

2016 SCORE EQUIVALENCE TABLES

TABLE 1 Year 3 Numeracy Score Equivalence Table

Year	Domain	Raw Score	Delta-Centered Logit	Logit	Logit SE	Scale Score	Scale SE	Band
3	Numeracy	0	-5.80669	-8.20288	1.68469	-41.26111	101.17043	1
3	Numeracy	1	-4.34001	-6.43803	1.00393	64.72316	60.28885	1
3	Numeracy	2	-3.56594	-5.50659	0.78594	120.65878	47.19793	1
3	Numeracy	3	-3.04808	-4.88345	0.67010	158.08011	40.24141	1
3	Numeracy	4	-2.65632	-4.41204	0.59752	186.38962	35.88278	1
3	Numeracy	5	-2.33683	-4.02760	0.54767	209.47634	32.88914	1
3	Numeracy	6	-2.06357	-3.69879	0.51134	229.22232	30.70742	1
3	Numeracy	7	-1.82210	-3.40823	0.48390	246.67127	29.05957	1
3	Numeracy	8	-1.60356	-3.14526	0.46263	262.46337	27.78225	1
3	Numeracy	9	-1.40208	-2.90282	0.44593	277.02258	26.77937	2
3	Numeracy	10	-1.21361	-2.67603	0.43260	290.64196	25.97886	2
3	Numeracy	11	-1.03516	-2.46130	0.42198	303.53711	25.34110	2
3	Numeracy	12	-0.86445	-2.25589	0.41356	315.87257	24.83546	2
3	Numeracy	13	-0.69970	-2.05764	0.40699	327.77804	24.44091	3
3	Numeracy	14	-0.53945	-1.86481	0.40201	339.35804	24.14184	3
3	Numeracy	15	-0.38250	-1.67596	0.39844	350.69902	23.92746	3
3	Numeracy	16	-0.22778	-1.48978	0.39614	361.87965	23.78933	3
3	Numeracy	17	-0.07436	-1.30517	0.39504	372.96601	23.72328	3
3	Numeracy	18	0.07867	-1.12103	0.39509	384.02414	23.72628	4
3	Numeracy	19	0.23218	-0.93631	0.39630	395.11710	23.79894	4
3	Numeracy	20	0.38706	-0.74994	0.39871	406.30915	23.94367	4
3	Numeracy	21	0.54426	-0.56078	0.40240	417.66875	24.16527	4
3	Numeracy	22	0.70488	-0.36751	0.40748	429.27516	24.47033	5
3	Numeracy	23	0.87008	-0.16873	0.41423	441.21247	24.87569	5
3	Numeracy	24	1.04139	0.03741	0.42282	453.59176	25.39154	5
3	Numeracy	25	1.22063	0.25309	0.43367	466.54396	26.04312	5
3	Numeracy	26	1.41014	0.48113	0.44727	480.23841	26.85984	6
3	Numeracy	27	1.61304	0.72528	0.46429	494.90031	27.88194	6
3	Numeracy	28	1.83355	0.99062	0.48599	510.83473	29.18508	6
3	Numeracy	29	2.07781	1.28454	0.51383	528.48547	30.85695	6
3	Numeracy	30	2.35496	1.61803	0.55030	548.51249	33.04708	6
3	Numeracy	31	2.67937	2.00839	0.59936	571.95472	35.99327	6
3	Numeracy	32	3.07469	2.48408	0.66860	600.52126	40.15133	6
3	Numeracy	33	3.58249	3.09512	0.77384	637.21595	46.47129	6
3	Numeracy	34	4.29212	3.94902	0.96560	688.49508	57.98703	6
3	Numeracy	35	5.60183	5.52499	1.59184	783.13656	95.59452	6

TABLE 2 Year 3 Reading Score Equivalence Table

Year	Domain	Raw Score	Delta-Centered Logit	Logit	Logit SE	Scale Score	Scale SE	Band
3	Reading	0	-5.06840	-5.72683	1.47843	36.57564	99.44373	1
3	Reading	1	-3.90521	-4.57027	0.87701	114.36941	58.99038	1
3	Reading	2	-3.32899	-3.99734	0.69760	152.90644	46.92271	1
3	Reading	3	-2.92636	-3.59700	0.60512	179.83453	40.70223	1
3	Reading	4	-2.60820	-3.28066	0.54729	201.11253	36.81240	1
3	Reading	5	-2.33999	-3.01397	0.50732	219.05092	34.12390	1
3	Reading	6	-2.10472	-2.78005	0.47801	234.78509	32.15242	1
3	Reading	7	-1.89269	-2.56922	0.45563	248.96617	30.64707	1
3	Reading	8	-1.69788	-2.37552	0.43804	261.99502	29.46391	1
3	Reading	9	-1.51622	-2.19490	0.42401	274.14408	28.52021	2
3	Reading	10	-1.34489	-2.02455	0.41259	285.60234	27.75207	2
3	Reading	11	-1.18175	-1.86234	0.40326	296.51308	27.12450	2
3	Reading	12	-1.02518	-1.70666	0.39563	306.98460	26.61129	2
3	Reading	13	-0.87388	-1.55622	0.38944	317.10365	26.19493	2
3	Reading	14	-0.72677	-1.40995	0.38450	326.94222	25.86265	3
3	Reading	15	-0.58293	-1.26693	0.38066	336.56218	25.60436	3
3	Reading	16	-0.44158	-1.12639	0.37782	346.01534	25.41333	3
3	Reading	17	-0.30197	-0.98757	0.37592	355.35279	25.28553	3
3	Reading	18	-0.16345	-0.84984	0.37490	364.61694	25.21692	3
3	Reading	19	-0.02535	-0.71253	0.37476	373.85283	25.20751	3
3	Reading	20	0.11295	-0.57502	0.37549	383.10217	25.25661	4
3	Reading	21	0.25211	-0.43665	0.37710	392.40936	25.36490	4
3	Reading	22	0.39280	-0.29676	0.37963	401.81879	25.53508	4
3	Reading	23	0.53573	-0.15465	0.38316	411.37755	25.77252	4
3	Reading	24	0.68172	-0.00949	0.38773	421.14145	26.07991	4
3	Reading	25	0.83162	0.13956	0.39350	431.16701	26.46802	5
3	Reading	26	0.98648	0.29353	0.40060	441.52351	26.94558	5
3	Reading	27	1.14750	0.45364	0.40925	452.29300	27.52741	5
3	Reading	28	1.31615	0.62133	0.41971	463.57234	28.23098	5
3	Reading	29	1.49427	0.79843	0.43237	475.48463	29.08253	5
3	Reading	30	1.68422	0.98730	0.44789	488.18861	30.12645	6
3	Reading	31	1.88919	1.19110	0.46704	501.89682	31.41454	6
3	Reading	32	2.11358	1.41421	0.49115	516.90388	33.03625	6
3	Reading	33	2.36394	1.66314	0.52232	533.64768	35.13284	6
3	Reading	34	2.65053	1.94810	0.56425	552.81496	37.95318	6
3	Reading	35	2.99120	2.28683	0.62399	575.59898	41.97148	6
3	Reading	36	3.42128	2.71446	0.71911	604.36268	48.36954	6
3	Reading	37	4.03115	3.32085	0.90140	645.15033	60.63093	6
3	Reading	38	5.23515	4.51799	1.51102	725.67364	101.63584	6

