)	21	(2.3)	375	(3.2)	380	(2.5)	387	(3.1)	435	(7.0)	61	(7.6)	15.0	(1.7)
	Ukrainian regions (18 of 27)	13.8	(1.9)	38	(3.3)	398	(4.8)	423	(5.3)	451	(6.1)	482	(5.7)	84	(6.7)	10.5	(1.6)
	United Arab Emirates	5.8	(0.4)	33	(1.3)	388	(1.8)	429	(2.2)	460	(1.8)	456	(1.8)	68	(2.6)	9.5	(0.7)
	Uruguay	17.9	(1.3)	31	(1.2)	371	(3.1)	394	(2.4)	412	(3.2)	462	(3.6)	91	(4.4)	10.4	(1.0)
	Uzbekistan	2.0	(0.5)	9	(1.2)	356	(2.5)	358	(2.5)	364	(2.7)	378	(3.1)	22	(3.5)	19.6	(1.4)
	Viet Nam	13.8	(2.0)	28	(2.2)	434	(5.1)	457	(4.1)	473	(5.2)	513	(6.9)	78	(7.7)	12.7	(1.2)

1. ESCS refers to the PISA index of economic, social and cultural status.

2. Resilient students in mathematics are disadvantaged students who scored in the top quarter of performance in mathematics amongst students in their own country.

* Caution is required when interpreting estimates because one or more PISA sampling standards were not met (see Reader's Guide, Annexes A2 and A4).

Note: Values that are statistically significant are indicated in bold (see Annex A3).

Table I.B1.4.17. Mathematics performance, by gender [1/6]

	Girls									
	Mean		Standard deviation		10th percentile		Median (50th percentile)		90th percentile	
	Mean score	S.E.	S.D.	S.E.	Score	S.E.	Score	S.E.	Score	S.E.
OECD Australia*	481	(2.1)	94	(1.4)	361	(2.7)	478	(2.3)	605	(4.2)
Austria	478	(2.7)	89	(1.6)	358	(5.0)	479	(3.2)	593	(3.9)
Belgium	486	(2.8)	93	(1.5)	359	(4.5)	489	(3.9)	605	(3.0)
Canada*	491	(1.7)	88	(1.0)	377	(2.4)	490	(2.0)	606	(2.7)
Chile	403	(2.2)	73	(1.4)	311	(3.8)	401	(2.9)	499	(3.1)
Colombia	378	(3.2)	71	(1.7)	291	(3.6)	374	(3.8)	474	(5.0)
Costa Rica	377	(2.1)	63	(1.6)	298	(3.0)	375	(2.4)	457	(3.5)
Czech Republic	483	(2.3)	89	(1.4)	367	(3.1)	482	(3.3)	601	(3.6)
Denmark*	483	(2.1)	77	(1.3)	383	(3.0)	484	(2.8)	583	(3.4)
Estonia	507	(2.5)	82	(1.2)	402	(3.2)	506	(3.0)	614	(3.7)
Finland	487	(2.1)	84	(1.2)	377	(3.3)	488	(2.6)	595	(3.0)
France	469	(2.5)	86	(1.4)	357	(3.7)	470	(3.2)	580	(3.6)
Germany	469	(3.0)	91	(1.6)	350	(4.3)	469	(4.0)	589	(4.3)
Greece	427	(2.2)	79	(1.3)	328	(3.4)	424	(2.6)	533	(3.4)
Hungary	465	(2.9)	89	(1.9)	347	(4.8)	467	(3.9)	580	(4.3)
Iceland	457	(2.2)	82	(1.7)	350	(4.1)	456	(3.0)	566	(4.9)
Ireland*	485	(2.7)	74	(1.2)	388	(3.7)	486	(3.2)	580	(3.7)
Israel	452	(2.9)	95	(1.6)	328	(4.4)	453	(4.0)	574	(4.5)
Italy	461	(2.8)	82	(1.7)	357	(3.6)	458	(3.2)	569	(5.0)
Japan	531	(2.9)	87	(2.1)	416	(5.2)	534	(3.5)	640	(4.2)
Korea	525	(3.7)	97	(2.6)	397	(5.8)	528	(4.2)	647	(5.4)
Latvia*	478	(2.3)	76	(1.6)	381	(4.6)	477	(2.8)	577	(4.0)
Lithuania	473	(2.0)	83	(1.4)	366	(3.4)	471	(2.7)	582	(3.3)
Mexico	389	(2.5)	66	(1.7)	308	(3.0)	385	(2.6)	476	(4.9)
Netherlands*	487	(4.2)	104	(2.4)	344	(6.7)	492	(5.5)	620	(4.0)
New Zealand*	474	(2.6)	91	(1.7)	355	(5.0)	473	(3.4)	594	(5.2)
Norway	469	(2.4)	87	(1.0)	356	(3.1)	469	(3.5)	581	(3.7)
Poland	486	(2.9)	84	(1.6)	375	(4.8)	487	(3.5)	594	(4.1)
Portugal	467	(2.5)	86	(1.7)	357	(4.5)	465	(3.2)	578	(2.8)
Slovak Republic	463	(3.3)	99	(2.1)	327	(6.7)	471	(4.5)	583	(3.9)
Slovenia	485	(1.9)	84	(1.3)	376	(3.6)	483	(2.8)	597	(3.5)
Spain	468	(1.6)	83	(0.9)	359	(2.9)	469	(2.2)	574	(2.3)
Sweden	481	(2.1)	90	(1.3)	363	(3.6)	481	(2.9)	599	(3.0)
Switzerland	502	(2.5)	92	(1.4)	380	(3.4)	503	(3.4)	621	(3.7)
Türkiye	450	(2.7)	86	(1.4)	342	(3.5)	445	(3.9)	567	(3.4)
United Kingdom*	482	(2.9)	92	(1.8)	364	(4.1)	480	(3.3)	602	(4.8)
United States*	458	(3.9)	88	(1.9)	346	(4.2)	455	(4.7)	574	(6.1)
OECD average	468	(0.4)	85	(0.3)	357	(0.7)	467	(0.6)	579	(0.7)

* Caution is required when interpreting estimates because one or more PISA sampling standards were not met (see Reader's Guide, Annexes A2 and A4).
Note: Values that are statistically significant are indicated in bold (see Annex A3).

Table I.B1.4.17. Mathematics performance, by gender [2/6]

	Girls									
	Mean		Standard deviation		10th percentile		Median (50th percentile)		90th percentile	
	Mean score	S.E.	S.D.	S.E.	Score	S.E.	Score	S.E.	Score	S.E.
Partners Albania	378	(2.2)	79	(1.5)	280	(3.4)	374	(2.9)	482	(3.6)
Argentina	372	(2.5)	72	(1.4)	284	(3.5)	367	(2.9)	468	(4.1)
Baku (Azerbaijan)	401	(2.4)	80	(1.2)	300	(3.5)	399	(2.9)	506	(3.8)
Brazil	375	(1.7)	72	(1.3)	289	(1.9)	367	(1.8)	471	(3.5)
Brunei Darussalam	448	(1.3)	78	(1.0)	351	(2.4)	443	(2.2)	552	(2.9)
Bulgaria	420	(3.5)	91	(2.4)	307	(4.3)	416	(3.8)	541	(6.6)
Cambodia	338	(2.4)	69	(1.6)	252	(3.6)	338	(2.6)	426	(4.6)
Croatia	460	(3.0)	83	(1.8)	355	(4.1)	457	(3.7)	572	(4.8)
Cyprus	426	(1.8)	92	(1.1)	311	(3.3)	422	(2.9)	550	(3.8)
Dominican Republic	341	(1.7)	52	(1.3)	277	(2.4)	338	(1.8)	409	(3.3)
El Salvador	340	(2.3)	58	(1.6)	270	(3.0)	336	(2.5)	417	(4.8)
Georgia	393	(2.3)	80	(1.8)	295	(3.0)	388	(2.6)	499	(4.4)
Guatemala	338	(2.6)	67	(2.0)	253	(3.6)	337	(2.5)	424	(5.6)
Hong Kong (China)*	536	(3.4)	97	(1.9)	408	(6.2)	540	(3.7)	656	(4.5)
Indonesia	369	(2.6)	62	(1.6)	293	(2.8)	364	(2.8)	451	(4.4)
Jamaica*	384	(2.9)	69	(1.4)	299	(3.5)	379	(3.6)	477	(4.4)
Jordan	368	(2.9)	61	(1.5)	292	(2.9)	366	(3.1)	447	(4.8)
Kazakhstan	426	(1.8)	74	(1.1)	335	(2.4)	422	(2.2)	521	(2.7)
Kosovo	355	(1.3)	60	(1.0)	281	(2.4)	351	(1.6)	434	(3.0)
Macao (China)	544	(1.8)	87	(1.4)	429	(4.1)	546	(2.4)	654	(3.7)
Malaysia	414	(2.4)	71	(2.0)	326	(2.8)	410	(2.7)	507	(4.6)
Malta	465	(2.4)	92	(1.9)	339	(5.0)	469	(3.5)	581	(4.4)
Moldova	412	(2.3)	75	(1.5)	321	(3.1)	407	(2.6)	513	(4.6)
Mongolia	427	(2.8)	81	(1.9)	328	(3.3)	422	(3.0)	536	(5.2)
Montenegro	406	(1.4)	78	(1.3)	308	(2.4)	402	(2.2)	510	(3.4)
Morocco	367	(3.2)	60	(1.9)	293	(3.0)	363	(3.3)	446	(6.0)
North Macedonia	392	(1.2)	80	(1.2)	292	(2.7)	388	(2.5)	498	(3.2)
Palestinian Authority	373	(2.4)	65	(1.3)	292	(3.0)	370	(2.5)	456	(3.9)
Panama*	355	(2.9)	63	(2.4)	278	(3.5)	351	(2.8)	437	(7.5)
Paraguay	332	(2.5)	75	(1.4)	238	(3.7)	329	(3.2)	430	(4.3)
Peru	384	(2.5)	75	(1.5)	292	(3.5)	379	(2.8)	484	(3.8)
Philippines	362	(2.7)	63	(1.7)	285	(2.9)	357	(2.9)	448	(4.7)
Qatar	418	(1.5)	83	(1.3)	317	(3.1)	413	(2.2)	529	(3.3)
Romania	425	(4.1)	93	(2.3)	305	(4.9)	423	(5.1)	546	(5.4)
Saudi Arabia	388	(2.5)	61	(1.4)	312	(2.9)	385	(2.8)	468	(4.1)
Serbia	434	(2.8)	85	(2.7)	330	(4.9)	432	(3.1)	545	(5.0)
Singapore	568	(1.7)	98	(1.1)	436	(4.2)	575	(2.4)	691	(3.2)
Chinese Taipei	544	(4.7)	104	(2.3)	402	(6.3)	549	(5.6)	676	(6.7)
Thailand	397	(3.5)	72	(2.8)	312	(3.0)	389	(2.9)	493	(8.3)
Ukrainian regions (18 of 27)	436	(4.1)	83	(2.1)	331	(5.9)	434	(5.3)	544	(5.9)
United Arab Emirates	435	(0.9)	92	(0.8)	321	(1.5)	428	(1.3)	561	(2.2)
Uruguay	403	(2.2)	80	(1.5)	302	(3.4)	401	(3.0)	509	(4.0)
Uzbekistan	361	(2.0)	62	(1.3)	284	(2.8)	358	(2.3)	441	(3.6)
Viet Nam	464	(3.7)	81	(2.2)	361	(5.0)	465	(4.2)	570	(5.8)

* Caution is required when interpreting estimates because one or more PISA sampling standards were not met (see Reader's Guide, Annexes A2 and A4).
Note: Values that are statistically significant are indicated in bold (see Annex A3).

Table I.B1.4.17. Mathematics performance, by gender [3/6]

		Boys								
		Mean		Standard deviation		10th percentile		Median (50th percentile)		90th percentile	
		Mean score	S.E.	S.D.	S.E.	Score	S.E.	Score	S.E.	Score	S.E.
OECD	Australia*	493	(2.5)	104	(1.2)	356	(3.1)	491	(2.9)	631	(4.2)
	Austria	497	(2.9)	97	(1.5)	366	(4.3)	499	(3.7)	621	(3.6)
	Belgium	493	(3.2)	100	(1.7)	360	(5.5)	496	(3.8)	623	(3.9)
	Canada*	503	(1.9)	99	(1.2)	373	(3.1)	504	(2.2)	631	(3.1)
	Chile	420	(2.6)	79	(1.4)	320	(3.8)	417	(3.5)	524	(3.6)
	Colombia	387	(3.3)	75	(1.6)	296	(3.6)	381	(4.0)	488	(4.5)
	Costa Rica	392	(2.3)	68	(1.5)	307	(3.3)	389	(2.7)	480	(4.1)
	Czech Republic	491	(3.3)	97	(1.7)	364	(3.9)	490	(4.7)	618	(4.0)
	Denmark*	495	(2.6)	85	(1.5)	383	(3.7)	495	(3.2)	606	(4.7)
	Estonia	513	(2.2)	88	(1.4)	400	(3.3)	513	(2.7)	627	(3.9)
	Finland	482	(2.3)	94	(1.1)	356	(3.0)	484	(3.1)	604	(3.3)
	France	479	(3.4)	96	(1.3)	350	(3.8)	482	(4.2)	605	(4.3)
	Germany	480	(3.7)	98	(1.6)	351	(5.2)	480	(4.4)	608	(4.1)
	Greece	433	(3.3)	88	(1.9)	323	(4.5)	429	(3.8)	551	(4.4)
	Hungary	480	(3.1)	98	(2.1)	348	(4.3)	483	(4.3)	608	(5.0)
	Iceland	461	(2.4)	93	(1.7)	339	(4.3)	460	(3.1)	582	(4.9)
	Ireland*	498	(2.7)	84	(1.2)	385	(4.0)	500	(3.3)	605	(3.6)
	Israel	463	(5.2)	118	(2.9)	307	(6.3)	466	(7.4)	616	(6.9)
	Italy	482	(4.0)	94	(1.7)	358	(4.2)	483	(4.9)	605	(5.6)
	Japan	540	(4.2)	98	(2.4)	404	(6.4)	547	(4.4)	663	(5.6)
	Korea	530	(5.6)	112	(3.4)	379	(9.3)	535	(6.6)	672	(6.5)
	Latvia*	488	(2.3)	84	(1.4)	381	(3.8)	487	(3.1)	597	(3.9)
	Lithuania	478	(2.3)	91	(1.6)	360	(3.8)	474	(3.1)	600	(4.2)
	Mexico	401	(2.6)	72	(1.6)	312	(3.7)	398	(3.2)	498	(4.2)
	Netherlands*	498	(3.9)	108	(2.2)	352	(5.8)	502	(5.4)	639	(3.8)
	New Zealand*	484	(2.9)	105	(1.8)	346	(3.8)	484	(3.9)	623	(4.5)
	Norway	468	(2.5)	100	(1.3)	337	(3.5)	468	(3.2)	598	(3.7)
	Poland	492	(2.7)	95	(1.8)	366	(4.5)	494	(3.9)	614	(4.0)
	Portugal	477	(2.6)	93	(1.7)	355	(4.1)	477	(3.7)	598	(3.3)
	Slovak Republic	465	(3.4)	103	(2.2)	328	(5.9)	466	(4.6)	597	(4.8)
	Slovenia	484	(1.7)	94	(1.4)	363	(3.6)	480	(2.6)	610	(4.1)
	Spain	478	(1.9)	90	(0.9)	359	(3.1)	480	(2.4)	593	(2.4)
	Sweden	483	(2.7)	100	(1.4)	350	(4.3)	485	(3.5)	614	(3.7)
	Switzerland	513	(2.6)	100	(1.6)	379	(3.9)	515	(3.7)	642	(3.7)
	Türkiye	456	(2.6)	93	(1.3)	339	(3.9)	449	(3.4)	586	(4.1)
	United Kingdom*	496	(3.0)	100	(1.7)	362	(4.1)	498	(3.9)	623	(4.6)
	United States*	471	(4.7)	100	(2.2)	343	(5.6)	469	(6.0)	606	(5.9)
	OECD average	477	(0.5)	94	(0.3)	353	(0.7)	477	(0.7)	600	(0.7)

* Caution is required when interpreting estimates because one or more PISA sampling standards were not met (see Reader's Guide, Annexes A2 and A4).

Note: Values that are statistically significant are indicated in bold (see Annex A3).

Table I.B1.4.17. Mathematics performance, by gender [4/6]

	Boys									
	Mean		Standard deviation		10th percentile		Median (50th percentile)		90th percentile	
	Mean score	S.E.	S.D.	S.E.	Score	S.E.	Score	S.E.	Score	S.E.
Albania	359	(2.8)	89	(1.8)	255	(3.6)	348	(3.2)	481	(5.0)
Argentina	383	(2.4)	77	(1.3)	289	(3.3)	377	(3.2)	485	(3.8)
Baku (Azerbaijan)	394	(2.9)	90	(1.5)	284	(3.3)	387	(3.4)	517	(5.0)
Brazil	383	(2.0)	81	(1.3)	287	(2.4)	374	(2.3)	493	(3.7)
Brunei Darussalam	437	(1.2)	89	(1.0)	325	(2.6)	430	(2.0)	559	(3.4)
Bulgaria	415	(4.1)	102	(2.3)	291	(4.1)	405	(5.3)	555	(6.6)
Cambodia	334	(3.5)	77	(2.3)	235	(4.1)	334	(3.5)	431	(6.3)
Croatia	466	(3.0)	92	(1.6)	349	(4.2)	462	(4.1)	590	(4.4)
Cyprus	411	(1.7)	108	(1.3)	282	(2.8)	397	(2.6)	562	(3.9)
Dominican Republic	337	(1.9)	56	(1.5)	269	(2.7)	332	(1.9)	412	(3.4)
El Salvador	347	(2.4)	61	(1.3)	273	(2.6)	341	(2.7)	429	(4.7)
Georgia	387	(3.2)	89	(3.0)	283	(3.3)	378	(3.2)	506	(7.6)
Guatemala	351	(2.5)	70	(1.8)	260	(4.1)	350	(2.6)	439	(4.1)
Hong Kong (China)*	544	(3.4)	111	(2.0)	391	(5.4)	552	(3.9)	684	(5.2)
Indonesia	362	(2.8)	62	(1.5)	287	(2.8)	357	(2.9)	445	(5.0)
Jamaica*	370	(5.0)	73	(2.7)	283	(3.9)	361	(5.6)	474	(10.3)
Jordan	353	(2.8)	62	(1.1)	277	(2.9)	350	(3.3)	435	(3.7)
Kazakhstan	425	(2.1)	83	(1.2)	323	(2.5)	420	(2.4)	538	(3.5)
Kosovo	355	(1.3)	65	(1.1)	278	(2.3)	348	(1.8)	443	(4.1)
Macao (China)	559	(1.5)	97	(1.4)	430	(3.9)	562	(2.6)	683	(3.8)
Malaysia	403	(2.8)	79	(3.0)	309	(2.4)	395	(2.8)	512	(6.8)
Malta	467	(2.2)	105	(1.8)	328	(4.6)	471	(3.5)	602	(5.2)
Moldova	416	(2.8)	83	(1.6)	313	(3.0)	410	(3.3)	529	(5.3)
Mongolia	422	(2.9)	85	(1.9)	319	(3.6)	414	(3.1)	538	(5.7)
Montenegro	405	(1.5)	85	(1.3)	303	(3.1)	396	(2.5)	523	(3.5)
Morocco	363	(3.7)	65	(2.5)	286	(2.6)	356	(3.8)	452	(7.2)
North Macedonia	386	(1.3)	85	(1.1)	283	(2.6)	376	(2.3)	503	(3.2)
Palestinian Authority	357	(2.6)	67	(1.8)	278	(2.8)	350	(2.8)	446	(5.4)
Panama*	358	(3.3)	68	(2.2)	278	(3.1)	351	(3.7)	448	(6.9)
Paraguay	343	(2.8)	79	(1.5)	243	(3.7)	341	(3.5)	448	(4.6)
Peru	399	(2.8)	80	(1.4)	299	(3.3)	394	(3.5)	508	(4.3)
Philippines	348	(2.8)	66	(2.4)	274	(2.5)	337	(2.5)	436	(6.0)
Qatar	410	(1.7)	94	(1.5)	299	(2.6)	397	(2.7)	544	(4.1)
Romania	430	(4.5)	104	(2.3)	300	(4.3)	424	(5.9)	572	(6.8)
Saudi Arabia	390	(2.6)	70	(1.4)	305	(2.7)	385	(3.0)	482	(4.3)
Serbia	445	(3.9)	94	(3.2)	328	(4.7)	440	(4.0)	571	(7.5)
Singapore	581	(1.7)	107	(1.3)	431	(4.0)	589	(2.5)	712	(3.2)
Chinese Taipei	550	(4.7)	119	(3.0)	384	(6.9)	560	(5.7)	696	(7.5)
Thailand	391	(3.3)	79	(2.7)	301	(3.3)	380	(2.9)	499	(8.1)
Ukrainian regions (18 of 27)	446	(5.3)	93	(2.8)	327	(7.0)	442	(6.9)	567	(7.2)
United Arab Emirates	428	(1.5)	109	(1.1)	296	(1.9)	416	(2.6)	579	(2.3)
Uruguay	414	(2.5)	86	(1.4)	304	(3.1)	411	(3.4)	529	(3.6)
Uzbekistan	367	(2.4)	71	(1.0)	281	(2.7)	362	(2.7)	463	(4.0)
Viet Nam	475	(4.6)	90	(2.8)	360	(7.5)	473	(5.0)	591	(6.2)

* Caution is required when interpreting estimates because one or more PISA sampling standards were not met (see Reader's Guide, Annexes A2 and A4).

Note: Values that are statistically significant are indicated in bold (see Annex A3).