TABLE 3 Year 3 Spelling Score Equivalence Table

Year	Domain	Raw Score	Delta-Centered Logit	Logit	Logit SE	Scale Score	Scale SE	Band
3	Spelling	0	-5.79092	-7.37910	1.61662	182.95034	61.60665	1
3	Spelling	1	-4.45683	-5.87065	0.99209	240.43482	37.80687	1
3	Spelling	2	-3.71686	-5.03396	0.81161	272.31965	30.92908	2
3	Spelling	3	-3.16138	-4.40588	0.71978	296.25472	27.42959	2
3	Spelling	4	-2.70122	-3.88558	0.66261	316.08247	25.25094	2
3	Spelling	5	-2.29997	-3.43188	0.62374	333.37220	23.76967	3
3	Spelling	6	-1.93792	-3.02251	0.59610	348.97260	22.71636	3
3	Spelling	7	-1.60261	-2.64338	0.57617	363.42060	21.95686	3
3	Spelling	8	-1.28577	-2.28513	0.56161	377.07290	21.40200	4
3	Spelling	9	-0.98178	-1.94141	0.55104	390.17149	20.99920	4
3	Spelling	10	-0.68684	-1.60792	0.54347	402.88023	20.71072	4
3	Spelling	11	-0.39833	-1.28170	0.53828	415.31192	20.51294	4
3	Spelling	12	-0.11418	-0.96041	0.53520	427.55573	20.39556	5
3	Spelling	13	0.16751	-0.64190	0.53419	439.69361	20.35707	5
3	Spelling	14	0.44884	-0.32380	0.53541	451.81586	20.40357	5
3	Spelling	15	0.73229	-0.00331	0.53916	464.02919	20.54647	5
3	Spelling	16	1.02084	0.32296	0.54584	476.46279	20.80104	5
3	Spelling	17	1.31811	0.65908	0.55595	489.27175	21.18631	6
3	Spelling	18	1.62851	1.01005	0.57017	502.64662	21.72821	6
3	Spelling	19	1.95746	1.38199	0.58947	516.82062	22.46370	6
3	Spelling	20	2.31184	1.78269	0.61538	532.09062	23.45109	6
3	Spelling	21	2.70115	2.22288	0.65104	548.86552	24.81003	6
3	Spelling	22	3.14076	2.71995	0.70340	567.80801	26.80538	6
3	Spelling	23	3.66232	3.30968	0.78911	590.28162	30.07164	6
3	Spelling	24	4.35131	4.08872	0.96215	619.96951	36.66590	6
3	Spelling	25	5.61800	5.52096	1.57037	674.54975	59.84414	6

TABLE 4 Year 3 Grammar & Punctuation Score Equivalence Table

Year	Domain	Raw Score	Delta-Centered Logit	Logit	Logit SE	Scale Score	Scale SE	Band
3	GP	0	-4.78945	-5.59139	1.55742	-3.07166	114.47409	1
3	GP	1	-3.52890	-4.14894	0.94003	102.95186	69.09445	1
3	GP	2	-2.86361	-3.38765	0.75525	158.90849	55.51268	1
3	GP	3	-2.38475	-2.83969	0.65822	199.18486	48.38074	1
3	GP	4	-2.00336	-2.40327	0.59589	231.26277	43.79934	1
3	GP	5	-1.68254	-2.03615	0.55217	258.24697	40.58581	1
3	GP	6	-1.40256	-1.71577	0.51995	281.79566	38.21757	2
3	GP	7	-1.15134	-1.42830	0.49574	302.92540	36.43807	2
3	GP	8	-0.92104	-1.16477	0.47710	322.29548	35.06799	3
3	GP	9	-0.70613	-0.91885	0.46281	340.37119	34.01764	3
3	GP	10	-0.50256	-0.68590	0.45202	357.49357	33.22455	3
3	GP	11	-0.30720	-0.46235	0.44423	373.92503	32.65197	3
3	GP	12	-0.11756	-0.24535	0.43898	389.87505	32.26608	4
3	GP	13	0.06850	-0.03244	0.43608	405.52444	32.05292	4
3	GP	14	0.25295	0.17863	0.43542	421.03859	32.00441	4
3	GP	15	0.43766	0.38999	0.43702	436.57405	32.12201	5
3	GP	16	0.62457	0.60387	0.44103	452.29474	32.41676	5
3	GP	17	0.81582	0.82272	0.44774	468.38074	32.90996	5
3	GP	18	1.01395	1.04944	0.45765	485.04520	33.63837	6
3	GP	19	1.22218	1.28772	0.47155	502.55935	34.66005	6
3	GP	20	1.44490	1.54258	0.49060	521.29217	36.06027	6
3	GP	21	1.68839	1.82120	0.51697	541.77141	37.99853	6
3	GP	22	1.96259	2.13497	0.55429	564.83425	40.74164	6
3	GP	23	2.28467	2.50353	0.61011	591.92429	44.84454	6
3	GP	24	2.68946	2.96673	0.70074	625.97060	51.50606	6
3	GP	25	3.26620	3.62669	0.87884	674.47924	64.59684	6
3	GP	26	4.42852	4.95673	1.47927	772.24035	108.72988	6