Table I.B1.4.17. Mathematics performance, by gender [5/6]

	Gender differences (boys - girls)									
	Mean score		Standard deviation		10th percentile		Median (50th percentile)		90th percentile	
	Score dif.	S.E.	Dif.	S.E.	Score dif.	S.E.	Score dif.	S.E.	Score dif.	S.E.
Australia*	11	(3.0)	10	(1.6)	-5	(4.0)	13	(3.5)	26	(5.5)
Austria	19	(3.0)	7	(1.9)	7	(5.7)	20	(4.2)	28	(4.6)
Belgium	8	(4.1)	7	(2.4)	1	(7.9)	7	(4.8)	18	(4.3)
Canada*	12	(1.7)	11	(1.4)	-5	(3.2)	14	(2.3)	25	(3.6)
Chile	16	(2.5)	5	(1.8)	8	(4.7)	16	(4.2)	25	(4.0)
Colombia	9	(2.2)	4	(1.4)	5	(3.3)	7	(3.2)	14	(4.2)
Costa Rica	15	(2.2)	5	(1.6)	9	(4.1)	14	(2.5)	23	(4.0)
Czech Republic	7	(3.8)	8	(1.8)	-3	(4.7)	8	(5.5)	18	(5.3)
Denmark*	12	(2.8)	8	(1.9)	0	(4.4)	11	(3.5)	23	(5.2)
Estonia	6	(2.4)	6	(1.4)	-2	(4.0)	7	(3.2)	13	(4.7)
Finland	-5	(2.3)	10	(1.4)	-21	(3.7)	-4	(3.4)	9	(3.7)
France	10	(3.3)	10	(1.6)	-7	(4.7)	12	(4.5)	25	(5.2)
Germany	11	(2.6)	7	(1.8)	1	(4.9)	11	(3.4)	20	(4.9)
Greece	6	(3.1)	9	(1.9)	-4	(4.9)	5	(3.8)	19	(4.5)
Hungary	15	(3.2)	9	(2.3)	2	(6.7)	16	(4.5)	28	(4.9)
Iceland	3	(3.5)	10	(2.5)	-11	(6.1)	4	(4.5)	16	(6.9)
Ireland*	13	(3.5)	9	(1.7)	-2	(5.1)	14	(4.5)	25	(5.3)
Israel	11	(5.4)	23	(3.1)	-21	(6.8)	13	(7.6)	42	(7.8)
Italy	21	(3.5)	12	(1.6)	1	(5.0)	25	(4.9)	37	(5.3)
Japan	9	(4.1)	12	(2.5)	-12	(6.8)	12	(4.5)	23	(5.9)
Korea	5	(5.6)	15	(3.3)	-18	(9.3)	7	(7.2)	25	(7.3)
Latvia*	10	(2.3)	7	(1.9)	0	(5.3)	10	(3.0)	20	(4.8)
Lithuania	5	(2.3)	8	(1.6)	-6	(4.2)	3	(3.6)	18	(4.3)
Mexico	12	(2.3)	6	(1.5)	4	(3.6)	13	(3.0)	21	(4.4)
Netherlands*	11	(3.0)	4	(2.0)	8	(6.0)	10	(4.9)	19	(4.4)
New Zealand*	10	(3.8)	14	(2.3)	-8	(5.6)	11	(5.1)	29	(6.8)
Norway	-1	(2.7)	13	(1.5)	-19	(4.3)	-1	(3.7)	17	(5.0)
Poland	6	(3.3)	11	(1.9)	-9	(6.4)	7	(4.6)	20	(5.1)
Portugal	11	(2.0)	7	(1.8)	-2	(4.0)	11	(3.5)	20	(3.9)
Slovak Republic	1	(3.5)	4	(2.3)	1	(7.2)	-5	(5.5)	14	(5.0)
Slovenia	-2	(2.6)	9	(1.8)	-13	(5.0)	-2	(4.0)	13	(5.2)
Spain	10	(1.9)	7	(1.1)	1	(3.6)	11	(2.8)	19	(2.8)
Sweden	2	(2.6)	10	(1.6)	-13	(5.0)	4	(3.9)	15	(3.9)
Switzerland	11	(2.9)	8	(1.6)	-1	(4.5)	13	(4.2)	21	(4.5)
Türkiye	6	(4.3)	7	(1.8)	-3	(5.7)	4	(5.6)	18	(5.3)
United Kingdom*	14	(3.8)	7	(2.3)	-1	(5.3)	18	(4.8)	21	(6.6)
United States*	13	(3.2)	12	(2.0)	-3	(5.8)	14	(4.9)	32	(5.3)
OECD average	9	(0.5)	9	(0.3)	-4	(0.9)	10	(0.7)	22	(0.8)

* Caution is required when interpreting estimates because one or more PISA sampling standards were not met (see Reader's Guide, Annexes A2 and A4).
Note: Values that are statistically significant are indicated in bold (see Annex A3).

Table I.B1.4.17. Mathematics performance, by gender [6/6]

	Gender differences (boys - girls)									
	Mean score		Standard deviation		10th percentile		Median (50th percentile)		90th percentile	
	Score dif.	S.E.	Dif.	S.E.	Score dif.	S.E.	Score dif.	S.E.	Score dif.	S.E.
Albania	**-19**	(2.8)	**10**	(2.0)	**-25**	(4.9)	**-27**	(3.8)	-1	(5.5)
Argentina	**11**	(2.2)	**5**	(1.5)	5	(4.0)	**10**	(3.0)	**17**	(4.5)
Baku (Azerbaijan)	**-7**	(2.5)	**10**	(1.5)	**-16**	(4.4)	**-12**	(3.3)	**11**	(4.9)
Brazil	**8**	(1.9)	**8**	(1.2)	-2	(3.0)	**6**	(2.5)	**22**	(4.0)
Brunei Darussalam	**-11**	(1.6)	**11**	(1.4)	**-25**	(3.6)	**-13**	(3.0)	7	(4.3)
Bulgaria	-6	(3.7)	**11**	(2.0)	**-17**	(5.6)	**-10**	(5.2)	**14**	(5.8)
Cambodia	-4	(2.6)	**8**	(2.3)	**-17**	(5.0)	-4	(3.1)	6	(5.6)
Croatia	6	(3.7)	**9**	(1.9)	-5	(5.4)	4	(5.0)	**19**	(5.0)
Cyprus	**-16**	(2.6)	**15**	(1.7)	**-30**	(4.0)	**-25**	(3.9)	**12**	(5.4)
Dominican Republic	**-4**	(1.6)	**5**	(1.3)	**-8**	(2.8)	**-7**	(2.1)	4	(3.6)
El Salvador	**6**	(2.5)	4	(1.9)	3	(3.2)	6	(3.2)	**12**	(5.5)
Georgia	-5	(2.9)	**9**	(2.4)	**-12**	(3.8)	**-10**	(3.5)	7	(6.7)
Guatemala	**12**	(2.5)	3	(1.6)	7	(4.7)	**13**	(3.1)	**15**	(4.2)
Hong Kong (China)*	**9**	(3.4)	**14**	(2.1)	**-17**	(6.1)	**12**	(4.2)	**28**	(5.9)
Indonesia	**-6**	(2.7)	0	(1.7)	-6	(3.4)	**-7**	(2.7)	-5	(5.6)
Jamaica*	**-13**	(5.0)	5	(3.0)	**-15**	(4.8)	**-18**	(5.8)	-3	(11.0)
Jordan	**-15**	(4.2)	1	(1.8)	**-16**	(4.1)	**-16**	(4.6)	-12	(6.2)
Kazakhstan	0	(2.0)	**9**	(1.3)	**-11**	(3.0)	-2	(2.4)	**17**	(3.5)
Kosovo	0	(1.6)	**5**	(1.5)	-2	(3.2)	-3	(2.3)	9	(4.7)
Macao (China)	**15**	(2.4)	**10**	(2.0)	1	(5.8)	**16**	(3.5)	**29**	(4.8)
Malaysia	**-10**	(2.0)	**8**	(1.9)	**-16**	(2.9)	**-15**	(3.0)	5	(5.3)
Malta	1	(3.4)	**13**	(2.5)	-12	(7.2)	2	(5.2)	**21**	(5.9)
Moldova	4	(2.3)	**9**	(1.7)	**-9**	(4.1)	3	(3.2)	**16**	(5.0)
Mongolia	**-6**	(2.5)	4	(1.8)	**-9**	(4.1)	**-8**	(3.3)	2	(5.7)
Montenegro	0	(1.9)	**8**	(1.8)	-5	(3.6)	**-6**	(3.0)	**14**	(4.9)
Morocco	**-4**	(1.8)	4	(1.4)	**-7**	(2.9)	**-7**	(2.9)	6	(4.0)
North Macedonia	**-6**	(1.8)	**6**	(1.4)	**-10**	(3.5)	**-11**	(3.4)	5	(4.5)
Palestinian Authority	**-16**	(3.4)	2	(2.1)	**-14**	(4.1)	**-20**	(3.6)	-10	(6.2)
Panama*	4	(2.5)	**5**	(1.9)	-1	(4.1)	0	(3.5)	11	(6.2)
Paraguay	**11**	(2.9)	4	(1.8)	5	(4.7)	**12**	(3.6)	**17**	(5.8)
Peru	**15**	(2.5)	**6**	(1.7)	7	(4.1)	**15**	(3.3)	**24**	(4.7)
Philippines	**-14**	(1.9)	3	(2.0)	**-11**	(3.1)	**-20**	(2.4)	**-11**	(4.8)
Qatar	**-8**	(2.2)	**11**	(1.9)	**-18**	(3.6)	**-15**	(3.4)	**15**	(5.5)
Romania	5	(3.0)	**11**	(2.2)	-5	(5.4)	1	(4.6)	**25**	(5.0)
Saudi Arabia	2	(3.7)	**8**	(1.8)	-7	(3.9)	-1	(4.2)	**14**	(6.0)
Serbia	**11**	(3.5)	**9**	(2.7)	-2	(6.5)	8	(4.1)	**27**	(6.0)
Singapore	**12**	(2.3)	**10**	(1.7)	-5	(6.2)	**15**	(3.6)	**21**	(4.6)
Chinese Taipei	6	(5.5)	**15**	(3.1)	**-18**	(8.1)	12	(7.0)	**21**	(8.2)
Thailand	-6	(4.3)	6	(3.7)	**-11**	(4.1)	**-9**	(3.6)	7	(10.5)
Ukrainian regions (18 of 27)	**10**	(4.8)	**10**	(2.7)	-4	(7.5)	8	(6.7)	**24**	(7.4)
United Arab Emirates	**-7**	(1.7)	**17**	(1.4)	**-26**	(2.4)	**-12**	(2.8)	**19**	(3.5)
Uruguay	**11**	(2.4)	**6**	(1.5)	2	(3.7)	**10**	(3.7)	**20**	(4.6)
Uzbekistan	**6**	(2.0)	**9**	(1.4)	-3	(3.4)	4	(2.7)	**22**	(4.3)
Viet Nam	**10**	(2.5)	**9**	(2.1)	-1	(5.7)	**9**	(3.8)	**21**	(5.1)

Partners

* Caution is required when interpreting estimates because one or more PISA sampling standards were not met (see Reader's Guide, Annexes A2 and A4).
Note: Values that are statistically significant are indicated in bold (see Annex A3).

Table I.B1.5.4. Mean mathematics performance, 2003 through 2022 [1/4]

		Mathematics performance, by PISA cycle												
		PISA 2003		PISA 2006		PISA 2009		PISA 2012		PISA 2015		PISA 2018		PISA 2022	
		Mean score	S.E.	Mean score	S.E.	Mean score	S.E.	Mean score	S.E.	Mean score	S.E.	Mean score	S.E.	Mean score	S.E.
OECD	Australia*	524	(2.1)	520	(2.2)	514	(2.5)	504	(1.6)	494	(1.6)	491	(1.9)	487	(1.8)
	Austria	506	(3.3)	505	(3.7)	m	m	506	(2.7)	497	(2.9)	499	(3.0)	487	(2.3)
	Belgium	529	(2.3)	520	(3.0)	515	(2.3)	515	(2.1)	507	(2.4)	508	(2.3)	489	(2.2)
	Canada*	532	(1.8)	527	(2.0)	527	(1.6)	518	(1.8)	516	(2.3)	512	(2.4)	497	(1.6)
	Chile	m	m	411	(4.6)	421	(3.1)	423	(3.1)	423	(2.5)	417	(2.4)	412	(2.1)
	Colombia	m	m	370	(3.8)	381	(3.2)	376	(2.9)	390	(2.3)	391	(3.0)	383	(3.0)
	Costa Rica	m	m	m	m	409	(3.0)	407	(3.0)	400	(2.5)	402	(3.3)	385	(1.9)
	Czech Republic	516	(3.5)	510	(3.6)	493	(2.8)	499	(2.9)	492	(2.4)	499	(2.5)	487	(2.1)
	Denmark*	514	(2.7)	513	(2.6)	503	(2.6)	500	(2.3)	511	(2.2)	509	(1.7)	489	(1.9)
	Estonia	m	m	515	(2.7)	512	(2.6)	521	(2.0)	520	(2.0)	523	(1.7)	510	(2.0)
	Finland	544	(1.9)	548	(2.3)	541	(2.2)	519	(1.9)	511	(2.3)	507	(2.0)	484	(1.9)
	France	511	(2.5)	496	(3.2)	497	(3.1)	495	(2.5)	493	(2.1)	495	(2.3)	474	(2.5)
	Germany	503	(3.3)	504	(3.9)	513	(2.9)	514	(2.9)	506	(2.9)	500	(2.6)	475	(3.1)
	Greece	445	(3.9)	459	(3.0)	466	(3.9)	453	(2.5)	454	(3.8)	451	(3.1)	430	(2.3)
	Hungary	490	(2.8)	491	(2.9)	490	(3.5)	477	(3.2)	477	(2.5)	481	(2.3)	473	(2.5)
	Iceland	515	(1.4)	506	(1.8)	507	(1.4)	493	(1.7)	488	(2.0)	495	(2.0)	459	(1.6)
	Ireland*	503	(2.4)	501	(2.8)	487	(2.5)	501	(2.2)	504	(2.1)	500	(2.2)	492	(2.0)
	Israel	m	m	442	(4.3)	447	(3.3)	466	(4.7)	470	(3.6)	463	(3.5)	458	(3.3)
	Italy	466	(3.1)	462	(2.3)	483	(1.9)	485	(2.0)	490	(2.8)	487	(2.8)	471	(3.1)
	Japan	534	(4.0)	523	(3.3)	529	(3.3)	536	(3.6)	532	(3.0)	527	(2.5)	536	(2.9)
	Korea	542	(3.2)	547	(3.8)	546	(4.0)	554	(4.6)	524	(3.7)	526	(3.1)	527	(3.9)
	Latvia*	483	(3.7)	486	(3.0)	482	(3.1)	491	(2.8)	482	(1.9)	496	(2.0)	483	(2.0)
	Lithuania	m	m	486	(2.9)	477	(2.6)	479	(2.6)	478	(2.3)	481	(2.0)	475	(1.8)
	Mexico	385	(3.6)	406	(2.9)	419	(1.8)	413	(1.4)	408	(2.2)	409	(2.5)	395	(2.3)
	Netherlands*	538	(3.1)	531	(2.6)	526	(4.7)	523	(3.5)	512	(2.2)	519	(2.6)	493	(3.8)
	New Zealand*	523	(2.3)	522	(2.4)	519	(2.3)	500	(2.2)	495	(2.3)	494	(1.7)	479	(2.0)
	Norway	495	(2.4)	490	(2.6)	498	(2.4)	489	(2.7)	502	(2.2)	501	(2.2)	468	(2.1)
	Poland	490	(2.5)	495	(2.4)	495	(2.8)	518	(3.6)	504	(2.4)	516	(2.6)	489	(2.3)
	Portugal	466	(3.4)	466	(3.1)	487	(2.9)	487	(3.8)	492	(2.5)	492	(2.7)	472	(2.4)
	Slovak Republic	498	(3.3)	492	(2.8)	497	(3.1)	482	(3.4)	475	(2.7)	486	(2.6)	464	(2.9)
	Slovenia	m	m	504	(1.0)	501	(1.2)	501	(1.2)	510	(1.3)	509	(1.4)	485	(1.2)
	Spain	485	(2.4)	480	(2.3)	483	(2.1)	484	(1.9)	486	(2.2)	m	m	473	(1.5)
	Sweden	509	(2.6)	502	(2.4)	494	(2.9)	478	(2.3)	494	(3.2)	502	(2.7)	482	(2.1)
	Switzerland	527	(3.4)	530	(3.2)	534	(3.3)	531	(3.0)	521	(2.9)	515	(2.9)	508	(2.1)
	Türkiye	423	(6.7)	424	(4.9)	445	(4.4)	448	(4.8)	420	(4.1)	454	(2.3)	453	(1.6)
	United Kingdom*	m	m	495	(2.1)	492	(2.4)	494	(3.3)	492	(2.5)	502	(2.6)	489	(2.2)
	United States*	483	(2.9)	474	(4.0)	487	(3.6)	481	(3.6)	470	(3.2)	478	(3.2)	465	(4.0)
	OECD average	m	m	m	m	m	m	488	(0.5)	485	(0.4)	m	m	472	(0.4)
	OECD average-23	502	(0.6)	501	(0.6)	502	(0.6)	499	(0.6)	496	(0.5)	496	(0.5)	480	(0.5)
	OECD average-26	m	m	m	m	m	m	484	(0.6)	480	(0.5)	483	(0.5)	468	(0.5)
	OECD average-35	m	m	491	(0.5)	m	m	491	(0.5)	487	(0.4)	490	(0.4)	475	(0.4)

1. The average decennial trend is the average change, per 10-year period, between the earliest available measurement in PISA and PISA 2022, calculated by a linear regression. The average decennial trend is only computed for countries with comparable data in more than two PISA assessments, over the period considered.

2. Curvilinear trends in performance are computed only for countries with comparable data in more than four PISA assessments. Curvilinear trends are calculated by a regression of performance over both linear and quadratic (squared) terms of the gap between the year of assessment and 2022. The coefficient for the linear term represents the annual rate of change in 2022, while the coefficient for the quadratic term represents the acceleration or deceleration of the change in performance.

* Caution is required when interpreting estimates because one or more PISA sampling standards were not met (see Reader's Guide, Annexes A2 and A4).

Notes: Values that are statistically significant are indicated in bold (see Annex A3). Costa Rica, Georgia, Malaysia, Malta, Moldova and the United Arab Emirates conducted the PISA 2009 assessment in 2010 as part of PISA 2009+. For Cambodia, Guatemala and Paraguay, results reported under PISA 2018 refer to the results of the PISA for Development assessment, in 2017.

Table I.B1.5.4. Mean mathematics performance, 2003 through 2022 [2/4]

	Mathematics performance, by PISA cycle													
	PISA 2003		PISA 2006		PISA 2009		PISA 2012		PISA 2015		PISA 2018		PISA 2022	
	Mean score	S.E.	Mean score	S.E.	Mean score	S.E.	Mean score	S.E.	Mean score	S.E.	Mean score	S.E.	Mean score	S.E.
Albania	m	m	m	m	377	(4.0)	394	(2.0)	413	(3.4)	437	(2.4)	368	(2.1)
Argentina	m	m	381	(6.2)	388	(4.1)	388	(3.5)	m	m	379	(2.8)	378	(2.3)
Baku (Azerbaijan)	m	m	m	m	m	m	m	m	m	m	420	(2.8)	397	(2.4)
Brazil	356	(4.8)	370	(2.9)	386	(2.4)	389	(1.9)	377	(2.9)	384	(2.0)	379	(1.6)
Brunei Darussalam	m	m	m	m	m	m	m	m	m	m	430	(1.2)	442	(0.9)
Bulgaria	m	m	413	(6.1)	428	(5.9)	439	(4.0)	441	(4.0)	436	(3.8)	417	(3.3)
Cambodia	m	m	m	m	m	m	m	m	m	m	325	(2.7)	336	(2.7)
Croatia	m	m	467	(2.4)	460	(3.1)	471	(3.5)	464	(2.8)	464	(2.5)	463	(2.4)
Cyprus	m	m	m	m	m	m	440	(1.1)	437	(1.7)	451	(1.4)	418	(1.2)
Dominican Republic	m	m	m	m	m	m	m	m	328	(2.7)	325	(2.6)	339	(1.6)
El Salvador	m	m	m	m	m	m	m	m	m	m	m	m	343	(2.0)
Georgia	m	m	m	m	379	(2.8)	m	m	404	(2.8)	398	(2.6)	390	(2.4)
Guatemala	m	m	m	m	m	m	m	m	m	m	334	(3.2)	344	(2.2)
Hong Kong (China)*	550	(4.5)	547	(2.7)	555	(2.7)	561	(3.2)	548	(3.0)	551	(3.0)	540	(3.0)
Indonesia	360	(3.9)	391	(5.6)	371	(3.7)	375	(4.0)	386	(3.1)	379	(3.1)	366	(2.4)
Jamaica*	m	m	m	m	m	m	m	m	m	m	m	m	377	(3.1)
Jordan	m	m	384	(3.3)	387	(3.7)	386	(3.1)	380	(2.7)	400	(3.3)	361	(2.0)
Kazakhstan	m	m	m	m	405	(3.0)	432	(3.0)	m	m	423	(1.9)	425	(1.7)
Kosovo	m	m	m	m	m	m	m	m	362	(1.6)	366	(1.5)	355	(1.0)
Macao (China)	527	(2.9)	525	(1.3)	525	(0.9)	538	(1.0)	544	(1.1)	558	(1.5)	552	(1.1)
Malaysia	m	m	m	m	404	(2.7)	421	(3.2)	m	m	440	(2.9)	409	(2.4)
Malta	m	m	m	m	463	(1.4)	m	m	479	(1.7)	472	(1.9)	466	(1.6)
Moldova	m	m	m	m	397	(3.1)	m	m	420	(2.5)	421	(2.4)	414	(2.3)
Mongolia	m	m	m	m	m	m	m	m	m	m	m	m	425	(2.6)
Montenegro	m	m	399	(1.4)	403	(2.0)	410	(1.1)	418	(1.5)	430	(1.2)	406	(1.1)
Morocco	m	m	m	m	m	m	m	m	m	m	368	(3.3)	365	(3.4)
North Macedonia	m	m	m	m	m	m	m	m	371	(1.3)	394	(1.6)	389	(0.9)
Palestinian Authority	m	m	m	m	m	m	m	m	m	m	m	m	366	(1.8)
Panama*	m	m	m	m	360	(5.2)	m	m	m	m	353	(2.7)	357	(2.8)
Paraguay	m	m	m	m	m	m	m	m	m	m	326	(2.9)	338	(2.2)
Peru	m	m	m	m	365	(4.0)	368	(3.7)	387	(2.7)	400	(2.6)	391	(2.3)
Philippines	m	m	m	m	m	m	m	m	m	m	353	(3.5)	355	(2.6)
Qatar	m	m	318	(1.0)	368	(0.7)	376	(0.8)	402	(1.3)	414	(1.2)	414	(1.1)
Romania	m	m	415	(4.2)	427	(3.4)	445	(3.8)	444	(3.8)	430	(4.9)	428	(4.0)
Saudi Arabia	m	m	m	m	m	m	m	m	m	m	373	(3.0)	389	(1.8)
Serbia	m	m	435	(3.5)	442	(2.9)	449	(3.4)	m	m	448	(3.2)	440	(3.0)
Singapore	m	m	m	m	562	(1.4)	573	(1.3)	564	(1.5)	569	(1.6)	575	(1.2)
Chinese Taipei	m	m	549	(4.1)	543	(3.4)	560	(3.3)	542	(3.0)	531	(2.9)	547	(3.8)
Thailand	417	(3.0)	417	(2.3)	419	(3.2)	427	(3.4)	415	(3.0)	419	(3.4)	394	(2.7)
Ukrainian regions (18 of 27)	m	m	m	m	m	m	m	m	m	m	m	m	441	(4.1)
United Arab Emirates	m	m	m	m	421	(2.5)	434	(2.4)	427	(2.4)	435	(2.1)	431	(0.9)
Uruguay	422	(3.3)	427	(2.6)	427	(2.6)	409	(2.8)	418	(2.5)	418	(2.6)	409	(2.0)
Uzbekistan	m	m	m	m	m	m	m	m	m	m	m	m	364	(2.0)
Viet Nam	m	m	m	m	m	m	m	m	m	m	m	m	469	(3.9)

1. The average decennial trend is the average change, per 10-year period, between the earliest available measurement in PISA and PISA 2022, calculated by a linear regression. The average decennial trend is only computed for countries with comparable data in more than two PISA assessments, over the period considered.