TABLE 5 Year 5 Numeracy Score Equivalence Table

Year	Domain	Raw Score	Delta-Centered Logit	Logit	Logit SE	Scale Score	Scale SE	Band
5	Numeracy	0	-5.27377	-4.68846	1.47984	169.78982	88.86860	3
5	Numeracy	1	-4.10882	-3.60145	0.87804	235.06786	52.72880	3
5	Numeracy	2	-3.53123	-3.06250	0.69853	267.43334	41.94871	3
5	Numeracy	3	-3.12749	-2.68577	0.60598	290.05705	36.39082	3
5	Numeracy	4	-2.80839	-2.38802	0.54812	307.93779	32.91617	3
5	Numeracy	5	-2.53936	-2.13699	0.50814	323.01285	30.51525	3
5	Numeracy	6	-2.30330	-1.91672	0.47884	336.24069	28.75571	3
5	Numeracy	7	-2.09051	-1.71817	0.45647	348.16418	27.41232	3
5	Numeracy	8	-1.89495	-1.53569	0.43889	359.12263	26.35659	3
5	Numeracy	9	-1.71253	-1.36547	0.42486	369.34482	25.51405	3
5	Numeracy	10	-1.54044	-1.20489	0.41342	378.98811	24.82705	4
5	Numeracy	11	-1.37657	-1.05199	0.40405	388.17019	24.26435	4
5	Numeracy	12	-1.21930	-0.90524	0.39636	396.98294	23.80255	4
5	Numeracy	13	-1.06736	-0.76346	0.39006	405.49724	23.42421	4
5	Numeracy	14	-0.91967	-0.62565	0.38503	413.77312	23.12215	4
5	Numeracy	15	-0.77537	-0.49101	0.38104	421.85864	22.88254	4
5	Numeracy	16	-0.63368	-0.35880	0.37802	429.79822	22.70118	5
5	Numeracy	17	-0.49390	-0.22837	0.37590	437.63092	22.57387	5
5	Numeracy	18	-0.35537	-0.09911	0.37464	445.39335	22.49820	5
5	Numeracy	19	-0.21747	0.02957	0.37421	453.12095	22.47238	5
5	Numeracy	20	-0.07960	0.15822	0.37461	460.84675	22.49640	5
5	Numeracy	21	0.05885	0.28740	0.37586	468.60437	22.57146	5
5	Numeracy	22	0.19857	0.41778	0.37796	476.43406	22.69757	5
5	Numeracy	23	0.34018	0.54991	0.38099	484.36884	22.87953	6
5	Numeracy	24	0.48443	0.68451	0.38500	492.45196	23.12035	6
5	Numeracy	25	0.63215	0.82235	0.39008	500.72964	23.42541	6
5	Numeracy	26	0.78425	0.96427	0.39633	509.25234	23.80074	6
5	Numeracy	27	0.94179	1.11127	0.40390	518.08011	24.25534	6
5	Numeracy	28	1.10603	1.26453	0.41296	527.28381	24.79942	6
5	Numeracy	29	1.27844	1.42540	0.42372	536.94451	25.44559	7
5	Numeracy	30	1.46082	1.59558	0.43652	547.16430	26.21427	7
5	Numeracy	31	1.65539	1.77713	0.45176	558.06690	27.12947	7
5	Numeracy	32	1.86499	1.97271	0.47000	569.81203	28.22484	7
5	Numeracy	33	2.09328	2.18573	0.49205	582.60449	29.54900	8
5	Numeracy	34	2.34526	2.42085	0.51919	596.72412	31.17884	8
5	Numeracy	35	2.62815	2.68482	0.55351	612.57627	33.23985	8
5	Numeracy	36	2.95325	2.98817	0.59866	630.79330	35.95124	8
5	Numeracy	37	3.34005	3.34909	0.66261	652.46757	39.79162	8
5	Numeracy	38	3.82732	3.80376	0.76235	679.77180	45.78129	8
5	Numeracy	39	4.51054	4.44127	0.95141	718.05609	57.13488	8
5	Numeracy	40	5.80736	5.65134	1.58025	790.72424	94.89851	8