2. Curvilinear trends in performance are computed only for countries with comparable data in more than four PISA assessments. Curvilinear trends are calculated by a regression of performance over both linear and quadratic (squared) terms of the gap between the year of assessment and 2022. The coefficient for the linear term represents the annual rate of change in 2022, while the coefficient for the quadratic term represents the acceleration or deceleration of the change in performance.

* Caution is required when interpreting estimates because one or more PISA sampling standards were not met (see Reader's Guide, Annexes A2 and A4).

Notes: Values that are statistically significant are indicated in bold (see Annex A3). Costa Rica, Georgia, Malaysia, Malta, Moldova and the United Arab Emirates conducted the PISA 2009 assessment in 2010 as part of PISA 2009+. For Cambodia, Guatemala and Paraguay, results reported under PISA 2018 refer to the results of the PISA for Development assessment, in 2017.

Table I.B1.5.4. Mean mathematics performance, 2003 through 2022 [3/4]

	Change in mathematics performance between PISA 2022 and:												Average decennial trend in mathematics performance across PISA assessments (since 2003 or earliest assessment available)			Average decennial trend in mathematics performance since 2012 (or earliest assessment available after 2012)			Curvilinear trend in mathematics performance across PISA assessments			
	PISA 2003 (PISA 2022 - PISA 2003)		PISA 2006 (PISA 2022 - PISA 2006)		PISA 2009 (PISA 2022 - PISA 2009)		PISA 2012 (PISA 2022 - PISA 2012)		PISA 2015 (PISA 2022 - PISA 2015)		PISA 2018 (PISA 2022 - PISA 2018)								Annual rate of change in 2022 (linear term)		Rate of acceleration or deceleration in performance (quadratic term)	
	Score dif.	S.E.	Score dif.	S.E.	Score dif.	S.E.	Score dif.	S.E.	Score dif.	S.E.	Score dif.	S.E.	Coef.	S.E.	p-value	Coef.	S.E.	p-value	Coef.	S.E.	Coef.	S.E.
Australia*	-37	(6.2)	-33	(5.0)	-27	(5.3)	-17	(4.3)	-7	(3.6)	-4	(3.5)	-21	(3.0)	0.000	-16	(4.0)	0.000	-1.5	(0.5)	0.04	(0.03)
Austria	-18	(6.8)	-18	(6.0)	m	m	-18	(5.0)	-9	(4.6)	-12	(4.4)	-9	(3.3)	0.007	-16	(4.8)	0.001	-2.2	(0.7)	-0.07	(0.04)
Belgium	-40	(6.4)	-31	(5.5)	-26	(5.3)	-25	(4.7)	-17	(4.2)	-19	(3.9)	-18	(3.1)	0.000	-23	(4.4)	0.000	-2.4	(0.6)	-0.03	(0.03)
Canada*	-36	(6.0)	-30	(4.8)	-30	(4.8)	-21	(4.3)	-19	(3.9)	-15	(3.6)	-17	(2.9)	0.000	-21	(4.1)	0.000	-2.8	(0.5)	-0.05	(0.03)
Chile	m	m	0	(6.5)	-9	(5.7)	-11	(5.2)	-11	(4.3)	-6	(3.9)	-1	(3.7)	0.759	-12	(4.8)	0.014	-2.9	(0.8)	-0.18	(0.06)
Colombia	m	m	13	(6.3)	2	(6.2)	6	(5.5)	-7	(4.7)	-8	(4.8)	9	(3.7)	0.015	5	(5.2)	0.361	-1.4	(0.8)	-0.14	(0.06)
Costa Rica	m	m	m	m	-25	(5.5)	-22	(5.1)	-16	(4.1)	-18	(4.4)	-17	(4.3)	0.000	-20	(4.8)	0.000	-3.5	(0.8)	-0.13	(0.09)
Czech Republic	-29	(6.9)	-23	(5.8)	-6	(5.5)	-12	(5.0)	-5	(4.2)	-12	(3.9)	-12	(3.2)	0.000	-9	(4.8)	0.055	0.2	(0.6)	0.07	(0.04)
Denmark*	-25	(6.5)	-24	(5.2)	-14	(5.4)	-11	(4.7)	-22	(4.0)	-20	(3.4)	-9	(3.0)	0.003	-12	(4.3)	0.006	-1.7	(0.6)	-0.04	(0.03)
Estonia	m	m	-5	(5.3)	-2	(5.4)	-11	(4.6)	-10	(4.0)	-13	(3.5)	1	(3.3)	0.869	-9	(4.2)	0.036	-2.1	(0.7)	-0.13	(0.05)
Finland	-60	(6.1)	-64	(5.0)	-56	(5.1)	-35	(4.5)	-27	(4.0)	-23	(3.5)	-34	(2.9)	0.000	-33	(4.2)	0.000	-5.0	(0.5)	-0.08	(0.03)
France	-37	(6.6)	-22	(5.7)	-23	(5.8)	-21	(5.0)	-19	(4.3)	-21	(4.1)	-14	(3.1)	0.000	-20	(4.7)	0.000	-2.0	(0.6)	-0.04	(0.04)
Germany	-28	(7.1)	-29	(6.4)	-38	(6.0)	-39	(5.5)	-31	(5.0)	-25	(4.6)	-12	(3.3)	0.000	-38	(5.2)	0.000	-6.2	(0.7)	-0.26	(0.04)
Greece	-15	(7.2)	-29	(5.6)	-36	(6.2)	-23	(5.0)	-23	(5.2)	-21	(4.5)	-9	(3.3)	0.009	-22	(4.7)	0.000	-5.2	(0.7)	-0.23	(0.04)
Hungary	-17	(6.7)	-18	(5.6)	-17	(6.0)	-4	(5.4)	-4	(4.5)	-8	(4.1)	-10	(3.2)	0.002	-3	(5.1)	0.561	-0.8	(0.7)	0.01	(0.04)
Iceland	-56	(5.9)	-47	(4.7)	-48	(4.8)	-34	(4.3)	-29	(3.7)	-36	(3.4)	-24	(2.9)	0.000	-30	(4.1)	0.000	-4.4	(0.5)	-0.10	(0.03)
Ireland*	-11	(6.4)	-10	(5.3)	5	(5.4)	-10	(4.7)	-12	(4.0)	-8	(3.7)	-2	(3.0)	0.413	-10	(4.4)	0.018	-0.5	(0.6)	-0.01	(0.03)
Israel	m	m	16	(6.8)	11	(6.3)	-9	(6.7)	-12	(5.6)	-5	(5.3)	11	(3.9)	0.004	-10	(6.3)	0.126	-3.2	(1.0)	-0.27	(0.07)
Italy	6	(7.1)	10	(5.6)	-12	(5.6)	-14	(5.1)	-18	(5.0)	-15	(4.7)	8	(3.2)	0.015	-14	(4.9)	0.003	-3.3	(0.7)	-0.21	(0.04)
Japan	1	(7.4)	12	(6.0)	7	(6.2)	-1	(5.9)	3	(5.0)	9	(4.4)	2	(3.4)	0.574	-2	(5.5)	0.764	0.7	(0.8)	0.02	(0.04)
Korea	-15	(7.5)	-20	(6.8)	-19	(7.0)	-26	(7.0)	3	(6.0)	1	(5.4)	-13	(3.4)	0.000	-23	(6.5)	0.000	-2.7	(0.9)	-0.07	(0.05)
Latvia*	0	(7.0)	-3	(5.5)	1	(5.6)	-7	(5.0)	1	(3.9)	-13	(3.6)	2	(3.2)	0.510	-3	(4.5)	0.543	-0.4	(0.6)	-0.03	(0.04)
Lithuania	m	m	-11	(5.4)	-1	(5.3)	-4	(4.8)	-3	(4.0)	-6	(3.5)	-4	(3.3)	0.267	-2	(4.6)	0.586	0.1	(0.7)	0.03	(0.05)
Mexico	10	(7.0)	-11	(5.5)	-23	(5.2)	-18	(4.4)	-13	(4.2)	-14	(4.0)	2	(3.2)	0.469	-17	(4.3)	0.000	-4.9	(0.6)	-0.27	(0.04)
Netherlands*	-45	(7.4)	-38	(6.1)	-33	(7.4)	-30	(6.2)	-20	(5.2)	-27	(5.1)	-20	(3.4)	0.000	-27	(5.9)	0.000	-3.2	(0.9)	-0.06	(0.04)
New Zealand*	-44	(6.3)	-43	(5.1)	-40	(5.3)	-21	(4.7)	-16	(4.1)	-15	(3.4)	-24	(3.0)	0.000	-19	(4.4)	0.000	-2.9	(0.6)	-0.02	(0.03)
Norway	-27	(6.4)	-21	(5.3)	-30	(5.3)	-21	(5.0)	-33	(4.1)	-33	(3.8)	-7	(3.0)	0.021	-21	(4.6)	0.000	-4.1	(0.6)	-0.18	(0.03)
Poland	-1	(6.5)	-6	(5.3)	-6	(5.6)	-29	(5.6)	-16	(4.3)	-27	(4.1)	5	(3.1)	0.134	-24	(5.2)	0.000	-3.7	(0.7)	-0.22	(0.04)
Portugal	6	(6.9)	6	(5.6)	-15	(5.7)	-15	(5.7)	-20	(4.4)	-21	(4.2)	8	(3.2)	0.011	-15	(5.0)	0.006	-3.8	(0.7)	-0.24	(0.04)
Slovak Republic	-34	(7.1)	-28	(5.8)	-33	(6.0)	-18	(5.7)	-11	(4.8)	-22	(4.5)	-16	(3.2)	0.000	-14	(5.3)	0.008	-2.3	(0.7)	-0.04	(0.04)
Slovenia	m	m	-20	(4.4)	-17	(4.6)	-17	(4.0)	-25	(3.3)	-24	(2.9)	-7	(2.9)	0.020	-17	(3.7)	0.000	-3.9	(0.5)	-0.20	(0.03)
Spain	-12	(6.2)	-7	(4.9)	-10	(5.0)	-11	(4.3)	-13	(3.8)	m	m	-4	(2.9)	0.146	-12	(4.0)	0.002	-1.6	(0.5)	-0.06	(0.03)
Sweden	-27	(6.4)	-21	(5.2)	-12	(5.6)	4	(4.7)	-12	(4.7)	-21	(4.0)	-9	(3.1)	0.002	4	(4.5)	0.375	0.5	(0.6)	0.08	(0.03)
Switzerland	-19	(6.8)	-22	(5.6)	-26	(5.8)	-23	(5.2)	-13	(4.5)	-7	(4.3)	-12	(3.2)	0.000	-23	(4.9)	0.000	-3.6	(0.7)	-0.13	(0.04)
Türkiye	30	(8.9)	29	(6.6)	8	(6.4)	5	(6.2)	33	(5.2)	0	(3.6)	14	(3.8)	0.000	15	(5.8)	0.009	1.2	(0.9)	-0.01	(0.05)
United Kingdom*	m	m	-6	(5.1)	-3	(5.4)	-5	(5.3)	-4	(4.3)	-13	(4.1)	-1	(3.2)	0.819	-2	(5.0)	0.625	-0.8	(0.8)	-0.04	(0.05)
United States*	-18	(7.4)	-9	(7.0)	-23	(6.9)	-16	(6.5)	-5	(5.8)	-13	(5.6)	-8	(3.5)	0.026	-13	(6.0)	0.029	-2.1	(0.8)	-0.07	(0.04)
OECD average	m	m	m	m	m	m	-16	(3.6)	-12	(2.8)	m	m	-7	(2.7)	0.008	-14	(3.4)	0.000	-2.4	(0.3)	-0.09	(0.03)
OECD average-23	-22	(5.6)	-21	(4.2)	-21	(4.3)	-18	(3.7)	-15	(2.8)	-16	(2.3)	-10	(2.7)	0.000	-17	(3.4)	0.000	-2.6	(0.4)	-0.09	(0.02)
OECD average-26	m	m	m	m	m	m	-16	(3.7)	-13	(2.8)	-15	(2.3)	-7	(2.8)	0.015	-15	(3.4)	0.000	-2.6	(0.4)	-0.11	(0.03)
OECD average-35	m	m	-16	(4.1)	m	m	-16	(3.6)	-12	(2.8)	-15	(2.3)	-7	(2.7)	0.009	-14	(3.4)	0.000	-2.4	(0.4)	-0.09	(0.02)

1. The average decennial trend is the average change, per 10-year period, between the earliest available measurement in PISA and PISA 2022, calculated by a linear regression. The average decennial trend is only computed for countries with comparable data in more than two PISA assessments, over the period considered.

2. Curvilinear trends in performance are computed only for countries with comparable data in more than four PISA assessments. Curvilinear trends are calculated by a regression of performance over both linear and quadratic (squared) terms of the gap between the year of assessment and 2022. The coefficient for the linear term represents the annual rate of change in 2022, while the coefficient for the quadratic term represents the acceleration or deceleration of the change in performance.

* Caution is required when interpreting estimates because one or more PISA sampling standards were not met (see Reader's Guide, Annexes A2 and A4).

Notes: Values that are statistically significant are indicated in bold (see Annex A3). Costa Rica, Georgia, Malaysia, Malta, Moldova and the United Arab Emirates conducted the PISA 2009 assessment in 2010 as part of PISA 2009+. For Cambodia, Guatemala and Paraguay, results reported under PISA 2018 refer to the results of the PISA for Development assessment, in 2017.

Table I.B1.5.4. Mean mathematics performance, 2003 through 2022 [4/4]

	Change in mathematics performance between PISA 2022 and:												Average decennial trend in mathematics performance across PISA assessments (since 2003 or earliest assessment available)			Average decennial trend in mathematics performance since 2012 (or earliest assessment available after 2012)			Curvilinear trend in mathematics performance across PISA assessments			
	PISA 2003 (PISA 2022 - PISA 2003)		PISA 2006 (PISA 2022 - PISA 2006)		PISA 2009 (PISA 2022 - PISA 2009)		PISA 2012 (PISA 2022 - PISA 2012)		PISA 2015 (PISA 2022 - PISA 2015)		PISA 2018 (PISA 2022 - PISA 2018)								Annual rate of change in 2022 (linear term)		Rate of acceleration or deceleration in performance (quadratic term)	
	Score dif.	S.E.	Score dif.	S.E.	Score dif.	S.E.	Score dif.	S.E.	Score dif.	S.E.	Score dif.	S.E.	Coef.	S.E.	p-value	Coef.	S.E.	p-value	Coef.	S.E.	Coef.	S.E.
Partners Albania	m	m	m	m	-9	(6.2)	**-26**	(4.6)	**-45**	(4.9)	**-69**	(3.9)	4	(4.4)	0.325	**-21**	(4.5)	0.000	**-14.9**	(1.0)	**-1.18**	(0.09)
Argentina	m	m	-4	(7.8)	-11	(6.3)	**-11**	(5.5)	m	m	-2	(4.2)	-5	(4.2)	0.255	**-11**	(5.6)	0.047	-2.2	(1.1)	-0.11	(0.08)
Baku (Azerbaijan)	m	m	m	m	m	m	m	m	m	m	**-23**	(4.3)	m	m	m	m	m	m	m	m	m	m
Brazil	**23**	(7.5)	9	(5.3)	-7	(5.2)	**-10**	(4.4)	2	(4.3)	-5	(3.4)	**10**	(3.3)	0.003	-7	(4.2)	0.087	**-2.9**	(0.6)	**-0.20**	(0.04)
Brunei Darussalam	m	m	m	m	m	m	m	m	m	m	**12**	(2.7)	m	m	m	m	m	m	m	m	m	m
Bulgaria	m	m	4	(8.1)	-11	(8.0)	**-21**	(6.3)	**-24**	(5.8)	**-19**	(5.5)	3	(4.6)	0.461	**-22**	(5.9)	0.000	**-6.1**	(1.1)	**-0.40**	(0.08)
Cambodia	m	m	m	m	m	m	m	m	m	m	**12**	(4.4)	m	m	m	m	m	m	m	m	m	m
Croatia	m	m	-4	(5.3)	3	(5.8)	-8	(5.6)	-1	(4.6)	-1	(4.1)	-1	(3.4)	0.722	-7	(5.1)	0.202	-0.4	(0.8)	-0.02	(0.05)
Cyprus	m	m	m	m	m	m	**-21**	(3.9)	**-19**	(3.4)	**-32**	(2.9)	m	m	m	**-17**	(3.6)	0.000	m	m	m	m
Dominican Republic	m	m	m	m	m	m	m	m	**11**	(4.2)	**14**	(3.8)	m	m	m	**17**	(5.6)	0.002	m	m	m	m
El Salvador	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Georgia	m	m	m	m	11	(5.6)	m	m	**-14**	(4.6)	-8	(4.2)	8	(4.5)	0.061	**-20**	(6.7)	0.003	m	m	m	m
Guatemala	m	m	m	m	m	m	m	m	m	m	**10**	(4.5)	m	m	m	m	m	m	m	m	m	m
Hong Kong (China)*	-10	(7.8)	-7	(5.7)	**-14**	(5.9)	**-21**	(5.7)	-8	(5.0)	**-11**	(4.8)	-3	(3.4)	0.316	**-18**	(5.4)	0.001	**-2.5**	(0.8)	**-0.11**	(0.04)
Indonesia	5	(7.2)	**-25**	(7.3)	-6	(6.1)	-10	(5.9)	**-21**	(4.7)	**-13**	(4.5)	0	(3.5)	0.942	**-12**	(5.5)	0.033	**-3.2**	(0.8)	**-0.17**	(0.04)
Jamaica*	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Jordan	m	m	**-23**	(5.6)	**-25**	(6.0)	**-24**	(5.2)	**-19**	(4.3)	**-39**	(4.5)	**-8**	(3.6)	0.020	**-19**	(5.0)	0.000	**-4.7**	(0.8)	**-0.24**	(0.05)
Kazakhstan	m	m	m	m	**21**	(5.5)	-6	(5.0)	m	m	2	(3.4)	**10**	(4.1)	0.015	-7	(5.1)	0.168	m	m	m	m
Kosovo	m	m	m	m	m	m	m	m	**-7**	(3.3)	**-11**	(2.9)	m	m	m	**-10**	(4.6)	0.040	m	m	m	m
Macao (China)	**25**	(6.3)	**27**	(4.4)	**27**	(4.5)	**14**	(3.9)	**8**	(3.2)	**-6**	(2.9)	**18**	(2.9)	0.000	**16**	(3.6)	0.000	**2.2**	(0.5)	0.02	(0.03)
Malaysia	m	m	m	m	4	(5.6)	**-12**	(5.4)	m	m	**-32**	(4.4)	7	(4.3)	0.088	-8	(5.4)	0.120	m	m	m	m
Malta	m	m	m	m	3	(4.8)	m	m	**-13**	(3.6)	-6	(3.3)	3	(3.8)	0.508	**-17**	(5.3)	0.001	m	m	m	m
Moldova	m	m	m	m	**17**	(5.8)	m	m	-5	(4.3)	-6	(4.0)	**14**	(4.6)	0.002	-8	(6.2)	0.194	m	m	m	m
Mongolia	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Montenegro	m	m	6	(4.5)	3	(4.9)	-4	(3.9)	**-12**	(3.3)	**-24**	(2.8)	**10**	(2.9)	0.000	-2	(3.7)	0.647	**-2.7**	(0.5)	**-0.23**	(0.04)
Morocco	m	m	m	m	m	m	m	m	m	m	-3	(5.2)	m	m	m	m	m	m	m	m	m	m
North Macedonia	m	m	m	m	m	m	m	m	**17**	(3.1)	**-6**	(2.9)	m	m	m	**23**	(4.4)	0.000	m	m	m	m
Palestinian Authority	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Panama*	m	m	m	m	-3	(7.3)	m	m	m	m	4	(4.5)	-4	(5.8)	0.536	m	m	m	m	m	m	m
Paraguay	m	m	m	m	m	m	m	m	m	m	**11**	(4.3)	m	m	m	m	m	m	m	m	m	m
Peru	m	m	m	m	**26**	(6.3)	**23**	(5.6)	5	(4.5)	**-9**	(4.2)	**26**	(4.5)	0.000	**24**	(5.3)	0.000	-0.6	(1.0)	**-0.24**	(0.09)
Philippines	m	m	m	m	m	m	m	m	m	m	2	(4.9)	m	m	m	m	m	m	m	m	m	m
Qatar	m	m	**96**	(4.4)	**46**	(4.5)	**38**	(3.8)	**12**	(3.2)	0	(2.8)	**58**	(2.9)	0.000	**36**	(3.6)	0.000	**-1.6**	(0.4)	**-0.46**	(0.03)
Romania	m	m	13	(7.1)	1	(6.8)	**-17**	(6.6)	**-16**	(6.1)	-2	(6.7)	6	(4.2)	0.153	**-19**	(6.2)	0.002	**-4.8**	(1.1)	**-0.33**	(0.07)
Saudi Arabia	m	m	m	m	m	m	m	m	m	m	**16**	(4.1)	m	m	m	m	m	m	m	m	m	m
Serbia	m	m	5	(6.2)	-3	(6.0)	-9	(5.8)	m	m	-8	(4.9)	3	(3.7)	0.464	-8	(5.8)	0.144	**-2.8**	(1.0)	**-0.19**	(0.07)
Singapore	m	m	m	m	**13**	(4.7)	1	(4.0)	**10**	(3.3)	6	(3.0)	6	(3.5)	0.066	3	(3.7)	0.469	0.8	(0.6)	0.01	(0.06)
Chinese Taipei	m	m	-2	(6.9)	4	(6.6)	**-13**	(6.2)	5	(5.6)	**16**	(5.3)	-6	(3.9)	0.160	**-13**	(5.8)	0.024	-0.1	(1.0)	0.03	(0.06)
Thailand	**-23**	(6.8)	**-23**	(5.4)	**-25**	(6.0)	**-33**	(5.6)	**-22**	(4.9)	**-25**	(4.9)	**-8**	(3.2)	0.009	**-30**	(5.3)	0.000	**-4.4**	(0.7)	**-0.18**	(0.04)
Ukrainiennes (18 of 27)	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
United Arab Emirates	m	m	m	m	**10**	(5.0)	-3	(4.4)	4	(3.8)	-4	(3.2)	7	(3.9)	0.093	0	(4.2)	0.964	-1.2	(0.7)	-0.14	(0.08)
Uruguay	**-13**	(6.8)	**-18**	(5.3)	**-18**	(5.4)	-1	(5.0)	**-9**	(4.2)	**-9**	(4.0)	**-8**	(3.1)	0.012	-2	(4.6)	0.738	-1.1	(0.6)	-0.02	(0.04)
Uzbekistan	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Viet Nam	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m

1. The average decennial trend is the average change, per 10-year period, between the earliest available measurement in PISA and PISA 2022, calculated by a linear regression. The average decennial trend is only computed for countries with comparable data in more than two PISA assessments, over the period considered. 2. Curvilinear trends in performance are computed only for countries with comparable data in more than four PISA assessments. Curvilinear trends are calculated by a regression of performance over both linear and quadratic (squared) terms of the gap between the year of assessment and 2022. The coefficient for the linear term represents the annual rate of change in 2022, while the coefficient for the quadratic term represents the acceleration or deceleration of the change in performance. * Caution is required when interpreting estimates because one or more PISA sampling standards were not met (see Reader's Guide, Annexes A2 and A4). Notes: Values that are statistically significant are indicated in bold (see Annex A3). Costa Rica, Georgia, Malaysia, Malta, Moldova and the United Arab Emirates conducted the PISA 2009 assessment in 2010 as part of PISA 2009+. For Cambodia, Guatemala and Paraguay, results reported under PISA 2018 refer to the results of the PISA for Development assessment, in 2017.