TABLE 6 Year 5 Reading Score Equivalence Table

Year	Domain	Raw Score	Delta-Centered Logit	Logit	Logit SE	Scale Score	Scale SE	Band
5	Reading	0	-5.24931	-6.12343	1.49208	9.89911	100.36188	3
5	Reading	1	-4.07083	-4.69523	0.88905	105.96422	59.80023	3
5	Reading	2	-3.47950	-3.97859	0.70986	154.16762	47.74736	3
5	Reading	3	-3.06217	-3.47283	0.61762	188.18659	41.54301	3
5	Reading	4	-2.72985	-3.07009	0.55992	215.27611	37.66194	3
5	Reading	5	-2.44817	-2.72872	0.51993	238.23771	34.97209	3
5	Reading	6	-2.20017	-2.42817	0.49047	258.45362	32.99052	3
5	Reading	7	-1.97618	-2.15672	0.46784	276.71218	31.46835	3
5	Reading	8	-1.77016	-1.90704	0.44994	293.50642	30.26434	3
5	Reading	9	-1.57802	-1.67419	0.43551	309.16863	29.29374	3
5	Reading	10	-1.39685	-1.45463	0.42372	323.93691	28.50071	3
5	Reading	11	-1.22448	-1.24573	0.41400	337.98816	27.84691	3
5	Reading	12	-1.05921	-1.04544	0.40599	351.46028	27.30813	3
5	Reading	13	-0.89968	-0.85211	0.39941	364.46425	26.86554	3
5	Reading	14	-0.74478	-0.66439	0.39407	377.09087	26.50636	4
5	Reading	15	-0.59355	-0.48111	0.38985	389.41885	26.22251	4
5	Reading	16	-0.44519	-0.30131	0.38658	401.51275	26.00256	4
5	Reading	17	-0.29894	-0.12407	0.38425	413.43445	25.84583	4
5	Reading	18	-0.15412	0.05143	0.38279	425.23912	25.74763	4
5	Reading	19	-0.01010	0.22597	0.38218	436.97922	25.70660	5
5	Reading	20	0.13374	0.40029	0.38240	448.70451	25.72140	5
5	Reading	21	0.27804	0.57517	0.38349	460.46748	25.79471	5
5	Reading	22	0.42345	0.75139	0.38547	472.32058	25.92789	5
5	Reading	23	0.57065	0.92978	0.38841	484.31963	26.12565	6
5	Reading	24	0.72044	1.11131	0.39239	496.52990	26.39335	6
5	Reading	25	0.87364	1.29698	0.39759	509.01863	26.74312	6
5	Reading	26	1.03129	1.48803	0.40413	521.86924	27.18302	6
5	Reading	27	1.19462	1.68597	0.41227	535.18329	27.73054	7
5	Reading	28	1.36511	1.89259	0.42235	549.08119	28.40856	7
5	Reading	29	1.54472	2.11026	0.43481	563.72234	29.24665	7
5	Reading	30	1.73600	2.34207	0.45028	579.31459	30.28721	7
5	Reading	31	1.94241	2.59222	0.46993	596.14045	31.60893	8
5	Reading	32	2.16905	2.86688	0.49516	614.61492	33.30598	8
5	Reading	33	2.42361	3.17539	0.52849	635.36625	35.54786	8
5	Reading	34	2.71862	3.53291	0.57419	659.41414	38.62178	8
5	Reading	35	3.07640	3.96650	0.64047	688.57873	43.07998	8
5	Reading	36	3.54176	4.53047	0.74615	726.51308	50.18834	8
5	Reading	37	4.22301	5.35608	0.94655	782.04614	63.66785	8
5	Reading	38	5.55234	6.96709	1.59482	890.40761	107.27248	8

TABLE 7 Year 5 Spelling Score Equivalence Table

Year	Domain	Raw Score	Delta-Centered Logit	Logit	Logit SE	Scale Score	Scale SE	Band
5	Spelling	0	-5.53157	-4.61277	1.58335	288.37049	60.33878	3
5	Spelling	1	-4.25001	-3.36799	0.97462	335.80694	37.14112	3
5	Spelling	2	-3.54220	-2.68049	0.80312	362.00640	30.60554	3
5	Spelling	3	-2.99809	-2.15200	0.71775	382.14626	27.35224	4
5	Spelling	4	-2.53520	-1.70239	0.66367	399.28013	25.29134	4
5	Spelling	5	-2.12685	-1.30576	0.62386	414.39503	23.77425	4
5	Spelling	6	-1.76113	-0.95054	0.59246	427.93186	22.57765	5
5	Spelling	7	-1.42941	-0.62834	0.56737	440.21036	21.62151	5
5	Spelling	8	-1.12407	-0.33176	0.54755	451.51252	20.86620	5
5	Spelling	9	-0.83853	-0.05442	0.53229	462.08148	20.28467	5
5	Spelling	10	-0.56732	0.20901	0.52106	472.12035	19.85671	5
5	Spelling	11	-0.30597	0.46286	0.51336	481.79414	19.56328	6
5	Spelling	12	-0.05075	0.71075	0.50882	491.24081	19.39027	6
5	Spelling	13	0.20155	0.95581	0.50715	500.57963	19.32663	6
5	Spelling	14	0.45373	1.20076	0.50818	509.91426	19.36588	6
5	Spelling	15	0.70846	1.44817	0.51185	519.34263	19.50574	6
5	Spelling	16	0.96835	1.70061	0.51826	528.96269	19.75001	6
5	Spelling	17	1.23620	1.96077	0.52770	538.87695	20.10975	7
5	Spelling	18	1.51525	2.23181	0.54081	549.20582	20.60935	7
5	Spelling	19	1.80976	2.51787	0.55861	560.10708	21.28768	7
5	Spelling	20	2.12573	2.82477	0.58315	571.80252	22.22286	7
5	Spelling	21	2.47268	3.16176	0.61813	584.64464	23.55589	8
5	Spelling	22	2.86745	3.54520	0.67071	599.25689	25.55962	8
5	Spelling	23	3.34423	4.00830	0.75801	616.90484	28.88648	8
5	Spelling	24	3.99172	4.63721	0.93320	640.87154	35.56267	8
5	Spelling	25	5.22272	5.83288	1.53935	686.43649	58.66202	8