Table I.B1.5.5. Mean reading performance, 2000 through 2022 [1/6]

		Reading performance, by PISA cycle														
		PISA 2000		PISA 2003		PISA 2006		PISA 2009		PISA 2012		PISA 2015		PISA 2018		PISA 2022	
		Mean score	S.E.	Mean score	S.E.	Mean score	S.E.	Mean score	S.E.	Mean score	S.E.	Mean score	S.E.	Mean score	S.E.	Mean score	S.E.
OECD	Australia*	528	(3.5)	525	(2.1)	513	(2.1)	515	(2.3)	512	(1.6)	503	(1.7)	503	(1.6)	498	(2.0)
	Austria	492	(2.7)	491	(3.8)	490	(4.1)	m	m	490	(2.8)	485	(2.8)	484	(2.7)	480	(2.7)
	Belgium	507	(3.6)	507	(2.6)	501	(3.0)	506	(2.3)	509	(2.3)	499	(2.4)	493	(2.3)	479	(2.5)
	Canada*	534	(1.6)	528	(1.7)	527	(2.4)	524	(1.5)	523	(1.9)	527	(2.3)	520	(1.8)	507	(2.0)
	Chile	410	(3.6)	m	m	442	(5.0)	449	(3.1)	441	(2.9)	459	(2.6)	452	(2.6)	448	(2.6)
	Colombia	m	m	m	m	385	(5.1)	413	(3.7)	403	(3.4)	425	(2.9)	412	(3.3)	409	(3.8)
	Costa Rica	m	m	m	m	m	m	443	(3.2)	441	(3.5)	427	(2.6)	426	(3.4)	415	(2.7)
	Czech Republic	492	(2.4)	489	(3.5)	483	(4.2)	478	(2.9)	493	(2.9)	487	(2.6)	490	(2.5)	489	(2.2)
	Denmark*	497	(2.4)	492	(2.8)	494	(3.2)	495	(2.1)	496	(2.6)	500	(2.5)	501	(1.8)	489	(2.6)
	Estonia	m	m	m	m	501	(2.9)	501	(2.6)	516	(2.0)	519	(2.2)	523	(1.8)	511	(2.4)
	Finland	546	(2.6)	543	(1.6)	547	(2.1)	536	(2.3)	524	(2.4)	526	(2.5)	520	(2.3)	490	(2.3)
	France	505	(2.7)	496	(2.7)	488	(4.1)	496	(3.4)	505	(2.8)	499	(2.5)	493	(2.3)	474	(3.1)
	Germany	484	(2.5)	491	(3.4)	495	(4.4)	497	(2.7)	508	(2.8)	509	(3.0)	498	(3.0)	480	(3.6)
	Greece	474	(5.0)	472	(4.1)	460	(4.0)	483	(4.3)	477	(3.3)	467	(4.3)	457	(3.6)	438	(2.8)
	Hungary	480	(4.0)	482	(2.5)	482	(3.3)	494	(3.2)	488	(3.2)	470	(2.7)	476	(2.3)	473	(2.8)
	Iceland	507	(1.5)	492	(1.6)	484	(1.9)	500	(1.4)	483	(1.8)	482	(2.0)	474	(1.7)	436	(2.1)
	Ireland*	527	(3.2)	515	(2.6)	517	(3.5)	496	(3.0)	523	(2.6)	521	(2.5)	518	(2.2)	516	(2.3)
	Israel	452	(8.5)	m	m	439	(4.6)	474	(3.6)	486	(5.0)	479	(3.8)	470	(3.7)	474	(3.5)
	Italy	487	(2.9)	476	(3.0)	469	(2.4)	486	(1.6)	490	(2.0)	485	(2.7)	476	(2.4)	482	(2.7)
	Japan	522	(5.2)	498	(3.9)	498	(3.6)	520	(3.5)	538	(3.7)	516	(3.2)	504	(2.7)	516	(3.2)
	Korea	525	(2.4)	534	(3.1)	556	(3.8)	539	(3.5)	536	(3.9)	517	(3.5)	514	(2.9)	515	(3.6)
	Latvia*	458	(5.3)	491	(3.7)	479	(3.7)	484	(3.0)	489	(2.4)	488	(1.8)	479	(1.6)	475	(2.5)
	Lithuania	m	m	m	m	470	(3.0)	468	(2.4)	477	(2.5)	472	(2.7)	476	(1.5)	472	(2.2)
	Mexico	422	(3.3)	400	(4.1)	410	(3.1)	425	(2.0)	424	(1.5)	423	(2.6)	420	(2.7)	415	(2.9)
	Netherlands*	m	m	513	(2.9)	507	(2.9)	508	(5.1)	511	(3.5)	503	(2.4)	485	(2.7)	459	(4.3)
	New Zealand*	529	(2.8)	522	(2.5)	521	(3.0)	521	(2.4)	512	(2.4)	509	(2.4)	506	(2.0)	501	(2.1)
	Norway	505	(2.8)	500	(2.8)	484	(3.2)	503	(2.6)	504	(3.2)	513	(2.5)	499	(2.2)	477	(2.5)
	Poland	479	(4.5)	497	(2.9)	508	(2.8)	500	(2.6)	518	(3.1)	506	(2.5)	512	(2.7)	489	(2.7)
	Portugal	470	(4.5)	478	(3.7)	472	(3.6)	489	(3.1)	488	(3.8)	498	(2.7)	492	(2.4)	477	(2.7)
	Slovak Republic	m	m	469	(3.1)	466	(3.1)	477	(2.5)	463	(4.2)	453	(2.8)	458	(2.2)	447	(3.1)
	Slovenia	m	m	m	m	494	(1.0)	483	(1.0)	481	(1.2)	505	(1.5)	495	(1.2)	469	(1.6)
	Spain	493	(2.7)	481	(2.6)	461	(2.2)	481	(2.0)	488	(1.9)	496	(2.4)	m	m	474	(1.7)
	Sweden	516	(2.2)	514	(2.4)	507	(3.4)	497	(2.9)	483	(3.0)	500	(3.5)	506	(3.0)	487	(2.5)
	Switzerland	494	(4.2)	499	(3.3)	499	(3.1)	501	(2.4)	509	(2.6)	492	(3.0)	484	(3.1)	483	(2.3)
	Türkiye	m	m	441	(5.8)	447	(4.2)	464	(3.5)	475	(4.2)	428	(4.0)	466	(2.2)	456	(1.9)
	United Kingdom*	m	m	m	m	495	(2.3)	494	(2.3)	499	(3.5)	498	(2.8)	504	(2.6)	494	(2.4)
	United States*	504	(7.0)	495	(3.2)	m	m	500	(3.7)	498	(3.7)	497	(3.4)	505	(3.6)	504	(4.3)
	OECD average	m	m	m	m	m	m	m	m	492	(0.5)	489	(0.5)	m	m	476	(0.5)
	OECD average-23	500	(0.7)	497	(0.6)	495	(0.7)	499	(0.6)	501	(0.6)	497	(0.6)	493	(0.5)	482	(0.6)
	OECD average-26	m	m	m	m	m	m	m	m	487	(0.6)	482	(0.6)	480	(0.5)	469	(0.5)
	OECD average-35	m	m	m	m	m	m	m	m	494	(0.5)	490	(0.5)	488	(0.4)	477	(0.5)

1. The average decennial trend is the average change, per 10-year period, between the earliest available measurement in PISA and PISA 2022, calculated by a linear regression. The average decennial trend is only computed for countries with comparable data in more than two PISA assessments, over the period considered. 2. Curvilinear trends in performance are computed only for countries with comparable data in more than four PISA assessments. Curvilinear trends are calculated by a regression of performance over both linear and quadratic (squared) terms of the gap between the year of assessment and 2022. The coefficient for the linear term represents the annual rate of change in 2022, while the coefficient for the quadratic term represents the acceleration or deceleration of the change in performance. * Caution is required when interpreting estimates because one or more PISA sampling standards were not met (see Reader's Guide, Annexes A2 and A4). ** Caution is required when comparing estimates based on PISA 2022 with other countries/economies as a strong linkage to the international PISA reading scale could not be established (see Reader's Guide and Annex A4). Notes: Values that are statistically significant are indicated in bold (see Annex A3). Costa Rica, Georgia, Malaysia, Malta, Moldova and the United Arab Emirates conducted the PISA 2009 assessment in 2010 as part of PISA 2009+. For Cambodia, Guatemala and Paraguay, results reported under PISA 2018 refer to the results of the PISA for Development assessment, in 2017.

Table I.B1.5.5. Mean reading performance, 2000 through 2022 [2/6]

	Reading performance, by PISA cycle															
	PISA 2000		PISA 2003		PISA 2006		PISA 2009		PISA 2012		PISA 2015		PISA 2018		PISA 2022	
	Mean score	S.E.	Mean score	S.E.	Mean score	S.E.	Mean score	S.E.	Mean score	S.E.	Mean score	S.E.	Mean score	S.E.	Mean score	S.E.
Albania	349	(3.3)	m	m	m	m	385	(4.0)	394	(3.2)	405	(4.1)	405	(1.9)	358	(1.9)
Argentina	418	(9.9)	m	m	374	(7.2)	398	(4.6)	396	(3.7)	m	m	402	(3.0)	401	(2.6)
Baku (Azerbaijan)	m	m	m	m	m	m	m	m	m	m	m	m	389	(2.5)	365	(2.5)
Brazil	396	(3.1)	403	(4.6)	393	(3.7)	412	(2.7)	407	(2.0)	407	(2.8)	413	(2.1)	410	(2.1)
Brunei Darussalam	m	m	m	m	m	m	m	m	m	m	m	m	408	(0.9)	429	(1.2)
Bulgaria	430	(4.9)	m	m	402	(6.9)	429	(6.7)	436	(6.0)	432	(5.0)	420	(3.9)	404	(3.4)
Cambodia	m	m	m	m	m	m	m	m	m	m	m	m	321	(2.1)	329	(2.1)
Croatia	m	m	m	m	477	(2.8)	476	(2.9)	485	(3.3)	487	(2.7)	479	(2.7)	475	(2.4)
Cyprus	m	m	m	m	m	m	m	m	449	(1.2)	443	(1.7)	424	(1.4)	381	(1.2)
Dominican Republic	m	m	m	m	m	m	m	m	m	m	358	(3.1)	342	(2.9)	351	(2.4)
El Salvador	m	m	m	m	m	m	m	m	m	m	m	m	m	m	365	(2.8)
Georgia	m	m	m	m	m	m	374	(2.9)	m	m	401	(3.0)	380	(2.2)	374	(2.3)
Guatemala	m	m	m	m	m	m	m	m	m	m	m	m	369	(3.5)	374	(2.4)
Hong Kong (China)*	525	(2.9)	510	(3.7)	536	(2.4)	533	(2.1)	545	(2.8)	527	(2.7)	524	(2.7)	500	(2.8)
Indonesia	371	(4.0)	382	(3.4)	393	(5.9)	402	(3.7)	396	(4.2)	397	(2.9)	371	(2.6)	359	(2.9)
Jamaica*	m	m	m	m	m	m	m	m	m	m	m	m	m	m	410	(4.2)
Jordan	m	m	m	m	m	m	m	m	m	m	m	m	m	m	342	(2.4)
Kazakhstan	m	m	m	m	m	m	390	(3.1)	393	(2.7)	m	m	387	(1.5)	386	(1.7)
Kosovo	m	m	m	m	m	m	m	m	m	m	347	(1.6)	353	(1.1)	342	(1.1)
Macao (China)	m	m	498	(2.2)	492	(1.1)	487	(0.9)	509	(0.9)	509	(1.3)	525	(1.2)	510	(1.3)
Malaysia	m	m	m	m	m	m	414	(2.9)	398	(3.3)	m	m	415	(2.9)	388	(2.7)
Malta	m	m	m	m	m	m	442	(1.6)	m	m	447	(1.8)	448	(1.7)	445	(1.9)
Moldova	m	m	m	m	m	m	388	(2.8)	m	m	416	(2.5)	424	(2.4)	4 11	(2.5)
Mongolia	m	m	m	m	m	m	m	m	m	m	m	m	m	m	378	(2.3)
Montenegro	m	m	m	m	392	(1.2)	408	(1.7)	422	(1.2)	427	(1.6)	421	(1.1)	405	(1.3)
Morocco	m	m	m	m	m	m	m	m	m	m	m	m	359	(3.1)	339	(4.0)
North Macedonia	373	(1.9)	m	m	m	m	m	m	m	m	352	(1.4)	393	(1.1)	359	(0.8)
Palestinian Authority	m	m	m	m	m	m	m	m	m	m	m	m	m	m	349	(2.0)
Panama*	m	m	m	m	m	m	371	(6.5)	m	m	m	m	377	(3.0)	392	(3.4)
Paraguay	m	m	m	m	m	m	m	m	m	m	m	m	370	(3.7)	373	(2.4)
Peru	327	(4.4)	m	m	m	m	370	(4.0)	384	(4.3)	398	(2.9)	401	(3.0)	408	(2.7)
Philippines	m	m	m	m	m	m	m	m	m	m	m	m	340	(3.3)	347	(3.4)
Qatar	m	m	m	m	312	(1.2)	372	(0.8)	388	(0.8)	402	(1.0)	407	(0.8)	419	(1.4)
Romania	m	m	m	m	396	(4.7)	424	(4.1)	438	(4.0)	434	(4.1)	428	(5.1)	428	(4.0)
Saudi Arabia	m	m	m	m	m	m	m	m	m	m	m	m	399	(3.0)	383	(2.0)
Serbia	m	m	m	m	401	(3.5)	442	(2.4)	446	(3.4)	m	m	439	(3.3)	440	(2.8)
Singapore	m	m	m	m	m	m	526	(1.1)	542	(1.4)	535	(1.6)	549	(1.6)	543	(1.9)
Chinese Taipei	m	m	m	m	496	(3.4)	495	(2.6)	523	(3.0)	497	(2.5)	503	(2.8)	515	(3.3)
Thailand	431	(3.2)	420	(2.8)	417	(2.6)	421	(2.6)	441	(3.1)	409	(3.3)	393	(3.2)	379	(2.8)
Ukrainian regions (18 of 27)	m	m	m	m	m	m	m	m	m	m	m	m	m	m	428	(3.9)
United Arab Emirates	m	m	m	m	m	m	431	(2.9)	442	(2.5)	434	(2.9)	432	(2.3)	417	(1.3)
Uruguay	m	m	434	(3.4)	413	(3.4)	426	(2.6)	411	(3.2)	437	(2.5)	427	(2.8)	430	(2.4)
Uzbekistan	m	m	m	m	m	m	m	m	m	m	m	m	m	m	336	(2.0)
Viet Nam**	m	m	m	m	m	m	m	m	m	m	m	m	m	m	462	(3.9)

1. The average decennial trend is the average change, per 10-year period, between the earliest available measurement in PISA and PISA 2022, calculated by a linear regression. The average decennial trend is only computed for countries with comparable data in more than two PISA assessments, over the period considered. 2. Curvilinear trends in performance are computed only for countries with comparable data in more than four PISA assessments. Curvilinear trends are calculated by a regression of performance over both linear and quadratic (squared) terms of the gap between the year of assessment and 2022. The coefficient for the linear term represents the annual rate of change in 2022, while the coefficient for the quadratic term represents the acceleration or deceleration of the change in performance. * Caution is required when interpreting estimates because one or more PISA sampling standards were not met (see Reader's Guide, Annexes A2 and A4). ** Caution is required when comparing estimates based on PISA 2022 with other countries/economies as a strong linkage to the international PISA reading scale could not be established (see Reader's Guide and Annex A4). Notes: Values that are statistically significant are indicated in bold (see Annex A3). Costa Rica, Georgia, Malaysia, Malta, Moldova and the United Arab Emirates conducted the PISA 2009 assessment in 2010 as part of PISA 2009+. For Cambodia, Guatemala and Paraguay, results reported under PISA 2018 refer to the results of the PISA for Development assessment, in 2017.

Table I.B1.5.5. Mean reading performance, 2000 through 2022 [3/6]

| | Change in reading performance between PISA 2022 and: | | | | | | | | | | | | | |
| | PISA 2000 (PISA 2022 - PISA 2000) | | PISA 2003 (PISA 2022 - PISA 2003) | | PISA 2006 (PISA 2022 - PISA 2006) | | PISA 2009 (PISA 2022 - PISA 2009) | | PISA 2012 (PISA 2022 - PISA 2012) | | PISA 2015 (PISA 2022 - PISA 2015) | | PISA 2018 (PISA 2022 - PISA 2018) | |
	Score dif.	S.E.	Score dif.	S.E.	Score dif.	S.E.	Score dif.	S.E.	Score dif.	S.E.	Score dif.	S.E.	Score dif.	S.E.
OECD Australia*	**-30**	(7.8)	**-27**	(6.0)	-15	(9.0)	**-17**	(5.6)	**-14**	(6.5)	-5	(4.5)	-5	(3.0)
Austria	-12	(7.7)	-10	(7.0)	-10	(9.9)	m	m	-9	(7.1)	-4	(5.3)	-4	(4.1)
Belgium	**-28**	(8.0)	**-28**	(6.4)	**-22**	(9.4)	**-27**	(5.8)	**-30**	(6.9)	**-20**	(5.0)	**-14**	(3.7)
Canada*	**-27**	(7.1)	**-21**	(5.9)	**-20**	(9.1)	**-17**	(5.3)	**-16**	(6.6)	**-20**	(4.7)	**-13**	(3.0)
Chile	**38**	(8.0)	m	m	6	(10.3)	-1	(6.2)	7	(7.2)	**-11**	(5.2)	-4	(4.0)
Colombia	m	m	m	m	23	(10.6)	-5	(7.1)	5	(7.9)	**-16**	(6.0)	-4	(5.2)
Costa Rica	m	m	m	m	m	m	**-27**	(6.2)	**-25**	(7.4)	**-12**	(5.2)	**-11**	(4.6)
Czech Republic	-3	(7.4)	0	(6.7)	6	(9.8)	10	(5.9)	-4	(7.0)	1	(5.0)	-2	(3.7)
Denmark*	-8	(7.5)	-4	(6.5)	-6	(9.5)	-6	(5.7)	-7	(7.1)	**-11**	(5.1)	**-12**	(3.5)
Estonia	m	m	m	m	10	(9.3)	10	(5.9)	-5	(6.8)	-8	(4.9)	**-12**	(3.3)
Finland	**-56**	(7.5)	**-53**	(5.9)	**-57**	(9.1)	**-46**	(5.6)	**-34**	(6.8)	**-36**	(5.0)	**-30**	(3.5)
France	**-31**	(7.8)	**-22**	(6.6)	-14	(10.0)	**-22**	(6.6)	**-32**	(7.3)	**-25**	(5.4)	**-19**	(4.1)
Germany	-4	(8.0)	-12	(7.2)	-15	(10.3)	**-18**	(6.5)	**-28**	(7.6)	**-29**	(5.9)	**-18**	(4.9)
Greece	**-35**	(8.8)	**-34**	(7.2)	**-21**	(9.9)	**-44**	(7.0)	**-39**	(7.4)	**-29**	(6.3)	**-19**	(4.8)
Hungary	-7	(8.3)	-9	(6.5)	-9	(9.6)	**-21**	(6.3)	**-15**	(7.4)	3	(5.3)	-3	(3.9)
Iceland	**-71**	(7.1)	**-56**	(5.9)	**-49**	(9.0)	**-64**	(5.3)	**-47**	(6.6)	**-46**	(4.6)	**-38**	(3.1)
Ireland*	-11	(7.8)	1	(6.3)	-1	(9.6)	**20**	(6.0)	-7	(6.9)	-5	(5.0)	-2	(3.6)
Israel	22	(11.3)	m	m	**35**	(10.3)	0	(6.9)	-12	(8.6)	-5	(6.3)	3	(5.3)
Italy	-6	(7.8)	6	(6.6)	13	(9.3)	-4	(5.6)	-8	(6.9)	-3	(5.2)	5	(3.9)
Japan	-6	(9.0)	**18**	(7.3)	18	(9.8)	-4	(6.6)	**-22**	(7.7)	0	(5.8)	**12**	(4.4)
Korea	-9	(8.0)	**-19**	(7.1)	**-41**	(10.1)	**-24**	(6.8)	**-20**	(8.1)	-2	(6.2)	1	(4.9)
Latvia*	16	(8.8)	**-16**	(6.9)	-5	(9.7)	-9	(6.0)	**-14**	(6.9)	**-13**	(4.7)	-4	(3.3)
Lithuania	m	m	m	m	2	(9.3)	3	(5.7)	-5	(6.9)	-1	(5.1)	-4	(3.1)
Mexico	-7	(8.0)	**16**	(7.3)	5	(9.5)	-10	(5.8)	-8	(6.9)	-8	(5.3)	-5	(4.3)
Netherlands*	m	m	**-54**	(7.4)	**-48**	(10.0)	**-49**	(8.2)	**-52**	(8.2)	**-44**	(6.1)	**-26**	(5.2)
New Zealand*	**-28**	(7.5)	**-21**	(6.2)	**-20**	(9.3)	**-20**	(5.6)	-11	(6.8)	-8	(4.8)	-5	(3.3)
Norway	**-29**	(7.7)	**-23**	(6.5)	-8	(9.5)	**-27**	(5.9)	**-27**	(7.3)	**-37**	(5.1)	**-23**	(3.7)
Poland	10	(8.5)	-8	(6.6)	**-19**	(9.4)	**-12**	(6.0)	**-29**	(7.3)	**-17**	(5.2)	**-23**	(4.1)
Portugal	6	(8.5)	-1	(7.0)	4	(9.6)	**-13**	(6.2)	-11	(7.6)	**-22**	(5.2)	**-15**	(3.9)
Slovak Republic	m	m	**-22**	(6.9)	**-19**	(9.6)	**-31**	(6.1)	**-16**	(7.9)	-6	(5.6)	**-11**	(4.1)
Slovenia	m	m	m	m	**-26**	(8.8)	**-15**	(5.0)	**-13**	(6.3)	**-37**	(4.2)	**-27**	(2.5)
Spain	**-18**	(7.4)	-6	(6.1)	13	(9.0)	-7	(5.3)	**-14**	(6.5)	**-21**	(4.6)	m	m
Sweden	**-29**	(7.5)	**-27**	(6.3)	**-20**	(9.6)	-10	(6.0)	4	(7.2)	**-13**	(5.6)	**-19**	(4.2)
Switzerland	-11	(8.2)	**-16**	(6.6)	-16	(9.4)	**-17**	(5.7)	**-26**	(6.9)	-9	(5.2)	-1	(4.1)
Türkiye	m	m	15	(8.0)	9	(9.7)	-8	(6.1)	**-19**	(7.6)	**28**	(5.7)	**-10**	(3.2)
United Kingdom*	m	m	m	m	-1	(9.2)	0	(5.7)	-5	(7.3)	-4	(5.1)	**-10**	(3.8)
United States*	0	(10.6)	9	(7.5)	m	m	4	(7.3)	6	(8.3)	7	(6.6)	-1	(5.8)
OECD average	m	m	m	m	m	m	m	m	**-16**	(6.0)	**-13**	(3.7)	m	m
OECD average-23	**-18**	(6.7)	**-15**	(5.3)	-14	(8.6)	**-17**	(4.7)	**-19**	(6.1)	**-15**	(3.7)	**-11**	(1.7)
OECD average-26	m	m	m	m	m	m	m	m	**-18**	(6.1)	**-13**	(3.7)	**-11**	(1.6)
OECD average-35	m	m	m	m	m	m	m	m	**-16**	(6.0)	**-13**	(3.7)	**-10**	(1.6)

* Caution is required when interpreting estimates because one or more PISA sampling standards were not met (see Reader's Guide, Annexes A2 and A4). ** Caution is required when comparing estimates based on PISA 2022 with other countries/economies as a strong linkage to the international PISA reading scale could not be established (see Reader's Guide and Annex A4). 1. The average decennial trend is the average change, per 10-year period, between the earliest available measurement in PISA and PISA 2022, calculated by a linear regression. The average decennial trend is only computed for countries with comparable data in more than two PISA assessments, over the period considered. 2. Curvilinear trends in performance are computed only for countries with comparable data in more than four PISA assessments. Curvilinear trends are calculated by a regression of performance over both linear and quadratic (squared) terms of the gap between the year of assessment and 2022. The coefficient for the linear term represents the annual rate of change in 2022, while the coefficient for the quadratic term represents the acceleration or deceleration of the change in performance. Notes: Values that are statistically significant are indicated in bold (see Annex A3). Costa Rica, Georgia, Malaysia, Malta, Moldova and the United Arab Emirates conducted the PISA 2009 assessment in 2010 as part of PISA 2009+. For Cambodia, Guatemala and Paraguay, results reported under PISA 2018 refer to the results of the PISA for Development assessment, in 2017.

Table I.B1.5.5. Mean reading performance, 2000 through 2022 [4/6]

| | Change in reading performance between PISA 2022 and: | | | | | | | | | | | | |
| | PISA 2000 (PISA 2022 - PISA 2000) | | PISA 2003 (PISA 2022 - PISA 2003) | | PISA 2006 (PISA 2022 - PISA 2006) | | PISA 2009 (PISA 2022 - PISA 2009) | | PISA 2012 (PISA 2022 - PISA 2012) | | PISA 2015 (PISA 2022 - PISA 2015) | | PISA 2018 (PISA 2022 - PISA 2018) | |
Partners	Score dif.	S.E.	Score dif.	S.E.	Score dif.	S.E.	Score dif.	S.E.	Score dif.	S.E.	Score dif.	S.E.	Score dif.	S.E.
Albania	10	(7.7)	m	m	m	m	**-26**	(6.5)	**-36**	(7.1)	**-47**	(5.8)	**-47**	(3.1)
Argentina	-18	(12.2)	m	m	**27**	(11.5)	2	(7.1)	5	(7.5)	m	m	-1	(4.2)
Baku (Azerbaijan)	m	m	m	m	m	m	m	m	m	m	m	m	**-24**	(3.8)
Brazil	14	(7.6)	8	(7.3)	17	(9.6)	-1	(5.8)	4	(6.7)	3	(5.0)	-3	(3.3)
Brunei Darussalam	m	m	m	m	m	m	m	m	m	m	m	m	**21**	(2.1)
Bulgaria	**-26**	(8.9)	m	m	2	(11.5)	**-25**	(8.8)	**-32**	(9.2)	**-27**	(7.0)	**-16**	(5.4)
Cambodia	m	m	m	m	m	m	m	m	m	m	m	m	**8**	(3.3)
Croatia	m	m	m	m	-2	(9.3)	0	(6.0)	-9	(7.3)	**-11**	(5.1)	-3	(3.9)
Cyprus	m	m	m	m	m	m	m	m	**-68**	(6.2)	**-62**	(4.2)	**-43**	(2.3)
Dominican Republic	m	m	m	m	m	m	m	m	m	m	-6	(5.3)	**10**	(4.0)
El Salvador	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Georgia	m	m	m	m	m	m	0	(5.9)	m	m	**-27**	(5.2)	-6	(3.5)
Guatemala	m	m	m	m	m	m	m	m	m	m	m	m	5	(4.5)
Hong Kong (China)*	**-26**	(7.8)	-10	(7.0)	**-36**	(9.3)	**-33**	(5.9)	**-45**	(7.2)	**-27**	(5.3)	**-25**	(4.2)
Indonesia	-12	(8.3)	**-23**	(6.9)	**-34**	(10.8)	**-43**	(6.6)	**-38**	(7.9)	**-39**	(5.5)	-12	(4.1)
Jamaica*	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Jordan	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Kazakhstan	m	m	m	m	m	m	-4	(5.8)	-6	(6.8)	m	m	-1	(2.7)
Kosovo	m	m	m	m	m	m	m	m	m	m	-5	(4.1)	**-11**	(2.1)
Macao (China)	m	m	**13**	(5.8)	**18**	(8.7)	**24**	(4.9)	1	(6.2)	2	(4.1)	**-15**	(2.3)
Malaysia	m	m	m	m	m	m	**-26**	(6.1)	-10	(7.4)	m	m	**-27**	(4.2)
Malta	m	m	m	m	m	m	3	(5.3)	m	m	-1	(4.5)	-3	(3.0)
Moldova	m	m	m	m	m	m	**23**	(6.0)	m	m	-5	(5.1)	**-13**	(3.8)
Mongolia	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Montenegro	m	m	m	m	13	(8.8)	-3	(5.1)	**-17**	(6.3)	**-22**	(4.2)	**-16**	(2.3)
Morocco	m	m	m	m	m	m	m	m	m	m	m	m	**-20**	(5.3)
North Macedonia	**-14**	(7.0)	m	m	m	m	m	m	m	m	7	(4.0)	**-34**	(2.0)
Palestinian Authority	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Panama*	m	m	m	m	m	m	**21**	(8.7)	m	m	m	m	**15**	(4.7)
Paraguay	m	m	m	m	m	m	m	m	m	m	m	m	3	(4.7)
Peru	**81**	(8.5)	m	m	m	m	**39**	(6.7)	**24**	(7.9)	**11**	(5.4)	8	(4.3)
Philippines	m	m	m	m	m	m	m	m	m	m	m	m	7	(5.0)
Qatar	m	m	m	m	**107**	(8.8)	**48**	(4.9)	**32**	(6.2)	**17**	(4.0)	**12**	(2.2)
Romania	m	m	m	m	**33**	(10.5)	4	(7.4)	-9	(8.2)	-5	(6.7)	1	(6.7)
Saudi Arabia	m	m	m	m	m	m	m	m	m	m	m	m	**-17**	(3.9)
Serbia	m	m	m	m	**39**	(9.6)	-2	(5.9)	-6	(7.5)	m	m	1	(4.5)
Singapore	m	m	m	m	m	m	**17**	(5.1)	0	(6.4)	7	(4.4)	**-7**	(2.9)
Chinese Taipei	m	m	m	m	19	(9.8)	**20**	(6.2)	-8	(7.5)	**18**	(5.5)	**13**	(4.6)
Thailand	**-52**	(7.9)	**-41**	(6.6)	**-38**	(9.4)	**-43**	(6.1)	**-63**	(7.3)	**-30**	(5.7)	**-14**	(4.5)
Ukrainian regions (18 of 27)	m	m	m	m	m	m	m	m	m	m	m	m	m	m
United Arab Emirates	m	m	m	m	m	m	**-14**	(5.6)	**-24**	(6.6)	**-16**	(4.8)	**-14**	(3.0)
Uruguay	m	m	-4	(6.7)	18	(9.5)	5	(5.9)	**19**	(7.2)	-6	(5.0)	3	(3.9)
Uzbekistan	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Viet Nam**	m	m	m	m	m	m	m	m	m	m	m	m	m	m

1. The average decennial trend is the average change, per 10-year period, between the earliest available measurement in PISA and PISA 2022, calculated by a linear regression. The average decennial trend is only computed for countries with comparable data in more than two PISA assessments, over the period considered. 2. Curvilinear trends in performance are computed only for countries with comparable data in more than four PISA assessments. Curvilinear trends are calculated by a regression of performance over both linear and quadratic (squared) terms of the gap between the year of assessment and 2022. The coefficient for the linear term represents the annual rate of change in 2022, while the coefficient for the quadratic term represents the acceleration or deceleration of the change in performance. * Caution is required when interpreting estimates because one or more PISA sampling standards were not met (see Reader's Guide, Annexes A2 and A4). ** Caution is required when comparing estimates based on PISA 2022 with other countries/economies as a strong linkage to the international PISA reading scale could not be established (see Reader's Guide and Annex A4). Notes: Values that are statistically significant are indicated in bold (see Annex A3). Costa Rica, Georgia, Malaysia, Malta, Moldova and the United Arab Emirates conducted the PISA 2009 assessment in 2010 as part of PISA 2009+. For Cambodia, Guatemala and Paraguay, results reported under PISA 2018 refer to the results of the PISA for Development assessment, in 2017.

Table I.B1.5.5. Mean reading performance, 2000 through 2022 [5/6]

	Average decennial trend in reading performance[1] across PISA assessments (since 2000 or earliest assessment available)			Average decennial trend in reading performance[1] since 2012 (or earliest assessment available after 2012)			Curvilinear trend in reading performance across PISA assessments [2]			
							Annual rate of change in 2022 (linear term)		Rate of acceleration or deceleration in performance (quadratic term)	
	Coef.	S.E.	p-value	Coef.	S.E.	p-value	Coef.	S.E.	Coef.	S.E.
Australia*	**-14**	(4.3)	0.001	-12	(6.4)	0.052	-0.8	(0.8)	0.02	(0.04)
Austria	-5	(4.4)	0.254	-9	(6.8)	0.209	-1.0	(0.8)	-0.02	(0.04)
Belgium	**-11**	(4.3)	0.012	**-29**	(6.6)	0.000	**-3.3**	(0.8)	**-0.10**	(0.04)
Canada*	**-9**	(4.2)	0.031	**-17**	(6.4)	0.007	**-1.7**	(0.7)	-0.04	(0.03)
Chile	**16**	(4.6)	0.000	4	(6.8)	0.583	**-2.1**	(0.8)	**-0.17**	(0.04)
Colombia	**12**	(5.9)	0.048	0	(7.5)	0.984	**-3.6**	(1.1)	**-0.30**	(0.07)
Costa Rica	**-21**	(6.3)	0.001	**-23**	(7.1)	0.001	**-2.3**	(1.1)	-0.02	(0.10)
Czech Republic	1	(4.3)	0.894	-3	(6.7)	0.643	0.9	(0.8)	0.04	(0.04)
Denmark*	0	(4.3)	0.989	-7	(6.7)	0.286	-0.8	(0.8)	-0.03	(0.04)
Estonia	**11**	(5.4)	0.043	-4	(6.4)	0.569	**-2.1**	(0.8)	**-0.20**	(0.05)
Finland	**-23**	(4.2)	0.000	**-34**	(6.6)	0.000	**-4.9**	(0.7)	**-0.12**	(0.04)
France	-8	(4.3)	0.079	**-31**	(7.0)	0.000	**-2.6**	(0.8)	**-0.08**	(0.04)
Germany	2	(4.4)	0.716	**-30**	(7.2)	0.000	**-4.1**	(0.8)	**-0.19**	(0.04)
Greece	**-12**	(4.5)	0.007	**-39**	(7.1)	0.000	**-4.7**	(0.9)	**-0.16**	(0.04)
Hungary	-5	(4.4)	0.270	-12	(7.0)	0.094	**-2.2**	(0.8)	-0.08	(0.04)
Iceland	**-24**	(4.2)	0.000	**-46**	(6.3)	0.000	**-5.7**	(0.7)	**-0.15**	(0.03)
Ireland*	-1	(4.3)	0.862	-7	(6.6)	0.286	1.5	(0.8)	0.07	(0.04)
Israel	**13**	(5.5)	0.015	-13	(8.1)	0.096	-0.8	(1.0)	-0.10	(0.06)
Italy	1	(4.3)	0.870	-9	(6.6)	0.169	0.0	(0.8)	0.00	(0.04)
Japan	2	(4.5)	0.632	**-22**	(7.4)	0.003	-0.6	(0.9)	-0.04	(0.04)
Korea	**-11**	(4.4)	0.011	**-19**	(7.8)	0.017	**-4.3**	(0.9)	**-0.14**	(0.04)
Latvia*	3	(4.5)	0.489	**-15**	(6.6)	0.019	**-3.2**	(0.8)	**-0.16**	(0.04)
Lithuania	2	(5.4)	0.679	-4	(6.6)	0.533	-0.8	(0.8)	-0.06	(0.06)
Mexico	4	(4.4)	0.420	-9	(6.6)	0.196	-0.6	(0.8)	-0.04	(0.04)
Netherlands*	**-25**	(5.1)	0.000	**-53**	(7.7)	0.000	**-7.1**	(1.0)	**-0.24**	(0.06)
New Zealand*	**-12**	(4.3)	0.004	-11	(6.5)	0.088	-1.4	(0.7)	-0.01	(0.04)
Norway	-5	(4.3)	0.257	**-30**	(6.9)	0.000	**-2.8**	(0.8)	**-0.10**	(0.04)
Poland	5	(4.4)	0.215	**-26**	(7.0)	0.000	**-4.3**	(0.8)	**-0.22**	(0.04)
Portugal	7	(4.5)	0.111	-13	(7.3)	0.078	**-2.2**	(0.9)	**-0.13**	(0.04)
Slovak Republic	**-13**	(4.9)	0.011	-13	(7.5)	0.080	**-2.5**	(0.9)	-0.06	(0.05)
Slovenia	-7	(5.1)	0.156	**-17**	(6.2)	0.006	**-4.2**	(0.7)	**-0.21**	(0.05)
Spain	-1	(4.2)	0.858	**-17**	(6.1)	0.007	-0.1	(0.7)	0.00	(0.04)
Sweden	**-11**	(4.3)	0.010	3	(6.9)	0.635	0.3	(0.8)	0.07	(0.04)
Switzerland	-7	(4.4)	0.131	**-25**	(6.7)	0.000	**-3.1**	(0.8)	**-0.11**	(0.04)
Türkiye	5	(5.2)	0.322	-6	(7.2)	0.402	-1.6	(1.0)	-0.11	(0.06)
United Kingdom*	2	(5.3)	0.719	-3	(7.0)	0.658	-1.0	(0.9)	-0.08	(0.06)
United States*	2	(4.7)	0.733	8	(7.9)	0.292	1.3	(1.0)	0.05	(0.05)
OECD average	-4	(4.3)	0.393	**-16**	(5.8)	0.006	**-2.1**	(0.6)	**-0.09**	(0.03)
OECD average-23	-6	(4.1)	0.176	**-19**	(5.8)	0.001	**-2.2**	(0.6)	**-0.07**	(0.03)
OECD average-26	-3	(4.4)	0.434	**-17**	(5.8)	0.003	**-2.4**	(0.6)	**-0.10**	(0.03)
OECD average-35	-3	(4.3)	0.447	**-16**	(5.8)	0.007	**-2.2**	(0.6)	**-0.09**	(0.03)

* Caution is required when interpreting estimates because one or more PISA sampling standards were not met (see Reader's Guide, Annexes A2 and A4). ** Caution is required when comparing estimates based on PISA 2022 with other countries/economies as a strong linkage to the international PISA reading scale could not be established (see Reader's Guide and Annex A4). 1. The average decennial trend is the average change, per 10-year period, between the earliest available measurement in PISA and PISA 2022, calculated by a linear regression. The average decennial trend is only computed for countries with comparable data in more than two PISA assessments, over the period considered. 2. Curvilinear trends in performance are computed only for countries with comparable data in more than four PISA assessments. Curvilinear trends are calculated by a regression of performance over both linear and quadratic (squared) terms of the gap between the year of assessment and 2022. The coefficient for the linear term represents the annual rate of change in 2022, while the coefficient for the quadratic term represents the acceleration or deceleration of the change in performance. Notes: Values that are statistically significant are indicated in bold (see Annex A3). Costa Rica, Georgia, Malaysia, Malta, Moldova and the United Arab Emirates conducted the PISA 2009 assessment in 2010 as part of PISA 2009+. For Cambodia, Guatemala and Paraguay, results reported under PISA 2018 refer to the results of the PISA for Development assessment, in 2017.