TABLE 8 Year 5 Grammar & Punctuation Score Equivalence Table

Year	Domain	Raw Score	Delta-Centered Logit	Logit	Logit SE	Scale Score	Scale SE	Band
5	GP	0	-5.30785	-5.52957	1.69442	1.47225	124.54392	3
5	GP	1	-3.82767	-3.79450	1.01243	129.00404	74.41602	3
5	GP	2	-3.04329	-2.87505	0.79611	196.58581	58.51599	3
5	GP	3	-2.51452	-2.25523	0.68354	242.14406	50.24182	3
5	GP	4	-2.10833	-1.77909	0.61440	277.14149	45.15987	3
5	GP	5	-1.77072	-1.38335	0.56792	306.22933	41.74348	3
5	GP	6	-1.47612	-1.03802	0.53487	331.61191	39.31422	3
5	GP	7	-1.21070	-0.72689	0.51039	354.48071	37.51488	3
5	GP	8	-0.96606	-0.44012	0.49194	375.55899	36.15877	4
5	GP	9	-0.73675	-0.17133	0.47778	395.31569	35.11797	4
5	GP	10	-0.51886	0.08408	0.46703	414.08894	34.32782	4
5	GP	11	-0.30944	0.32957	0.45908	432.13304	33.74348	5
5	GP	12	-0.10610	0.56792	0.45358	449.65233	33.33921	5
5	GP	13	0.09322	0.80156	0.45032	466.82543	33.09960	5
5	GP	14	0.29042	1.03272	0.44923	483.81624	33.01948	6
5	GP	15	0.48738	1.26360	0.45036	500.78648	33.10254	6
5	GP	16	0.68608	1.49651	0.45387	517.90592	33.36053	6
5	GP	17	0.88871	1.73404	0.46008	535.36494	33.81698	7
5	GP	18	1.09790	1.97925	0.46948	553.38846	34.50790	7
5	GP	19	1.31694	2.23601	0.48290	572.26093	35.49430	7
5	GP	20	1.55028	2.50953	0.50161	592.36531	36.86953	8
5	GP	21	1.80442	2.80743	0.52746	614.26167	38.76957	8
5	GP	22	2.08921	3.14126	0.56451	638.79897	41.49283	8
5	GP	23	2.42209	3.53147	0.61971	667.48034	45.55017	8
5	GP	24	2.83778	4.01874	0.70995	703.29585	52.18302	8
5	GP	25	3.42562	4.70780	0.88775	753.94340	65.25175	8
5	GP	26	4.59925	6.08353	1.48928	855.06284	109.46564	8

TABLE 9 Year 7 Numeracy Score Equivalence Table

Year	Domain	Raw Score	Delta-Centered Logit	Logit	Logit SE	Scale Score	Scale SE	Band
7	Numeracy	0	-5.62115	-3.86497	1.45340	219.24273	87.28081	4
7	Numeracy	1	-4.48433	-2.77442	0.85356	284.73337	51.25871	4
7	Numeracy	2	-3.93500	-2.24745	0.67246	316.37941	40.38314	4
7	Numeracy	3	-3.55975	-1.88747	0.57781	337.99724	34.69914	4
7	Numeracy	4	-3.26937	-1.60891	0.51792	354.72556	31.10257	4
7	Numeracy	5	-3.02936	-1.37867	0.47606	368.55213	28.58876	4
7	Numeracy	6	-2.82267	-1.18039	0.44491	380.45940	26.71811	4
7	Numeracy	7	-2.63965	-1.00482	0.42074	391.00288	25.26663	4
7	Numeracy	8	-2.47428	-0.84618	0.40136	400.52967	24.10281	4
7	Numeracy	9	-2.32256	-0.70063	0.38546	409.27036	23.14797	4
7	Numeracy	10	-2.18167	-0.56548	0.37220	417.38650	22.35167	4
7	Numeracy	11	-2.04958	-0.43876	0.36098	424.99640	21.67788	4
7	Numeracy	12	-1.92475	-0.31902	0.35139	432.18712	21.10197	5
7	Numeracy	13	-1.80599	-0.20509	0.34312	439.02895	20.60533	5
7	Numeracy	14	-1.69239	-0.09611	0.33590	445.57350	20.17175	5
7	Numeracy	15	-1.58315	0.00868	0.32965	451.86644	19.79642	5
7	Numeracy	16	-1.47769	0.10985	0.32417	457.94199	19.46733	5
7	Numeracy	17	-1.37549	0.20789	0.31934	463.82957	19.17728	5
7	Numeracy	18	-1.27610	0.30323	0.31509	469.55501	18.92205	5
7	Numeracy	19	-1.17916	0.39623	0.31135	475.13992	18.69745	5
7	Numeracy	20	-1.08434	0.48719	0.30807	480.60233	18.50048	6
7	Numeracy	21	-0.99136	0.57639	0.30521	485.95904	18.32873	6
7	Numeracy	22	-0.89997	0.66406	0.30271	491.22388	18.17860	6
7	Numeracy	23	-0.80995	0.75041	0.30056	496.40944	18.04948	6
7	Numeracy	24	-0.72109	0.83566	0.29873	501.52895	17.93959	6
7	Numeracy	25	-0.63321	0.91996	0.29719	506.59140	17.84711	6
7	Numeracy	26	-0.54613	1.00350	0.29593	511.60822	17.77144	6
7	Numeracy	27	-0.45970	1.08641	0.29492	516.58720	17.71079	6
7	Numeracy	28	-0.37377	1.16884	0.29417	521.53735	17.66575	6
7	Numeracy	29	-0.28820	1.25093	0.29366	526.46709	17.63512	6
7	Numeracy	30	-0.20285	1.33280	0.29337	531.38362	17.61770	7
7	Numeracy	31	-0.11758	1.41460	0.29332	536.29594	17.61470	7
7	Numeracy	32	-0.03227	1.49644	0.29349	541.21067	17.62491	7
7	Numeracy	33	0.05321	1.57844	0.29388	546.13500	17.64833	7
7	Numeracy	34	0.13898	1.66072	0.29450	551.07615	17.68556	7
7	Numeracy	35	0.22519	1.74342	0.29534	556.04252	17.73601	7
7	Numeracy	36	0.31197	1.82667	0.29640	561.04192	17.79966	7
7	Numeracy	37	0.39945	1.91059	0.29769	566.08155	17.87713	7
7	Numeracy	38	0.48776	1.99531	0.29926	571.16923	17.97141	7
7	Numeracy	39	0.57706	2.08097	0.30106	576.31336	18.07951	7
7	Numeracy	40	0.66752	2.16775	0.30314	581.52474	18.20442	7
7	Numeracy	41	0.75931	2.25580	0.30551	586.81239	18.34675	8
7	Numeracy	42	0.85262	2.34532	0.30819	592.18833	18.50769	8
7	Numeracy	43	0.94765	2.43648	0.31120	597.66274	18.68845	8
7	Numeracy	44	1.04464	2.52952	0.31458	603.25006	18.89142	8

Year	Domain	Raw Score	Delta-Centered Logit	Logit	Logit SE	Scale Score	Scale SE	Band
7	Numeracy	45	1.14383	2.62467	0.31837	608.96409	19.11902	8
7	Numeracy	46	1.24554	2.72224	0.32260	614.82344	19.37305	8
7	Numeracy	47	1.35008	2.82253	0.32733	620.84614	19.65710	8
7	Numeracy	48	1.45786	2.92592	0.33263	627.05501	19.97538	8
7	Numeracy	49	1.56930	3.03283	0.33865	633.47526	20.33690	8
7	Numeracy	50	1.68495	3.14377	0.34541	640.13752	20.74285	9
7	Numeracy	51	1.80547	3.25938	0.35307	647.08023	21.20286	9
7	Numeracy	52	1.93162	3.38040	0.36180	654.34783	21.72712	9
7	Numeracy	53	2.06438	3.50776	0.37184	661.99616	22.33005	9
7	Numeracy	54	2.20496	3.64262	0.38348	670.09488	23.02907	9
7	Numeracy	55	2.35494	3.78649	0.39714	678.73469	23.84939	9
7	Numeracy	56	2.51641	3.94139	0.41340	688.03687	24.82585	9
7	Numeracy	57	2.69221	4.11003	0.43309	698.16418	26.00829	9
7	Numeracy	58	2.88640	4.29632	0.45746	709.35143	27.47178	9
7	Numeracy	59	3.10501	4.50603	0.48889	721.94511	29.35924	9
7	Numeracy	60	3.35778	4.74852	0.53086	736.50733	31.87965	9
7	Numeracy	61	3.66176	5.04012	0.59075	754.01874	35.47622	9
7	Numeracy	62	4.05147	5.41397	0.68530	776.46949	41.15422	9
7	Numeracy	63	4.61612	5.95564	0.86641	808.99832	52.03039	9
7	Numeracy	64	5.76908	7.06168	1.46822	875.41917	88.17079	9

TABLE 10 Year 7 Non-Calculator Score Equivalence Table

Year	Domain	Raw Score	Delta-Centered Logit	Logit	Logit SE	Scale Score	Scale SE	Band
7	NC	0	-5.05408	-3.32098	1.49410	251.91088	89.72496	4
7	NC	1	-3.87462	-2.18953	0.89247	319.85767	53.59536	4
7	NC	2	-3.28077	-1.61985	0.71431	354.06858	42.89635	4
7	NC	3	-2.85910	-1.21534	0.62359	378.36056	37.44835	4
7	NC	4	-2.52068	-0.89069	0.56770	397.85671	34.09200	4
7	NC	5	-2.23126	-0.61305	0.52950	414.52979	31.79798	4
7	NC	6	-1.97392	-0.36618	0.50193	429.35503	30.14233	5
7	NC	7	-1.73912	-0.14094	0.48124	442.88134	28.89983	5
7	NC	8	-1.52089	0.06841	0.46526	455.45340	27.94019	5
7	NC	9	-1.31512	0.26580	0.45281	467.30723	27.19253	5
7	NC	10	-1.11886	0.45408	0.44314	478.61398	26.61182	6
7	NC	11	-0.92982	0.63542	0.43573	489.50396	26.16683	6
7	NC	12	-0.74615	0.81162	0.43023	500.08528	25.83654	6
7	NC	13	-0.56630	0.98415	0.42640	510.44619	25.60653	6
7	NC	14	-0.38892	1.15431	0.42407	520.66479	25.46661	6
7	NC	15	-0.21279	1.32327	0.42312	530.81131	25.40956	7
7	NC	16	-0.03677	1.49212	0.42348	540.95124	25.43118	7
7	NC	17	0.14019	1.66188	0.42512	551.14581	25.52967	7
7	NC	18	0.31917	1.83358	0.42802	561.45688	25.70382	7
7	NC	19	0.50124	2.00824	0.43221	571.94571	25.95544	7
7	NC	20	0.68752	2.18694	0.43778	582.67716	26.28994	8
7	NC	21	0.87926	2.37087	0.44487	593.72268	26.71571	8
7	NC	22	1.07787	2.56140	0.45370	605.16454	27.24598	8
7	NC	23	1.28507	2.76017	0.46461	617.10125	27.90115	8
7	NC	24	1.50307	2.96929	0.47812	629.65950	28.71247	8
7	NC	25	1.73483	3.19162	0.49501	643.01105	29.72676	9
7	NC	26	1.98449	3.43112	0.51673	657.39371	31.03111	9
7	NC	27	2.25832	3.69380	0.54528	673.16839	32.74562	9
7	NC	28	2.56630	3.98925	0.58447	690.91100	35.09909	9
7	NC	29	2.92596	4.33427	0.64139	711.63043	38.51730	9
7	NC	30	3.37228	4.76243	0.73350	737.34266	44.04876	9
7	NC	31	3.99526	5.36005	0.91305	773.23144	54.83125	9
7	NC	32	5.20888	6.52428	1.52146	843.14677	91.36800	9