Table I.B1.5.5. Mean reading performance, 2000 through 2022 [6/6]

	Average decennial trend in reading performance[1] across PISA assessments (since 2000 or earliest assessment available)			Average decennial trend in reading performance[1] since 2012 (or earliest assessment available after 2012)			Curvilinear trend in reading performance across PISA assessments [2]			
							Annual rate of change in 2022 (linear term)		Rate of acceleration or deceleration in performance (quadratic term)	
	Coef.	S.E.	p-value	Coef.	S.E.	p-value	Coef.	S.E.	Coef.	S.E.
Albania	**12**	(4.3)	0.005	**-35**	(6.7)	0.000	**-6.5**	(0.8)	**-0.35**	(0.04)
Argentina	-2	(5.8)	0.790	5	(7.7)	0.500	**3.2**	(1.2)	**0.16**	(0.07)
Baku (Azerbaijan)	m	m	m	m	m	m	m	m	m	m
Brazil	7	(4.4)	0.096	5	(6.5)	0.437	0.2	(0.8)	-0.02	(0.04)
Brunei Darussalam	m	m	m	m	m	m	m	m	m	m
Bulgaria	-5	(4.9)	0.321	**-33**	(8.7)	0.000	**-2.5**	(1.1)	-0.09	(0.05)
Cambodia	m	m	m	m	m	m	m	m	m	m
Croatia	0	(5.4)	0.979	-11	(6.9)	0.114	**-2.1**	(0.9)	**-0.13**	(0.06)
Cyprus	m	m	m	**-69**	(6.0)	0.000	m	m	m	m
Dominican Republic	m	m	m	-7	(7.4)	0.346	m	m	m	m
El Salvador	m	m	m	m	m	m	m	m	m	m
Georgia	-2	(5.8)	0.731	**-38**	(7.5)	0.000	m	m	m	m
Guatemala	m	m	m	m	m	m	m	m	m	m
Hong Kong (China)*	-5	(4.6)	0.267	**-42**	(6.9)	0.000	**-5.4**	(0.8)	**-0.22**	(0.04)
Indonesia	-5	(4.6)	0.229	**-42**	(7.5)	0.000	**-7.1**	(0.9)	**-0.30**	(0.04)
Jamaica*	m	m	m	m	m	m	m	m	m	m
Jordan	m	m	m	m	m	m	m	m	m	m
Kazakhstan	-4	(5.8)	0.467	-6	(7.1)	0.362	m	m	m	m
Kosovo	m	m	m	-8	(5.7)	0.166	m	m	m	m
Macao (China)	**14**	(4.7)	0.003	4	(5.9)	0.455	1.2	(0.7)	-0.01	(0.05)
Malaysia	-12	(6.3)	0.063	-7	(7.7)	0.352	m	m	m	m
Malta	3	(5.4)	0.596	-2	(6.1)	0.720	m	m	m	m
Moldova	**20**	(5.9)	0.001	-9	(7.3)	0.230	m	m	m	m
Mongolia	m	m	m	m	m	m	m	m	m	m
Montenegro	9	(5.1)	0.073	**-18**	(6.0)	0.003	**-5.8**	(0.6)	**-0.42**	(0.04)
Morocco	m	m	m	m	m	m	m	m	m	m
North Macedonia	-2	(4.3)	0.633	4	(5.5)	0.431	m	m	m	m
Palestinian Authority	m	m	m	m	m	m	m	m	m	m
Panama*	15	(7.5)	0.051	m	m	m	m	m	m	m
Paraguay	m	m	m	m	m	m	m	m	m	m
Peru	**38**	(4.6)	0.000	**22**	(7.5)	0.003	1.4	(0.9)	**-0.11**	(0.04)
Philippines	m	m	m	m	m	m	m	m	m	m
Qatar	**59**	(5.1)	0.000	**31**	(6.0)	0.000	**-2.2**	(0.6)	**-0.51**	(0.04)
Romania	**15**	(5.6)	0.008	-10	(8.0)	0.223	**-4.3**	(1.2)	**-0.36**	(0.08)
Saudi Arabia	m	m	m	m	m	m	m	m	m	m
Serbia	**16**	(5.5)	0.003	-6	(7.7)	0.451	**-5.4**	(1.1)	**-0.44**	(0.08)
Singapore	**12**	(5.5)	0.026	4	(6.4)	0.508	-1.2	(0.9)	**-0.19**	(0.07)
Chinese Taipei	8	(5.6)	0.131	-4	(7.2)	0.568	0.4	(1.0)	-0.03	(0.06)
Thailand	**-20**	(4.5)	0.000	**-61**	(7.1)	0.000	**-5.9**	(0.8)	**-0.18**	(0.04)
Ukrainian regions (18 of 27)	m	m	m	m	m	m	m	m	m	m
United Arab Emirates	**-12**	(6.0)	0.038	**-23**	(6.4)	0.000	**-4.6**	(0.9)	**-0.26**	(0.09)
Uruguay	3	(4.9)	0.516	**13**	(6.8)	0.049	**2.1**	(0.8)	0.09	(0.05)
Uzbekistan	m	m	m	m	m	m	m	m	m	m
Viet Nam**	m	m	m	m	m	m	m	m	m	m

1. The average decennial trend is the average change, per 10-year period, between the earliest available measurement in PISA and PISA 2022, calculated by a linear regression. The average decennial trend is only computed for countries with comparable data in more than two PISA assessments, over the period considered.2. Curvilinear trends in performance are computed only for countries with comparable data in more than four PISA assessments. Curvilinear trends are calculated by a regression of performance over both linear and quadratic (squared) terms of the gap between the year of assessment and 2022. The coefficient for the linear term represents the annual rate of change in 2022, while the coefficient for the quadratic term represents the acceleration or deceleration of the change in performance. * Caution is required when interpreting estimates because one or more PISA sampling standards were not met (see Reader's Guide, Annexes A2 and A4).** Caution is required when comparing estimates based on PISA 2022 with other countries/economies as a strong linkage to the international PISA reading scale could not be established (see Reader's Guide and Annex A4). Notes: Values that are statistically significant are indicated in bold (see Annex A3). Costa Rica, Georgia, Malaysia, Malta, Moldova and the United Arab Emirates conducted the PISA 2009 assessment in 2010 as part of PISA 2009+. For Cambodia, Guatemala and Paraguay, results reported under PISA 2018 refer to the results of the PISA for Development assessment, in 2017.

Table I.B1.5.6. Mean science performance, 2006 through 2022 [1/6]

	Science performance, by PISA cycle											
	PISA 2006		PISA 2009		PISA 2012		PISA 2015		PISA 2018		PISA 2022	
	Mean score	S.E.	Mean score	S.E.	Mean score	S.E.	Mean score	S.E.	Mean score	S.E.	Mean score	S.E.
Australia*	527	(2.3)	527	(2.5)	521	(1.8)	510	(1.5)	503	(1.8)	507	(1.9)
Austria	511	(3.9)	m	m	506	(2.7)	495	(2.4)	490	(2.8)	491	(2.7)
Belgium	510	(2.5)	507	(2.5)	505	(2.2)	502	(2.3)	499	(2.2)	491	(2.5)
Canada*	534	(2.0)	529	(1.6)	525	(1.9)	528	(2.1)	518	(2.2)	515	(1.9)
Chile	438	(4.3)	447	(2.9)	445	(2.9)	447	(2.4)	444	(2.4)	444	(2.5)
Colombia	388	(3.4)	402	(3.6)	399	(3.1)	416	(2.4)	413	(3.1)	4 11	(3.3)
Costa Rica	m	m	430	(2.8)	429	(2.9)	420	(2.1)	416	(3.3)	4 11	(2.4)
Czech Republic	513	(3.5)	500	(3.0)	508	(3.0)	493	(2.3)	497	(2.5)	498	(2.3)
Denmark*	496	(3.1)	499	(2.5)	498	(2.7)	502	(2.4)	493	(1.9)	494	(2.5)
Estonia	531	(2.5)	528	(2.7)	541	(1.9)	534	(2.1)	530	(1.9)	526	(2.1)
Finland	563	(2.0)	554	(2.3)	545	(2.2)	531	(2.4)	522	(2.5)	5 11	(2.5)
France	495	(3.4)	498	(3.6)	499	(2.6)	495	(2.1)	493	(2.2)	487	(2.7)
Germany	516	(3.8)	520	(2.8)	524	(3.0)	509	(2.7)	503	(2.9)	492	(3.5)
Greece	473	(3.2)	470	(4.0)	467	(3.1)	455	(3.9)	452	(3.1)	441	(2.8)
Hungary	504	(2.7)	503	(3.1)	494	(2.9)	477	(2.4)	481	(2.3)	486	(2.7)
Iceland	491	(1.6)	496	(1.4)	478	(2.1)	473	(1.7)	475	(1.8)	447	(1.8)
Ireland*	508	(3.2)	508	(3.3)	522	(2.5)	503	(2.4)	496	(2.2)	504	(2.3)
Israel	454	(3.7)	455	(3.1)	470	(5.0)	467	(3.4)	462	(3.6)	465	(3.4)
Italy	475	(2.0)	489	(1.8)	494	(1.9)	481	(2.5)	468	(2.4)	477	(3.2)
Japan	531	(3.4)	539	(3.4)	547	(3.6)	538	(3.0)	529	(2.6)	547	(2.8)
Korea	522	(3.4)	538	(3.4)	538	(3.7)	516	(3.1)	519	(2.8)	528	(3.6)
Latvia*	490	(3.0)	494	(3.1)	502	(2.8)	490	(1.6)	487	(1.8)	494	(2.3)
Lithuania	488	(2.8)	491	(2.9)	496	(2.6)	475	(2.7)	482	(1.6)	484	(2.3)
Mexico	410	(2.7)	416	(1.8)	415	(1.3)	416	(2.1)	419	(2.6)	410	(2.4)
Netherlands*	525	(2.7)	522	(5.4)	522	(3.5)	509	(2.3)	503	(2.8)	488	(4.1)
New Zealand*	530	(2.7)	532	(2.6)	516	(2.1)	513	(2.4)	508	(2.1)	504	(2.2)
Norway	487	(3.1)	500	(2.6)	495	(3.1)	498	(2.3)	490	(2.3)	478	(2.4)
Poland	498	(2.3)	508	(2.4)	526	(3.1)	501	(2.5)	5 11	(2.6)	499	(2.5)
Portugal	474	(3.0)	493	(2.9)	489	(3.7)	501	(2.4)	492	(2.8)	484	(2.6)
Slovak Republic	488	(2.6)	490	(3.0)	471	(3.6)	461	(2.6)	464	(2.3)	462	(3.0)
Slovenia	519	(1.1)	512	(1.1)	514	(1.3)	513	(1.3)	507	(1.3)	500	(1.4)
Spain	488	(2.6)	488	(2.1)	496	(1.8)	493	(2.1)	m	m	485	(1.6)
Sweden	503	(2.4)	495	(2.7)	485	(3.0)	493	(3.6)	499	(3.1)	494	(2.4)
Switzerland	512	(3.2)	517	(2.8)	515	(2.7)	506	(2.9)	495	(3.0)	503	(2.2)
Türkiye	424	(3.8)	454	(3.6)	463	(3.9)	425	(3.9)	468	(2.0)	476	(1.9)
United Kingdom*	515	(2.3)	514	(2.5)	514	(3.4)	509	(2.6)	505	(2.6)	500	(2.4)
United States*	489	(4.2)	502	(3.6)	497	(3.8)	496	(3.2)	502	(3.3)	499	(4.3)
OECD average	m	m	m	m	497	(0.5)	489	(0.4)	m	m	485	(0.4)
OECD average-23	503	(0.6)	506	(0.6)	505	(0.6)	497	(0.5)	493	(0.5)	491	(0.5)
OECD average-26	m	m	m	m	491	(0.6)	482	(0.5)	482	(0.5)	479	(0.5)
OECD average-35	495	(0.5)	m	m	499	(0.5)	491	(0.4)	489	(0.4)	487	(0.5)

1. The average decennial trend is the average change, per 10-year period, between the earliest available measurement in PISA and PISA 2022, calculated by a linear regression. The average decennial trend is only computed for countries with comparable data in more than two PISA assessments, over the period considered.

2. Curvilinear trends in performance are computed only for countries with comparable data in more than four PISA assessments. Curvilinear trends are calculated by a regression of performance over both linear and quadratic (squared) terms of the gap between the year of assessment and 2022. The coefficient for the linear term represents the annual rate of change in 2022, while the coefficient for the quadratic term represents the acceleration or deceleration of the change in performance.

* Caution is required when interpreting estimates because one or more PISA sampling standards were not met (see Reader's Guide, Annexes A2 and A4).

Notes: Values that are statistically significant are indicated in bold (see Annex A3). Costa Rica, Georgia, Malaysia, Malta, Moldova and the United Arab Emirates conducted the PISA 2009 assessment in 2010 as part of PISA 2009+. For Cambodia, Guatemala and Paraguay, results reported under PISA 2018 refer to the results of the PISA for Development assessment, in 2017.

Table I.B1.5.6. Mean science performance, 2006 through 2022 [2/6]

	Science performance, by PISA cycle											
	PISA 2006		PISA 2009		PISA 2012		PISA 2015		PISA 2018		PISA 2022	
	Mean score	S.E.	Mean score	S.E.	Mean score	S.E.	Mean score	S.E.	Mean score	S.E.	Mean score	S.E.
Albania	m	m	391	(3.9)	397	(2.4)	427	(3.3)	417	(2.0)	376	(2.2)
Argentina	391	(6.1)	401	(4.6)	406	(3.9)	m	m	404	(2.9)	406	(2.5)
Baku (Azerbaijan)	m	m	m	m	m	m	m	m	398	(2.4)	380	(2.2)
Brazil	390	(2.8)	405	(2.4)	402	(2.1)	401	(2.3)	404	(2.1)	403	(1.9)
Brunei Darussalam	m	m	m	m	m	m	m	m	431	(1.2)	446	(1.3)
Bulgaria	434	(6.1)	439	(5.9)	446	(4.8)	446	(4.4)	424	(3.6)	421	(3.2)
Cambodia	m	m	m	m	m	m	m	m	330	(1.9)	347	(2.1)
Croatia	493	(2.4)	486	(2.8)	491	(3.1)	475	(2.5)	472	(2.8)	483	(2.4)
Cyprus	m	m	m	m	438	(1.2)	433	(1.4)	439	(1.4)	411	(1.5)
Dominican Republic	m	m	m	m	m	m	332	(2.6)	336	(2.5)	360	(2.0)
El Salvador	m	m	m	m	m	m	m	m	m	m	373	(2.6)
Georgia	m	m	373	(2.9)	m	m	411	(2.4)	383	(2.3)	384	(2.3)
Guatemala	m	m	m	m	m	m	m	m	365	(2.9)	373	(2.2)
Hong Kong (China)*	542	(2.5)	549	(2.8)	555	(2.6)	523	(2.5)	517	(2.5)	520	(2.8)
Indonesia	393	(5.7)	383	(3.8)	382	(3.8)	403	(2.6)	396	(2.4)	383	(2.6)
Jamaica*	m	m	m	m	m	m	m	m	m	m	403	(3.9)
Jordan	m	m	m	m	m	m	m	m	m	m	375	(2.4)
Kazakhstan	m	m	400	(3.1)	425	(3.0)	m	m	397	(1.7)	423	(1.7)
Kosovo	m	m	m	m	m	m	378	(1.7)	365	(1.2)	357	(1.3)
Macao (China)	511	(1.1)	511	(1.0)	521	(0.8)	529	(1.1)	544	(1.5)	543	(1.1)
Malaysia	m	m	422	(2.7)	420	(3.0)	m	m	438	(2.7)	416	(2.3)
Malta	m	m	461	(1.7)	m	m	465	(1.6)	457	(1.9)	466	(1.7)
Moldova	m	m	413	(3.0)	m	m	428	(2.0)	428	(2.3)	417	(2.4)
Mongolia	m	m	m	m	m	m	m	m	m	m	412	(2.4)
Montenegro	412	(1.1)	401	(2.0)	410	(1.1)	411	(1.0)	415	(1.3)	403	(1.2)
Morocco	m	m	m	m	m	m	m	m	377	(3.0)	365	(3.4)
North Macedonia	m	m	m	m	m	m	384	(1.2)	413	(1.4)	380	(0.9)
Palestinian Authority	m	m	m	m	m	m	m	m	m	m	369	(2.1)
Panama*	m	m	376	(5.7)	m	m	m	m	365	(2.9)	388	(3.5)
Paraguay	m	m	m	m	m	m	m	m	358	(3.3)	368	(2.1)
Peru	m	m	369	(3.5)	373	(3.6)	397	(2.4)	404	(2.7)	408	(2.6)
Philippines	m	m	m	m	m	m	m	m	357	(3.2)	356	(3.1)
Qatar	349	(0.9)	379	(0.9)	384	(0.7)	418	(1.0)	419	(0.9)	432	(1.5)
Romania	418	(4.2)	428	(3.4)	439	(3.3)	435	(3.2)	426	(4.6)	428	(3.9)
Saudi Arabia	m	m	m	m	m	m	m	m	386	(2.8)	390	(2.0)
Serbia	436	(3.0)	443	(2.4)	445	(3.4)	m	m	440	(3.0)	447	(2.9)
Singapore	m	m	542	(1.4)	551	(1.5)	556	(1.2)	551	(1.5)	561	(1.3)
Chinese Taipei	532	(3.6)	520	(2.6)	523	(2.3)	532	(2.7)	516	(2.9)	537	(3.3)
Thailand	421	(2.1)	425	(3.0)	444	(2.9)	421	(2.8)	426	(3.2)	409	(2.8)
Ukrainian regions (18 of 27)	m	m	m	m	m	m	m	m	m	m	450	(3.8)
United Arab Emirates	m	m	438	(2.6)	448	(2.8)	437	(2.4)	434	(2.0)	432	(1.3)
Uruguay	428	(2.7)	427	(2.6)	416	(2.8)	435	(2.2)	426	(2.5)	435	(2.5)
Uzbekistan	m	m	m	m	m	m	m	m	m	m	355	(2.0)
Viet Nam	m	m	m	m	m	m	m	m	m	m	472	(3.6)

1. The average decennial trend is the average change, per 10-year period, between the earliest available measurement in PISA and PISA 2022, calculated by a linear regression. The average decennial trend is only computed for countries with comparable data in more than two PISA assessments, over the period considered.

2. Curvilinear trends in performance are computed only for countries with comparable data in more than four PISA assessments. Curvilinear trends are calculated by a regression of performance over both linear and quadratic (squared) terms of the gap between the year of assessment and 2022. The coefficient for the linear term represents the annual rate of change in 2022, while the coefficient for the quadratic term represents the acceleration or deceleration of the change in performance.

* Caution is required when interpreting estimates because one or more PISA sampling standards were not met (see Reader's Guide, Annexes A2 and A4).

Notes: Values that are statistically significant are indicated in bold (see Annex A3). Costa Rica, Georgia, Malaysia, Malta, Moldova and the United Arab Emirates conducted the PISA 2009 assessment in 2010 as part of PISA 2009+. For Cambodia, Guatemala and Paraguay, results reported under PISA 2018 refer to the results of the PISA for Development assessment, in 2017.

Table I.B1.5.6. Mean science performance, 2006 through 2022 [3/6]

	Change in science performance between PISA 2022 and:									
	PISA 2006 (PISA 2022 - PISA 2006)		PISA 2009 (PISA 2022 - PISA 2009)		PISA 2012 (PISA 2022 - PISA 2012)		PISA 2015 (PISA 2022 - PISA 2015)		PISA 2018 (PISA 2022 - PISA 2018)	
	Score dif.	S.E.	Score dif.	S.E.	Score dif.	S.E.	Score dif.	S.E.	Score dif.	S.E.
Australia*	-20	(4.7)	-20	(6.7)	-14	(5.8)	-3	(2.8)	4	(3.1)
Austria	-20	(6.0)	m	m	-15	(6.4)	-4	(3.9)	1	(4.2)
Belgium	-20	(5.1)	-16	(6.9)	-14	(6.2)	-11	(3.6)	-8	(3.7)
Canada*	-19	(4.6)	-14	(6.4)	-10	(5.9)	-13	(3.2)	-3	(3.3)
Chile	5	(6.2)	-4	(7.0)	-1	(6.4)	-3	(3.7)	0	(3.8)
Colombia	23	(6.0)	9	(7.7)	12	(6.9)	-5	(4.3)	-2	(4.8)
Costa Rica	m	m	-19	(7.0)	-18	(6.4)	-9	(3.5)	-5	(4.4)
Czech Republic	-15	(5.6)	-3	(7.0)	-11	(6.4)	5	(3.5)	1	(3.8)
Denmark*	-2	(5.4)	-6	(6.9)	-5	(6.4)	-8	(3.7)	1	(3.5)
Estonia	-6	(4.9)	-2	(6.8)	-16	(5.9)	-8	(3.2)	-4	(3.2)
Finland	-52	(4.9)	-43	(6.8)	-34	(6.2)	-20	(3.7)	-11	(3.9)
France	-8	(5.7)	-11	(7.4)	-12	(6.4)	-8	(3.7)	-6	(3.9)
Germany	-23	(6.3)	-28	(7.4)	-32	(6.9)	-17	(4.6)	-11	(4.8)
Greece	-33	(5.6)	-29	(7.7)	-26	(6.7)	-14	(5.0)	-11	(4.5)
Hungary	-18	(5.3)	-17	(7.2)	-8	(6.6)	9	(3.9)	5	(3.9)
Iceland	-44	(4.4)	-49	(6.3)	-31	(5.9)	-26	(2.8)	-28	(3.0)
Ireland*	-4	(5.4)	-4	(7.1)	-18	(6.2)	1	(3.6)	8	(3.5)
Israel	11	(6.2)	10	(7.5)	-5	(7.9)	-2	(5.0)	3	(5.2)
Italy	2	(5.3)	-11	(6.9)	-16	(6.4)	-3	(4.3)	9	(4.3)
Japan	15	(5.7)	7	(7.4)	0	(6.9)	8	(4.3)	17	(4.1)
Korea	6	(6.1)	-10	(7.7)	-10	(7.3)	12	(5.0)	9	(4.8)
Latvia*	4	(5.3)	0	(7.1)	-8	(6.3)	4	(3.1)	7	(3.3)
Lithuania	-3	(5.2)	-7	(7.0)	-11	(6.2)	9	(3.8)	2	(3.3)
Mexico	0	(5.2)	-6	(6.6)	-5	(5.9)	-6	(3.5)	-9	(3.9)
Netherlands*	-37	(6.1)	-34	(9.0)	-34	(7.5)	-20	(4.9)	-15	(5.2)
New Zealand*	-26	(5.1)	-28	(6.8)	-12	(6.1)	-9	(3.6)	-4	(3.5)
Norway	-8	(5.4)	-22	(6.9)	-16	(6.5)	-20	(3.6)	-12	(3.7)
Poland	1	(5.1)	-9	(6.9)	-27	(6.6)	-2	(3.8)	-12	(4.0)
Portugal	10	(5.4)	-9	(7.1)	-5	(6.9)	-17	(3.8)	-7	(4.1)
Slovak Republic	-26	(5.4)	-28	(7.3)	-9	(7.0)	1	(4.2)	-2	(4.1)
Slovenia	-19	(4.1)	-12	(6.2)	-14	(5.5)	-13	(2.4)	-7	(2.5)
Spain	-4	(4.8)	-4	(6.5)	-12	(5.7)	-8	(3.0)	m	m
Sweden	-10	(5.0)	-2	(6.9)	9	(6.4)	0	(4.5)	-6	(4.2)
Switzerland	-9	(5.3)	-14	(6.9)	-13	(6.3)	-3	(3.9)	7	(4.0)
Türkiye	52	(5.7)	22	(7.2)	13	(6.8)	50	(4.6)	8	(3.2)
United Kingdom*	-15	(4.9)	-14	(6.9)	-14	(6.6)	-10	(3.8)	-5	(3.8)
United States*	11	(7.1)	-3	(8.2)	2	(7.7)	3	(5.5)	-3	(5.7)
OECD average	m	m	m	m	-12	(5.2)	-4	(1.5)	m	m
OECD average-23	-12	(3.8)	-15	(6.0)	-14	(5.3)	-6	(1.6)	-3	(1.8)
OECD average-26	m	m	m	m	-12	(5.3)	-3	(1.6)	-3	(1.8)
OECD average-35	-8	(3.7)	m	m	-12	(5.2)	-4	(1.5)	-2	(1.7)

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Table I.B1.5.6. Mean science performance, 2006 through 2022 [4/6]

| | Change in science performance between PISA 2022 and: | | | | | | | | | |
| | PISA 2006 (PISA 2022 - PISA 2006) | | PISA 2009 (PISA 2022 - PISA 2009) | | PISA 2012 (PISA 2022 - PISA 2012) | | PISA 2015 (PISA 2022 - PISA 2015) | | PISA 2018 (PISA 2022 - PISA 2018) | |
Partners	Score dif.	S.E.	Score dif.	S.E.	Score dif.	S.E.	Score dif.	S.E.	Score dif.	S.E.
Albania	m	m	**-15**	(7.4)	**-21**	(6.2)	**-51**	(4.2)	**-41**	(3.4)
Argentina	**15**	(7.5)	5	(7.9)	1	(7.0)	m	m	2	(4.1)
Baku (Azerbaijan)	m	m	m	m	m	m	m	m	**-18**	(3.6)
Brazil	**13**	(5.0)	-2	(6.7)	1	(5.9)	2	(3.3)	-1	(3.2)
Brunei Darussalam	m	m	m	m	m	m	m	m	**15**	(2.4)
Bulgaria	-13	(7.8)	**-18**	(8.9)	**-25**	(7.7)	**-25**	(5.6)	-3	(5.1)
Cambodia	m	m	m	m	m	m	m	m	**17**	(3.3)
Croatia	**-11**	(5.0)	-4	(7.0)	-9	(6.5)	**7**	(3.7)	**10**	(4.0)
Cyprus	m	m	m	m	**-27**	(5.5)	**-22**	(2.4)	**-28**	(2.6)
Dominican Republic	m	m	m	m	m	m	**29**	(3.6)	**25**	(3.6)
El Salvador	m	m	m	m	m	m	m	m	m	m
Georgia	m	m	11	(7.0)	m	m	**-27**	(3.6)	1	(3.6)
Guatemala	m	m	m	m	m	m	m	m	**8**	(4.0)
Hong Kong (China)*	**-22**	(5.2)	**-29**	(7.1)	**-35**	(6.5)	-3	(4.0)	4	(4.1)
Indonesia	-11	(7.3)	0	(7.5)	1	(6.9)	**-20**	(3.9)	**-13**	(3.9)
Jamaica*	m	m	m	m	m	m	m	m	m	m
Jordan	m	m	m	m	m	m	m	m	m	m
Kazakhstan	m	m	**23**	(6.9)	-2	(6.2)	m	m	**26**	(2.9)
Kosovo	m	m	m	m	m	m	**-21**	(2.5)	**-8**	(2.4)
Macao (China)	**32**	(4.0)	**32**	(6.1)	**23**	(5.4)	**15**	(2.1)	0	(2.4)
Malaysia	m	m	-6	(6.9)	-3	(6.4)	m	m	**-21**	(3.9)
Malta	m	m	4	(6.4)	m	m	1	(2.7)	**9**	(3.0)
Moldova	m	m	4	(7.1)	m	m	**-11**	(3.4)	**-12**	(3.7)
Mongolia	m	m	m	m	m	m	m	m	m	m
Montenegro	**-9**	(4.0)	2	(6.4)	-7	(5.4)	**-8**	(2.1)	**-12**	(2.4)
Morocco	m	m	m	m	m	m	m	m	**-11**	(4.8)
North Macedonia	m	m	m	m	m	m	-4	(2.1)	**-33**	(2.3)
Palestinian Authority	m	m	m	m	m	m	m	m	m	m
Panama*	m	m	12	(9.0)	m	m	m	m	**23**	(4.8)
Paraguay	m	m	m	m	m	m	m	m	**10**	(4.2)
Peru	m	m	**38**	(7.4)	**35**	(6.8)	**11**	(3.8)	4	(4.1)
Philippines	m	m	m	m	m	m	m	m	-1	(4.7)
Qatar	**83**	(4.1)	**53**	(6.2)	**49**	(5.5)	**15**	(2.3)	**13**	(2.4)
Romania	9	(6.8)	-1	(7.8)	-11	(7.2)	-7	(5.2)	2	(6.2)
Saudi Arabia	m	m	m	m	m	m	m	m	4	(3.8)
Serbia	**12**	(5.6)	5	(7.0)	3	(6.9)	m	m	8	(4.5)
Singapore	m	m	**20**	(6.2)	10	(5.6)	**6**	(2.3)	**10**	(2.6)
Chinese Taipei	5	(6.1)	**17**	(7.3)	**14**	(6.6)	5	(4.5)	**22**	(4.7)
Thailand	**-12**	(5.1)	**-16**	(7.2)	**-35**	(6.6)	**-12**	(4.2)	**-17**	(4.5)
Ukrainian regions (18 of 27)	m	m	m	m	m	m	m	m	m	m
United Arab Emirates	m	m	-6	(6.6)	**-16**	(6.1)	-5	(3.1)	-2	(2.9)
Uruguay	7	(5.2)	8	(6.9)	**20**	(6.4)	0	(3.6)	**10**	(3.9)
Uzbekistan	m	m	m	m	m	m	m	m	m	m
Viet Nam	m	m	m	m	m	m	m	m	m	m

1. The average decennial trend is the average change, per 10-year period, between the earliest available measurement in PISA and PISA 2022, calculated by a linear regression. The average decennial trend is only computed for countries with comparable data in more than two PISA assessments, over the period considered.
2. Curvilinear trends in performance are computed only for countries with comparable data in more than four PISA assessments. Curvilinear trends are calculated by a regression of performance over both linear and quadratic (squared) terms of the gap between the year of assessment and 2022. The coefficient for the linear term represents the annual rate of change in 2022, while the coefficient for the quadratic term represents the acceleration or deceleration of the change in performance.
 * Caution is required when interpreting estimates because one or more PISA sampling standards were not met (see Reader's Guide, Annexes A2 and A4).
Notes: Values that are statistically significant are indicated in bold (see Annex A3). Costa Rica, Georgia, Malaysia, Malta, Moldova and the United Arab Emirates conducted the PISA 2009 assessment in 2010 as part of PISA 2009+. For Cambodia, Guatemala and Paraguay, results reported under PISA 2018 refer to the results of the PISA for Development assessment, in 2017.

Table I.B1.5.6. Mean science performance, 2006 through 2022 [5/6]

| | Average decennial trend in science performance[1] across PISA assessments (since 2006 or earliest assessment available) | | | Average decennial trend in science performance[1] since 2012 (or earliest assessment available after 2012) | | | Curvilinear trend in science performance across PISA assessments [2] | | | |
| | | | | | | | Annual rate of change in 2022 (linear term) | | Rate of acceleration or deceleration in performance (quadratic term) | |
	Coef.	S.E.	p-value	Coef.	S.E.	p-value	Coef.	S.E.	Coef.	S.E.
OECD Australia*	**-16**	(4.6)	0.000	**-14**	(5.3)	0.007	-0.8	(0.7)	0.05	(0.04)
Austria	**-14**	(5.0)	0.004	**-14**	(5.9)	0.015	-0.8	(0.8)	0.04	(0.05)
Belgium	**-11**	(4.8)	0.016	**-14**	(5.7)	0.012	**-1.8**	(0.8)	-0.04	(0.05)
Canada*	**-12**	(4.6)	0.011	**-13**	(5.4)	0.018	**-1.4**	(0.7)	-0.01	(0.04)
Chile	2	(5.0)	0.730	-2	(6.0)	0.769	-1.1	(0.9)	-0.08	(0.06)
Colombia	**15**	(5.1)	0.003	10	(6.4)	0.119	-0.9	(1.0)	**-0.15**	(0.06)
Costa Rica	**-16**	(5.9)	0.006	**-18**	(5.9)	0.003	-1.4	(1.0)	0.02	(0.10)
Czech Republic	-9	(4.9)	0.064	-8	(6.0)	0.198	0.7	(0.8)	0.10	(0.05)
Denmark*	-3	(4.8)	0.581	-7	(5.8)	0.222	-1.4	(0.8)	-0.07	(0.05)
Estonia	-3	(4.7)	0.545	**-15**	(5.4)	0.005	**-2.3**	(0.7)	**-0.12**	(0.04)
Finland	**-34**	(4.7)	0.000	**-34**	(5.7)	0.000	**-3.1**	(0.8)	0.02	(0.05)
France	-6	(5.0)	0.255	-12	(5.9)	0.053	**-2.0**	(0.8)	-0.09	(0.05)
Germany	**-17**	(5.1)	0.001	**-31**	(6.4)	0.000	**-4.6**	(1.0)	**-0.18**	(0.06)
Greece	**-21**	(5.0)	0.000	**-24**	(6.3)	0.000	**-2.7**	(0.9)	-0.04	(0.06)
Hungary	**-15**	(4.8)	0.002	-5	(6.1)	0.373	1.1	(0.9)	**0.16**	(0.05)
Iceland	**-27**	(4.6)	0.000	**-29**	(5.5)	0.000	**-4.9**	(0.6)	**-0.14**	(0.04)
Ireland*	-7	(4.8)	0.155	**-17**	(5.7)	0.003	-1.4	(0.8)	-0.04	(0.05)
Israel	7	(5.1)	0.185	-5	(7.3)	0.483	-1.2	(1.1)	-0.11	(0.07)
Italy	-6	(4.8)	0.215	**-17**	(6.1)	0.004	**-2.6**	(0.9)	**-0.12**	(0.05)
Japan	4	(5.0)	0.454	-1	(6.4)	0.851	0.3	(0.9)	-0.01	(0.06)
Korea	-4	(5.1)	0.393	-7	(6.9)	0.3 11	-0.6	(1.0)	-0.01	(0.06)
Latvia*	-1	(4.8)	0.829	-8	(5.7)	0.154	-0.9	(0.8)	-0.05	(0.05)
Lithuania	-6	(4.7)	0.232	-7	(5.8)	0.209	-0.2	(0.8)	0.02	(0.05)
Mexico	1	(4.8)	0.866	-4	(5.5)	0.466	**-1.7**	(0.7)	**-0.11**	(0.05)
Netherlands*	**-23**	(5.2)	0.000	**-32**	(6.9)	0.000	**-4.3**	(1.1)	**-0.12**	(0.06)
New Zealand*	**-18**	(4.8)	0.000	**-12**	(5.6)	0.039	-1.1	(0.8)	0.05	(0.05)
Norway	-7	(4.8)	0.175	**-18**	(6.0)	0.003	**-4.4**	(0.8)	**-0.23**	(0.05)
Poland	-1	(4.8)	0.795	**-21**	(6.0)	0.000	**-4.1**	(0.8)	**-0.24**	(0.05)
Portugal	5	(4.8)	0.295	-7	(6.3)	0.246	**-3.6**	(0.8)	**-0.26**	(0.05)
Slovak Republic	**-20**	(4.9)	0.000	-7	(6.5)	0.291	0.3	(0.9)	**0.14**	(0.05)
Slovenia	**-10**	(4.5)	0.026	**-14**	(5.0)	0.004	**-1.7**	(0.6)	-0.05	(0.04)
Spain	-2	(4.4)	0.612	**-12**	(5.0)	0.016	**-2.2**	(0.7)	**-0.12**	(0.05)
Sweden	-2	(4.8)	0.601	9	(6.0)	0.137	1.7	(0.8)	**0.12**	(0.05)
Switzerland	**-11**	(4.9)	0.029	**-14**	(5.8)	0.019	-1.3	(0.8)	-0.01	(0.05)
Türkiye	**24**	(4.9)	0.000	**25**	(6.3)	0.000	**2.8**	(0.9)	0.03	(0.06)
United Kingdom*	**-10**	(4.7)	0.033	**-15**	(6.1)	0.013	**-2.1**	(0.8)	-0.07	(0.05)
United States*	5	(5.4)	0.372	4	(7.2)	0.606	-0.6	(1.1)	-0.06	(0.07)
OECD average	-7	(4.4)	0.098	**-11**	(4.8)	0.020	**-1.5**	(0.4)	-0.05	(0.03)
OECD average-23	**-9**	(4.4)	0.031	**-13**	(4.8)	0.005	**-1.8**	(0.5)	-0.05	(0.03)
OECD average-26	-7	(4.4)	0.104	**-11**	(4.8)	0.026	**-1.4**	(0.5)	-0.04	(0.03)
OECD average-35	-7	(4.4)	0.102	**-11**	(4.8)	0.022	**-1.5**	(0.5)	-0.05	(0.03)

1. The average decennial trend is the average change, per 10-year period, between the earliest available measurement in PISA and PISA 2022, calculated by a linear regression. The average decennial trend is only computed for countries with comparable data in more than two PISA assessments, over the period considered.

2. Curvilinear trends in performance are computed only for countries with comparable data in more than four PISA assessments. Curvilinear trends are calculated by a regression of performance over both linear and quadratic (squared) terms of the gap between the year of assessment and 2022. The coefficient for the linear term represents the annual rate of change in 2022, while the coefficient for the quadratic term represents the acceleration or deceleration of the change in performance.

* Caution is required when interpreting estimates because one or more PISA sampling standards were not met (see Reader's Guide, Annexes A2 and A4).

Notes: Values that are statistically significant are indicated in bold (see Annex A3). Costa Rica, Georgia, Malaysia, Malta, Moldova and the United Arab Emirates conducted the PISA 2009 assessment in 2010 as part of PISA 2009+. For Cambodia, Guatemala and Paraguay, results reported under PISA 2018 refer to the results of the PISA for Development assessment, in 2017.

Table I.B1.5.6. Mean science performance, 2006 through 2022 [6/6]

| | Average decennial trend in science performance[1] across PISA assessments (since 2006 or earliest assessment available) | | | Average decennial trend in science performance[1] since 2012 (or earliest assessment available after 2012) | | | Curvilinear trend in science performance across PISA assessments [2] | | | |
| | | | | | | | Annual rate of change in 2022 (linear term) | | Rate of acceleration or deceleration in performance (quadratic term) | |
	Coef.	S.E.	p-value	Coef.	S.E.	p-value	Coef.	S.E.	Coef.	S.E.
Albania	-5	(5.8)	0.351	**-26**	(5.8)	0.000	**-12.4**	(1.0)	**-0.92**	(0.09)
Argentina	7	(5.4)	0.178	0	(7.1)	0.996	-1.2	(1.2)	-0.12	(0.09)
Baku (Azerbaijan)	m	m	m	m	m	m	m	m	m	m
Brazil	5	(4.7)	0.290	2	(5.4)	0.720	-0.9	(0.7)	**-0.09**	(0.05)
Brunei Darussalam	m	m	m	m	m	m	m	m	m	m
Bulgaria	-11	(5.7)	0.059	**-30**	(7.2)	0.000	**-5.0**	(1.2)	**-0.25**	(0.08)
Cambodia	m	m	m	m	m	m	m	m	m	m
Croatia	**-10**	(4.8)	0.044	-7	(6.0)	0.212	0.9	(0.8)	**0.12**	(0.05)
Cyprus	m	m	m	**-24**	(5.2)	0.000	m	m	m	m
Dominican Republic	m	m	m	41	(5.0)	0.000	m	m	m	m
El Salvador	m	m	m	m	m	m	m	m	m	m
Georgia	6	(5.6)	0.314	**-36**	(5.3)	0.000	m	m	m	m
Guatemala	m	m	m	m	m	m	m	m	m	m
Hong Kong (China)*	**-21**	(4.8)	0.000	**-31**	(5.9)	0.000	**-3.1**	(0.8)	-0.06	(0.05)
Indonesia	0	(5.3)	0.973	-3	(6.3)	0.652	-1.3	(1.0)	-0.08	(0.07)
Jamaica*	m	m	m	m	m	m	m	m	m	m
Jordan	m	m	m	m	m	m	m	m	m	m
Kazakhstan	6	(5.6)	0.258	-5	(6.4)	0.427	m	m	m	m
Kosovo	m	m	m	**-29**	(4.0)	0.000	m	m	m	m
Macao (China)	**24**	(4.5)	0.000	24	(4.9)	0.000	**2.4**	(0.5)	0.00	(0.03)
Malaysia	1	(5.9)	0.834	0	(6.6)	0.956	m	m	m	m
Malta	2	(5.2)	0.760	3	(3.9)	0.518	m	m	m	m
Moldova	5	(5.7)	0.425	**-16**	(4.8)	0.001	m	m	m	m
Mongolia	m	m	m	m	m	m	m	m	m	m
Montenegro	0	(4.5)	0.945	-6	(5.0)	0.242	-1.0	(0.5)	-0.06	(0.03)
Morocco	m	m	m	m	m	m	m	m	m	m
North Macedonia	m	m	m	**-10**	(3.3)	0.003	m	m	m	m
Palestinian Authority	m	m	m	m	m	m	m	m	m	m
Panama*	5	(7.1)	0.461	m	m	m	m	m	m	m
Paraguay	m	m	m	m	m	m	m	m	m	m
Peru	**33**	(5.9)	0.000	**33**	(6.3)	0.000	1.2	(1.0)	-0.17	(0.09)
Philippines	m	m	m	m	m	m	m	m	m	m
Qatar	**51**	(4.5)	0.000	**44**	(5.0)	0.000	**1.8**	(0.5)	**-0.21**	(0.03)
Romania	3	(5.3)	0.590	-13	(6.9)	0.070	**-2.8**	(1.1)	**-0.19**	(0.07)
Saudi Arabia	m	m	m	m	m	m	m	m	m	m
Serbia	4	(4.8)	0.356	2	(7.0)	0.796	0.0	(1.1)	-0.03	(0.07)
Singapore	**12**	(5.2)	0.017	8	(5.1)	0.101	0.7	(0.5)	-0.04	(0.06)
Chinese Taipei	2	(5.0)	0.650	9	(6.2)	0.144	**3.0**	(0.9)	**0.17**	(0.06)
Thailand	-8	(4.8)	0.103	**-30**	(6.1)	0.000	**-5.1**	(0.8)	**-0.27**	(0.05)
Ukrainian regions (18 of 27)	m	m	m	m	m	m	m	m	m	m
United Arab Emirates	-8	(5.7)	0.152	**-15**	(5.6)	0.006	**-1.8**	(0.8)	-0.07	(0.09)
Uruguay	5	(4.8)	0.320	**15**	(6.1)	0.017	**2.0**	(0.8)	0.09	(0.05)
Uzbekistan	m	m	m	m	m	m	m	m	m	m
Viet Nam	m	m	m	m	m	m	m	m	m	m

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Table I.B1.7.1. Percentage of students with an immigrant background in PISA 2022 [1/2]

Based on students' reports

	PISA 2022								Difference between first generation immigrant and second generation-immigrant students	
	Non-immigrant students		Immigrant students							
			All immigrant students		Second-generation immigrant students		First-generation immigrant students			
	%	S.E.	%	S.E.	%	S.E.	%	S.E.	% dif.	S.E.
Australia*	70.7	(0.9)	29.3	(0.9)	15.5	(0.6)	13.9	(0.5)	**-1.6**	(0.7)
Austria	73.4	(1.1)	26.6	(1.1)	17.0	(0.8)	9.6	(0.6)	**-7.4**	(0.9)
Belgium	79.5	(1.1)	20.5	(1.1)	11.5	(0.7)	8.9	(0.5)	**-2.6**	(0.7)
Canada*	65.6	(1.1)	34.4	(1.1)	18.3	(0.8)	16.1	(0.6)	**-2.1**	(0.9)
Chile	93.1	(0.9)	6.9	(0.9)	0.9	(0.2)	6.0	(0.9)	**5.1**	(0.9)
Colombia	97.1	(0.5)	2.9	(0.5)	0.2	(0.1)	2.6	(0.5)	**2.4**	(0.5)
Costa Rica	87.5	(0.9)	12.5	(0.9)	8.7	(0.8)	3.8	(0.4)	**-4.8**	(0.7)
Czech Republic	95.9	(0.4)	4.1	(0.4)	2.0	(0.2)	2.1	(0.3)	0.1	(0.2)
Denmark*	89.3	(0.4)	10.7	(0.4)	6.8	(0.3)	4.0	(0.3)	**-2.8**	(0.4)
Estonia	91.3	(0.4)	8.7	(0.4)	7.5	(0.4)	1.3	(0.1)	**-6.2**	(0.5)
Finland	93.2	(0.3)	6.8	(0.3)	2.9	(0.1)	3.9	(0.2)	**1.0**	(0.2)
France	83.5	(0.8)	16.5	(0.8)	11.3	(0.7)	5.2	(0.3)	**-6.0**	(0.7)
Germany	74.2	(1.1)	25.8	(1.1)	16.6	(0.7)	9.2	(0.7)	**-7.5**	(0.9)
Greece	86.8	(0.7)	13.2	(0.7)	10.6	(0.7)	2.5	(0.2)	**-8.1**	(0.7)
Hungary	97.8	(0.2)	2.2	(0.2)	1.2	(0.1)	1.0	(0.1)	-0.2	(0.2)
Iceland	92.6	(0.5)	7.4	(0.5)	3.5	(0.3)	3.9	(0.4)	0.5	(0.5)
Ireland*	82.6	(1.2)	17.4	(1.2)	9.4	(0.7)	8.0	(0.7)	**-1.5**	(0.7)
Israel	84.9	(0.9)	15.1	(0.9)	11.5	(0.8)	3.7	(0.4)	**-7.8**	(0.7)
Italy	89.3	(0.6)	10.7	(0.6)	7.6	(0.4)	3.1	(0.3)	**-4.5**	(0.4)
Japan	99.3	(0.1)	0.7	(0.1)	0.4	(0.1)	0.3	(0.1)	-0.1	(0.1)
Korea	99.6	(0.1)	0.4	(0.1)	0.1	(0.0)	0.3	(0.1)	**0.3**	(0.1)
Latvia*	96.7	(0.3)	3.3	(0.3)	2.5	(0.2)	0.8	(0.1)	**-1.7**	(0.2)
Lithuania	98.2	(0.2)	1.8	(0.2)	1.1	(0.1)	0.7	(0.1)	-0.4	(0.2)
Mexico	98.5	(0.2)	1.5	(0.2)	0.5	(0.1)	1.0	(0.2)	**0.5**	(0.2)
Netherlands*	86.4	(1.0)	13.6	(1.0)	9.0	(0.8)	4.6	(0.4)	**-4.5**	(0.8)
New Zealand*	71.5	(1.2)	28.5	(1.2)	14.2	(0.8)	14.3	(0.7)	0.1	(1.0)
Norway	84.1	(1.0)	15.9	(1.0)	8.7	(0.8)	7.3	(0.4)	-1.4	(0.8)
Poland	98.8	(0.2)	1.2	(0.2)	0.1	(0.1)	1.0	(0.2)	**0.9**	(0.2)
Portugal	88.7	(0.7)	11.3	(0.7)	4.6	(0.4)	6.7	(0.6)	**2.1**	(0.7)
Slovak Republic	98.2	(0.2)	1.8	(0.2)	0.7	(0.1)	1.1	(0.2)	0.4	(0.2)
Slovenia	90.2	(0.5)	9.8	(0.5)	3.7	(0.3)	6.1	(0.5)	**2.3**	(0.6)
Spain	84.9	(0.6)	15.1	(0.6)	8.8	(0.4)	6.3	(0.4)	**-2.5**	(0.4)
Sweden	78.7	(0.8)	21.3	(0.8)	10.8	(0.6)	10.6	(0.5)	-0.2	(0.8)
Switzerland	65.1	(1.0)	34.9	(1.0)	22.2	(0.8)	12.7	(0.5)	**-9.5**	(0.8)
Türkiye	98.3	(0.2)	1.7	(0.2)	0.3	(0.1)	1.4	(0.2)	**1.1**	(0.2)
United Kingdom*	79.9	(1.1)	20.1	(1.1)	11.1	(0.7)	9.0	(0.7)	**-2.2**	(0.9)
United States*	76.3	(1.7)	23.7	(1.7)	18.6	(1.5)	5.1	(0.5)	**-13.5**	(1.4)
OECD average	87.1	(0.1)	12.9	(0.1)	7.6	(0.1)	5.4	(0.1)	**-2.2**	(0.1)

* Caution is required when interpreting estimates because one or more PISA sampling standards were not met (see Reader's Guide, Annexes A2 and A4).
Note: Values that are statistically significant are indicated in bold (see Annex A3).