TABLE 11 Year 7 Calculator Score Equivalence Table

Year	Domain	Raw Score	Delta-Centered Logit	Logit	Logit SE	Scale Score	Scale SE	Band
7	CA	0	-4.82061	-3.09701	1.48028	265.36092	88.89503	4
7	CA	1	-3.65610	-1.97990	0.87976	332.44655	52.83209	4
7	CA	2	-3.07781	-1.42515	0.70102	365.76087	42.09825	4
7	CA	3	-2.67225	-1.03609	0.60927	389.12503	36.58840	4
7	CA	4	-2.35010	-0.72705	0.55272	407.68376	33.19241	4
7	CA	5	-2.07690	-0.46497	0.51408	423.42241	30.87197	4
7	CA	6	-1.83550	-0.23340	0.48628	437.32885	29.20250	5
7	CA	7	-1.61622	-0.02304	0.46543	449.96157	27.95040	5
7	CA	8	-1.41288	0.17202	0.44959	461.67547	26.99916	5
7	CA	9	-1.22145	0.35566	0.43726	472.70358	26.25871	5
7	CA	10	-1.03896	0.53072	0.42771	483.21643	25.68520	6
7	CA	11	-0.86322	0.69931	0.42039	493.34074	25.24562	6
7	CA	12	-0.69253	0.86305	0.41492	503.17379	24.91713	6
7	CA	13	-0.52548	1.02330	0.41103	512.79726	24.68352	6
7	CA	14	-0.36087	1.18121	0.40855	522.28021	24.53459	6
7	CA	15	-0.19766	1.33778	0.40737	531.68268	24.46373	7
7	CA	16	-0.03484	1.49398	0.40743	541.06294	24.46733	7
7	CA	17	0.12852	1.65069	0.40873	550.47382	24.54540	7
7	CA	18	0.29344	1.80889	0.41130	559.97418	24.69974	7
7	CA	19	0.46095	1.96959	0.41522	569.62467	24.93514	7
7	CA	20	0.63220	2.13387	0.42061	579.49015	25.25883	7
7	CA	21	0.80853	2.30302	0.42768	589.64809	25.68340	8
7	CA	22	0.99149	2.47853	0.43668	600.18797	26.22388	8
7	CA	23	1.18302	2.66227	0.44801	611.22208	26.90428	8
7	CA	24	1.38559	2.85659	0.46220	622.89154	27.75643	8
7	CA	25	1.60244	3.06462	0.48000	635.38434	28.82537	9
7	CA	26	1.83800	3.29059	0.50288	648.95448	30.19938	9
7	CA	27	2.09880	3.54078	0.53278	663.97910	31.99496	9
7	CA	28	2.39498	3.82490	0.57339	681.04132	34.43370	9
7	CA	29	2.74400	4.15972	0.63171	701.14821	37.93598	9
7	CA	30	3.18058	4.57853	0.72489	726.29894	43.53171	9
7	CA	31	3.79392	5.16690	0.90520	761.63224	54.35984	9
7	CA	32	4.99699	6.32101	1.51232	830.93983	90.81912	9

TABLE 12 Year 7 Reading Score Equivalence Table

Year	Domain	Raw Score	Delta-Centered Logit	Logit	Logit SE	Scale Score	Scale SE	Band
7	Reading	0	-5.31978	-4.58809	1.48531	113.17078	99.90650	4
7	Reading	1	-4.14605	-3.25591	0.87982	202.77729	59.17939	4
7	Reading	2	-3.56366	-2.59490	0.69760	247.23885	46.92271	4
7	Reading	3	-3.15896	-2.13556	0.60193	278.13547	40.48766	4
7	Reading	4	-2.84235	-1.77621	0.54107	302.30645	36.39403	4
7	Reading	5	-2.57899	-1.47730	0.49803	322.41205	33.49902	4
7	Reading	6	-2.35145	-1.21904	0.46591	339.78341	31.33854	4
7	Reading	7	-2.14980	-0.99017	0.44063	355.17791	29.63812	4
7	Reading	8	-1.96769	-0.78347	0.42020	369.08119	28.26394	4
7	Reading	9	-1.80085	-0.59411	0.40332	381.81812	27.12854	4
7	Reading	10	-1.64624	-0.41862	0.38916	393.62212	26.17609	4
7	Reading	11	-1.50161	-0.25447	0.37714	404.66335	25.36759	4
7	Reading	12	-1.36524	-0.09969	0.36684	415.07433	24.67478	4
7	Reading	13	-1.23578	0.04725	0.35795	424.95796	24.07681	4
7	Reading	14	-1.11214	0.18758	0.35030	434.39699	23.56225	5
7	Reading	15	-0.99345	0.32229	0.34364	443.45799	23.11428	5
7	Reading	16	-0.87897	0.45223	0.33786	452.19816	22.72550	5
7	Reading	17	-0.76808	0.57809	0.33286	460.66389	22.38918	5
7	Reading	18	-0.66025	0.70047	0.32854	468.89554	22.09861	5
7	Reading	19	-0.55502	0.81991	0.32485	476.92944	21.85041	5
7	Reading	20	-0.45196	0.93688	0.32173	484.79720	21.64055	6
7	Reading	21	-0.35073	1.05178	0.31915	492.52573	21.46701	6
7	Reading	22	-0.25098	1.16500	0.31705	500.14125	21.32576	6
7	Reading	23	-0.15240	1.27688	0.31544	507.66664	21.21746	6
7	Reading	24	-0.05468	1.38780	0.31428	515.12746	21.13944	6
7	Reading	25	0.04240	1.49798	0.31355	522.53851	21.09033	6
7	Reading	26	0.13919	1.60784	0.31328	529.92803	21.07217	6
7	Reading	27	0.23592	1.71763	0.31346	537.31284	21.08428	7
7	Reading	28	0.33287	1.82767	0.31408	544.71447	21.12598	7
7	Reading	29	0.43033	1.93828	0.31517	552.15444	21.19930	7
7	Reading	30	0.52859	2.04981	0.31676	559.65629	21.30625	7
7	Reading	31	0.62797	2.16260	0.31886	567.24289	21.44750	7
7	Reading	32	0.72881	2.27706	0.32153	574.94182	21.62709	7
7	Reading	33	0.83151	2.39362	0.32480	582.78200	21.84704	8
7	Reading	34	0.93647	2.51275	0.32879	590.79505	22.11542	8
7	Reading	35	1.04421	2.63504	0.33352	599.02065	22.43358	8
7	Reading	36	1.15528	2.76110	0.33913	607.49983	22.81092	8
7	Reading	37	1.27037	2.89173	0.34574	616.28641	23.25553	8
7	Reading	38	1.39029	3.02784	0.35352	625.44158	23.77884	8
7	Reading	39	1.51603	3.17055	0.36268	635.04069	24.39497	9
7	Reading	40	1.64885	3.32130	0.37359	645.18060	25.12881	9
7	Reading	41	1.79035	3.48191	0.38664	655.98372	26.00659	9
7	Reading	42	1.94265	3.65477	0.40243	667.61082	27.06868	9
7	Reading	43	2.10867	3.84320	0.42182	680.28520	28.37291	9
7	Reading	44	2.29251	4.05186	0.44613	694.32031	30.00807	9