Table I.B1.7.1. Percentage of students with an immigrant background in PISA 2022 [2/2]

Based on students' reports

	Non-immigrant students		All immigrant students		Second-generation immigrant students[1]		First-generation immigrant students[2]		Difference between first generation immigrant and second generation-immigrant students	
	%	S.E.	%	S.E.	%	S.E.	%	S.E.	% dif.	S.E.
Partners										
Albania	98.9	(0.1)	1.1	(0.1)	0.6	(0.1)	0.5	(0.1)	-0.1	(0.1)
Argentina	94.7	(0.6)	5.3	(0.6)	3.5	(0.4)	1.7	(0.2)	**-1.8**	(0.4)
Baku (Azerbaijan)	95.6	(0.3)	4.4	(0.3)	3.0	(0.2)	1.4	(0.2)	**-1.6**	(0.3)
Brazil	99.5	(0.1)	0.5	(0.1)	0.3	(0.1)	0.2	(0.1)	-0.1	(0.1)
Brunei Darussalam	92.1	(0.4)	7.9	(0.4)	3.0	(0.2)	4.9	(0.3)	**2.0**	(0.4)
Bulgaria	98.9	(0.2)	1.1	(0.2)	0.5	(0.1)	0.6	(0.1)	0.1	(0.2)
Cambodia	99.6	(0.1)	0.4	(0.1)	0.2	(0.1)	0.2	(0.1)	0.0	(0.1)
Croatia	91.2	(0.5)	8.8	(0.5)	7.5	(0.5)	1.3	(0.1)	**-6.2**	(0.5)
Cyprus	80.5	(0.5)	19.5	(0.5)	7.7	(0.3)	11.9	(0.6)	**4.2**	(0.8)
Dominican Republic	95.8	(0.3)	4.2	(0.3)	2.1	(0.2)	2.1	(0.3)	-0.1	(0.3)
El Salvador	99.3	(0.1)	0.7	(0.1)	0.3	(0.1)	0.4	(0.1)	0.0	(0.1)
Georgia	98.9	(0.2)	1.1	(0.2)	0.5	(0.1)	0.7	(0.2)	0.2	(0.2)
Guatemala	99.2	(0.2)	0.8	(0.2)	0.3	(0.1)	0.5	(0.2)	0.2	(0.2)
Hong Kong (China)*	60.5	(1.3)	39.5	(1.3)	31.3	(1.2)	8.2	(0.6)	**-23.2**	(1.3)
Indonesia	99.6	(0.1)	0.4	(0.1)	0.3	(0.1)	0.1	(0.1)	**-0.2**	(0.1)
Jamaica*	98.8	(0.2)	1.2	(0.2)	0.6	(0.1)	0.6	(0.2)	0.0	(0.2)
Jordan	88.5	(0.6)	11.5	(0.6)	5.0	(0.3)	6.5	(0.4)	**1.6**	(0.5)
Kazakhstan	92.6	(0.5)	7.4	(0.5)	4.3	(0.3)	3.1	(0.3)	**-1.1**	(0.3)
Kosovo	98.6	(0.2)	1.4	(0.2)	1.0	(0.1)	0.4	(0.1)	**-0.6**	(0.2)
Macao (China)	39.7	(0.7)	60.3	(0.7)	38.3	(0.8)	22.0	(0.6)	**-16.3**	(1.3)
Malaysia	98.5	(0.2)	1.5	(0.2)	1.2	(0.2)	0.4	(0.1)	**-0.8**	(0.2)
Malta	88.1	(0.5)	11.9	(0.5)	3.0	(0.3)	8.9	(0.5)	**5.9**	(0.7)
Moldova	98.2	(0.2)	1.8	(0.2)	1.2	(0.2)	0.5	(0.1)	**-0.7**	(0.2)
Mongolia	99.6	(0.1)	0.4	(0.1)	0.2	(0.1)	0.1	(0.0)	-0.1	(0.1)
Montenegro	93.8	(0.4)	6.2	(0.4)	3.5	(0.2)	2.7	(0.3)	**-0.8**	(0.4)
Morocco	99.3	(0.1)	0.7	(0.1)	0.2	(0.1)	0.5	(0.1)	**0.2**	(0.1)
North Macedonia	98.0	(0.2)	2.0	(0.2)	1.1	(0.1)	0.9	(0.1)	-0.2	(0.2)
Palestinian Authority	97.8	(0.2)	2.2	(0.2)	1.4	(0.1)	0.8	(0.1)	**-0.6**	(0.2)
Panama*	95.5	(0.6)	4.5	(0.6)	1.2	(0.2)	3.3	(0.5)	**2.1**	(0.5)
Paraguay	97.9	(0.4)	2.1	(0.4)	1.2	(0.2)	1.0	(0.2)	-0.2	(0.2)
Peru	98.8	(0.2)	1.2	(0.2)	0.2	(0.1)	0.9	(0.2)	**0.7**	(0.2)
Philippines	98.0	(0.2)	2.0	(0.2)	1.1	(0.1)	0.9	(0.1)	-0.2	(0.2)
Qatar	40.9	(0.5)	59.1	(0.5)	17.8	(0.6)	41.2	(0.7)	**23.4**	(1.2)
Romania	99.4	(0.1)	0.6	(0.1)	0.4	(0.1)	0.3	(0.1)	-0.1	(0.1)
Saudi Arabia	89.2	(1.0)	10.8	(1.0)	4.7	(0.5)	6.1	(0.6)	**1.5**	(0.4)
Serbia	89.3	(0.5)	10.7	(0.5)	9.9	(0.4)	0.8	(0.1)	**-9.1**	(0.4)
Singapore	71.4	(0.7)	28.6	(0.7)	11.1	(0.4)	17.5	(0.7)	**6.4**	(0.9)
Chinese Taipei	99.3	(0.2)	0.7	(0.2)	0.5	(0.1)	0.2	(0.1)	-0.2	(0.1)
Thailand	97.5	(0.5)	2.5	(0.5)	1.9	(0.4)	0.6	(0.2)	**-1.3**	(0.3)
Ukrainian regions (18 of 27)	99.1	(0.2)	0.9	(0.2)	0.8	(0.2)	0.2	(0.1)	**-0.6**	(0.2)
United Arab Emirates	47.1	(0.5)	52.9	(0.5)	18.6	(0.3)	34.3	(0.4)	**15.7**	(0.5)
Uruguay	98.4	(0.3)	1.6	(0.3)	0.3	(0.1)	1.2	(0.2)	**0.9**	(0.2)
Uzbekistan	99.0	(0.1)	1.0	(0.1)	0.7	(0.1)	0.3	(0.0)	**-0.3**	(0.1)
Viet Nam	99.9	(0.0)	0.1	(0.0)	0.1	(0.0)	0.1	(0.0)	0.0	(0.0)

* Caution is required when interpreting estimates because one or more PISA sampling standards were not met (see Reader's Guide, Annexes A2 and A4).
Note: Values that are statistically significant are indicated in bold (see Annex A3).

Table I.B1.7.17. Mathematics performance of students with an immigrant background in PISA 2022 [1/2]

	Mathematics performance										Difference between immigrant and non-immigrant students	
	All students		Non-immigrant students		Immigrant students							
					All immigrant students		Second-generation immigrant students		First-generation immigrant students			
	Mean score	S.E.	Mean score	S.E.	Mean score	S.E.	Mean score	S.E.	Mean score	S.E.	Score dif.	S.E.
Australia*	487	(1.8)	483	(1.5)	507	(3.7)	509	(4.4)	506	(4.5)	**24**	(3.5)
Austria	487	(2.3)	505	(2.4)	447	(3.7)	451	(4.3)	439	(6.3)	**-58**	(4.2)
Belgium	489	(2.2)	504	(2.3)	446	(3.6)	452	(4.0)	439	(5.5)	**-58**	(4.0)
Canada*	497	(1.6)	497	(1.8)	508	(2.9)	517	(3.4)	499	(3.7)	**12**	(3.2)
Chile	412	(2.1)	417	(2.1)	388	(6.6)	435	(12.9)	381	(6.9)	**-29**	(6.7)
Colombia	383	(3.0)	387	(2.9)	363	(9.6)	c	c	366	(10.6)	**-24**	(9.2)
Costa Rica	385	(1.9)	387	(2.0)	371	(3.9)	373	(4.3)	367	(6.0)	**-16**	(4.1)
Czech Republic	487	(2.1)	489	(2.2)	463	(6.5)	484	(9.4)	443	(8.2)	**-25**	(6.5)
Denmark*	489	(1.9)	497	(2.1)	442	(4.0)	445	(4.1)	437	(6.6)	**-54**	(4.3)
Estonia	510	(2.0)	514	(2.1)	490	(5.4)	492	(5.2)	475	(13.2)	**-25**	(5.8)
Finland	484	(1.9)	491	(1.9)	425	(3.3)	442	(4.1)	413	(5.0)	**-65**	(3.5)
France	474	(2.5)	485	(2.5)	434	(5.0)	438	(5.9)	425	(6.3)	**-51**	(5.3)
Germany	475	(3.1)	495	(3.0)	436	(4.2)	457	(4.3)	398	(5.9)	**-59**	(4.4)
Greece	430	(2.3)	438	(2.4)	398	(3.6)	404	(3.9)	373	(8.3)	**-40**	(4.3)
Hungary	473	(2.5)	474	(2.5)	482	(10.1)	499	(11.1)	462	(15.6)	8	(9.8)
Iceland	459	(1.6)	464	(1.7)	427	(5.3)	436	(8.5)	419	(7.7)	**-37**	(5.6)
Ireland*	492	(2.0)	495	(2.2)	487	(3.2)	489	(4.3)	484	(4.0)	**-8**	(3.4)
Israel	458	(3.3)	467	(3.3)	454	(5.5)	468	(5.6)	410	(9.1)	**-13**	(5.1)
Italy	471	(3.1)	476	(3.2)	446	(4.9)	453	(4.9)	430	(8.3)	**-30**	(4.9)
Japan	536	(2.9)	537	(2.9)	504	(18.0)	c	c	c	c	-33	(17.5)
Korea	527	(3.9)	529	(3.8)	c	c	c	c	c	c	c	c
Latvia*	483	(2.0)	484	(1.9)	492	(8.8)	491	(7.7)	496	(20.4)	8	(8.3)
Lithuania	475	(1.8)	477	(1.8)	463	(8.4)	453	(7.8)	479	(17.3)	-14	(8.7)
Mexico	395	(2.3)	398	(2.2)	334	(8.1)	352	(11.1)	325	(10.0)	**-64**	(8.3)
Netherlands*	493	(3.8)	508	(3.3)	450	(7.1)	460	(7.9)	431	(10.1)	**-58**	(7.5)
New Zealand*	479	(2.0)	479	(2.4)	491	(4.1)	500	(6.0)	482	(4.9)	**12**	(5.1)
Norway	468	(2.1)	479	(2.2)	443	(4.0)	448	(5.5)	436	(4.3)	**-36**	(4.5)
Poland	489	(2.3)	492	(2.2)	447	(14.8)	c	c	435	(13.7)	**-45**	(14.9)
Portugal	472	(2.4)	477	(2.2)	445	(5.1)	461	(6.8)	434	(5.9)	**-32**	(4.9)
Slovak Republic	464	(2.9)	467	(2.9)	456	(10.8)	459	(17.1)	454	(13.3)	-11	(10.9)
Slovenia	485	(1.2)	492	(1.3)	433	(4.8)	447	(7.4)	424	(6.2)	**-60**	(5.2)
Spain	473	(1.5)	481	(1.5)	448	(2.6)	459	(2.9)	433	(3.9)	**-33**	(2.5)
Sweden	482	(2.1)	499	(2.0)	436	(3.5)	449	(3.8)	423	(5.2)	**-63**	(3.9)
Switzerland	508	(2.1)	528	(2.1)	475	(3.0)	477	(3.6)	472	(4.2)	**-53**	(3.0)
Türkiye	453	(1.6)	455	(1.6)	418	(13.4)	c	c	410	(16.0)	**-37**	(13.4)
United Kingdom*	489	(2.2)	494	(2.3)	496	(5.6)	507	(6.2)	483	(6.7)	2	(5.6)
United States*	465	(4.0)	470	(3.8)	460	(7.5)	466	(8.4)	441	(8.9)	-10	(6.9)
OECD average	472	(0.4)	479	(0.4)	447	(1.2)	459	(1.3)	435	(1.6)	**-30**	(1.2)

* Caution is required when interpreting estimates because one or more PISA sampling standards were not met (see Reader's Guide, Annexes A2 and A4).
Note: Values that are statistically significant are indicated in bold (see Annex A3).

Table I.B1.7.17. Mathematics performance of students with an immigrant background in PISA 2022 [2/2]

| | All students | | Non-immigrant students | | Immigrant students | | | | | | Difference between immigrant and non-immigrant students | |
| | | | | | All immigrant students | | Second-generation immigrant students | | First-generation immigrant students | | | |
	Mean score	S.E.	Mean score	S.E.	Mean score	S.E.	Mean score	S.E.	Mean score	S.E.	Score dif.	S.E.
Albania	368	(2.1)	375	(2.1)	335	(14.2)	c	c	c	c	**-40**	(13.9)
Argentina	378	(2.3)	380	(2.3)	372	(5.3)	375	(5.9)	365	(8.8)	-8	(5.6)
Baku (Azerbaijan)	397	(2.4)	404	(2.3)	395	(5.8)	399	(6.9)	385	(10.5)	-9	(6.1)
Brazil	379	(1.6)	384	(1.6)	338	(15.0)	c	c	c	c	**-46**	(15.3)
Brunei Darussalam	442	(0.9)	439	(1.0)	493	(4.2)	475	(7.1)	505	(5.2)	**55**	(4.2)
Bulgaria	417	(3.3)	424	(3.3)	395	(17.4)	c	c	413	(23.1)	-29	(17.1)
Cambodia	336	(2.7)	340	(2.7)	c	c	c	c	c	c	c	c
Croatia	463	(2.4)	466	(2.4)	452	(4.6)	451	(5.0)	459	(12.0)	**-14**	(4.5)
Cyprus	418	(1.2)	424	(1.3)	431	(3.6)	419	(5.2)	439	(4.8)	7	(3.9)
Dominican Republic	339	(1.6)	345	(1.6)	322	(4.9)	311	(6.5)	332	(6.2)	**-23**	(5.1)
El Salvador	343	(2.0)	346	(2.0)	328	(15.4)	c	c	c	c	-18	(15.0)
Georgia	390	(2.4)	396	(2.4)	361	(17.5)	341	(15.4)	374	(24.5)	**-35**	(17.3)
Guatemala	344	(2.2)	350	(2.2)	332	(27.5)	c	c	c	c	-18	(26.7)
Hong Kong (China)*	540	(3.0)	547	(3.5)	539	(3.5)	542	(3.7)	527	(7.0)	**-8**	(3.5)
Indonesia	366	(2.4)	367	(2.3)	301	(12.6)	303	(14.1)	c	c	**-67**	(12.9)
Jamaica*	377	(3.1)	383	(3.1)	346	(13.8)	c	c	c	c	**-38**	(13.3)
Jordan	361	(2.0)	363	(2.2)	370	(3.6)	376	(4.5)	364	(4.7)	7	(3.7)
Kazakhstan	425	(1.7)	426	(1.7)	430	(4.2)	430	(5.7)	431	(4.7)	5	(4.1)
Kosovo	355	(1.0)	358	(1.1)	343	(8.2)	340	(9.4)	c	c	-15	(8.1)
Macao (China)	552	(1.1)	543	(2.0)	560	(1.7)	558	(2.1)	564	(2.7)	**17**	(2.8)
Malaysia	409	(2.4)	411	(2.5)	384	(10.9)	387	(8.7)	c	c	**-27**	(10.8)
Malta	466	(1.6)	469	(1.7)	475	(5.9)	451	(10.9)	484	(6.8)	6	(6.2)
Moldova	414	(2.3)	416	(2.3)	406	(9.1)	418	(10.9)	378	(15.3)	-10	(8.9)
Mongolia	425	(2.6)	427	(2.4)	c	c	c	c	c	c	c	c
Montenegro	406	(1.1)	407	(1.2)	410	(4.8)	417	(5.6)	402	(8.5)	3	(5.1)
Morocco	365	(3.4)	367	(3.4)	318	(9.6)	c	c	324	(12.0)	**-49**	(9.7)
North Macedonia	389	(0.9)	393	(1.0)	352	(9.2)	341	(12.5)	366	(14.7)	**-41**	(9.2)
Palestinian Authority	366	(1.8)	368	(1.9)	347	(7.0)	359	(8.9)	329	(13.6)	**-21**	(7.1)
Panama*	357	(2.8)	358	(2.6)	411	(13.3)	416	(13.7)	410	(16.3)	**54**	(12.7)
Paraguay	338	(2.2)	342	(2.0)	357	(16.3)	352	(21.3)	363	(18.5)	15	(16.4)
Peru	391	(2.3)	394	(2.3)	370	(11.3)	c	c	388	(12.1)	**-24**	(11.6)
Philippines	355	(2.6)	359	(2.6)	296	(9.0)	278	(7.0)	319	(17.7)	**-63**	(9.2)
Qatar	414	(1.1)	378	(1.8)	449	(1.8)	428	(3.3)	458	(2.3)	**71**	(2.4)
Romania	428	(4.0)	431	(4.0)	397	(22.3)	c	c	c	c	-34	(22.2)
Saudi Arabia	389	(1.8)	386	(1.9)	415	(4.5)	412	(5.3)	418	(6.0)	**29**	(4.7)
Serbia	440	(3.0)	441	(3.0)	448	(4.7)	448	(4.9)	445	(14.1)	7	(4.0)
Singapore	575	(1.2)	568	(1.5)	598	(2.8)	608	(3.8)	591	(4.1)	**30**	(3.3)
Chinese Taipei	547	(3.8)	549	(3.8)	481	(19.5)	c	c	c	c	**-68**	(19.6)
Thailand	394	(2.7)	397	(2.8)	364	(8.2)	364	(8.8)	366	(13.9)	**-32**	(8.5)
Ukrainian regions (18 of 27)	441	(4.1)	439	(4.0)	435	(20.7)	c	c	c	c	-4	(20.1)
United Arab Emirates	431	(0.9)	390	(1.0)	481	(1.6)	466	(2.2)	489	(1.9)	**90**	(1.8)
Uruguay	409	(2.0)	411	(2.1)	420	(11.9)	c	c	425	(13.2)	9	(12.2)
Uzbekistan	364	(2.0)	365	(2.0)	337	(7.5)	336	(10.0)	c	c	**-28**	(7.6)
Viet Nam	469	(3.9)	471	(3.8)	c	c	c	c	c	c	c	c

* Caution is required when interpreting estimates because one or more PISA sampling standards were not met (see Reader's Guide, Annexes A2 and A4).
Note: Values that are statistically significant are indicated in bold (see Annex A3).

Table I.B1.2. How did countries perform in PISA 2022? Chapter 2 tables

	Table I.B1.2.1	Mean score and variation in mathematics performance
	Table I.B1.2.2	Mean score and variation in reading performance
	Table I.B1.2.3	Mean score and variation in science performance
WEB	Table I.B1.2.4	Mean score and variation in student performance on the mathematics process subscale formulating
WEB	Table I.B1.2.5	Mean score and variation in student performance on the mathematics process subscale employing
WEB	Table I.B1.2.6	Mean score and variation in student performance on the mathematics process subscale interpreting
WEB	Table I.B1.2.7	Mean score and variation in student performance on the mathematics process subscale reasoning
WEB	Table I.B1.2.8	Mean score and variation in student performance on the mathematics content subscale change and relationships
WEB	Table I.B1.2.9	Mean score and variation in student performance on the mathematics content subscale quantity
WEB	Table I.B1.2.10	Mean score and variation in student performance on the mathematics content subscale space and shape
WEB	Table I.B1.2.11	Mean score and variation in student performance on the mathematics content subscale uncertainty and data
WEB	Table I.B1.2.12	Total variation in mathematics performance, and variation between and within schools
WEB	Table I.B1.2.13	Total variation in mathematics performance, and variation between and within schools (without modal grade restriction)
WEB	Table I.B1.2.14	Modal grade by country/economy
WEB	Table I.B1.2.15	Percentage of students, including those with missing information, at each grade level
WEB	Table I.B1.2.16	Index of mathematics anxiety and growth mindset
WEB	Table I.B1.2.17	Mathematics performance, mathematics anxiety and growth mindset

StatLink https://stat.link/xmrlsh

Table I.B1.3. What can students do in mathematics, reading and science? Chapter 3 tables

	Table I.B1.3.1	Percentage of students at each proficiency level in mathematics
	Table I.B1.3.2	Percentage of students at each proficiency level in reading
	Table I.B1.3.3	Percentage of students at each proficiency level in science
WEB	Table I.B1.3.4	Percentage of students at each proficiency level on the mathematics process subscale formulating
WEB	Table I.B1.3.5	Percentage of students at each proficiency level on the mathematics process subscale employing
WEB	Table I.B1.3.6	Percentage of students at each proficiency level on the mathematics process subscale interpreting
WEB	Table I.B1.3.7	Percentage of students at each proficiency level on the mathematics process subscale reasoning
WEB	Table I.B1.3.8	Percentage of students at each proficiency level on the mathematics content subscale change and relationships
WEB	Table I.B1.3.9	Percentage of students at each proficiency level on the mathematics content subscale quantity
WEB	Table I.B1.3.10	Percentage of students at each proficiency level on the mathematics content subscale space and shape
WEB	Table I.B1.3.11	Percentage of students at each proficiency level on the mathematics content subscale uncertainty and data
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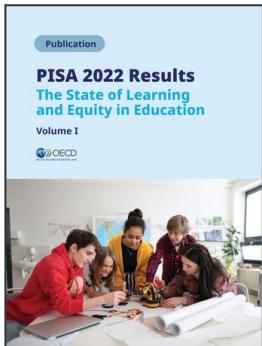
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