Year	Domain	Raw Score	Delta-Centered Logit	Logit	Logit SE	Scale Score	Scale SE	Band
7	Reading	45	2.50034	4.28774	0.47747	710.18632	32.11610	9
7	Reading	46	2.74197	4.56199	0.51957	728.63321	34.94787	9
7	Reading	47	3.03460	4.89413	0.57982	750.97397	39.00047	9
7	Reading	48	3.41299	5.32360	0.67501	779.86144	45.40324	9
7	Reading	49	3.96663	5.95198	0.85669	822.12820	57.62360	9
7	Reading	50	5.10926	7.24887	1.45790	909.36100	98.06282	9

TABLE 13 Year 7 Spelling Score Equivalence Table

Year	Domain	Raw Score	Delta-Centered Logit	Logit	Logit SE	Scale Score	Scale SE	Band
7	Spelling	0	-5.99386	-3.28721	1.60065	338.88533	60.99806	4
7	Spelling	1	-4.68316	-2.02108	0.98312	387.13540	37.46504	4
7	Spelling	2	-3.95480	-1.31748	0.80225	413.94840	30.57239	4
7	Spelling	3	-3.40845	-0.78971	0.70665	434.06082	26.92923	5
7	Spelling	4	-2.96301	-0.35941	0.64377	450.45882	24.53298	5
7	Spelling	5	-2.58468	0.00606	0.59855	464.38627	22.80973	5
7	Spelling	6	-2.25340	0.32607	0.56478	476.58130	21.52281	5
7	Spelling	7	-1.95563	0.61372	0.53930	487.54316	20.55181	6
7	Spelling	8	-1.68203	0.87802	0.51992	497.61518	19.81327	6
7	Spelling	9	-1.42579	1.12554	0.50542	507.04775	19.26070	6
7	Spelling	10	-1.18183	1.36121	0.49487	516.02873	18.85866	6
7	Spelling	11	-0.94625	1.58878	0.48757	524.70104	18.58047	6
7	Spelling	12	-0.71594	1.81126	0.48299	533.17938	18.40593	7
7	Spelling	13	-0.48836	2.03110	0.48071	541.55711	18.31904	7
7	Spelling	14	-0.26143	2.25032	0.48040	549.91121	18.30723	7
7	Spelling	15	-0.03341	2.47058	0.48179	558.30494	18.36020	7
7	Spelling	16	0.19712	2.69328	0.48469	566.79166	18.47071	7
7	Spelling	17	0.43145	2.91964	0.48896	575.41786	18.63344	7
7	Spelling	18	0.67072	3.15077	0.49463	584.22583	18.84951	8
7	Spelling	19	0.91618	3.38789	0.50176	593.26207	19.12122	8
7	Spelling	20	1.16938	3.63248	0.51064	602.58298	19.45962	8
7	Spelling	21	1.43227	3.88643	0.52163	612.26058	19.87843	8
7	Spelling	22	1.70751	4.15231	0.53527	622.39282	20.39823	8
7	Spelling	23	1.99857	4.43348	0.55228	633.10773	21.04645	8
7	Spelling	24	2.31005	4.73437	0.57396	644.57414	21.87264	9
7	Spelling	25	2.64838	5.06119	0.60202	657.02870	22.94196	9
7	Spelling	26	3.02316	5.42323	0.64002	670.82543	24.39008	9
7	Spelling	27	3.45105	5.83657	0.69492	686.57711	26.48222	9
7	Spelling	28	3.96571	6.33373	0.78399	705.52304	29.87653	9
7	Spelling	29	4.65505	6.99964	0.96087	730.89974	36.61713	9
7	Spelling	30	5.93036	8.23159	1.57392	777.84726	59.97942	9

TABLE 14 Year 7 Grammar & Punctuation Score Equivalence Table

Year	Domain	Raw Score	Delta-Centered Logit	Logit	Logit SE	Scale Score	Scale SE	Band
7	GP	0	-4.60068	-3.71252	1.50148	135.02977	110.36237	4
7	GP	1	-3.41076	-2.37314	0.89636	233.47740	65.88460	4
7	GP	2	-2.80957	-1.69644	0.71672	283.21646	52.68063	4
7	GP	3	-2.38392	-1.21733	0.62390	318.43219	45.85814	4
7	GP	4	-2.04441	-0.83518	0.56617	346.52113	41.61485	4
7	GP	5	-1.75640	-0.51099	0.52631	370.34987	38.68504	4
7	GP	6	-1.50252	-0.22523	0.49724	391.35391	36.54833	4
7	GP	7	-1.27268	0.03348	0.47538	410.36972	34.94157	4
7	GP	8	-1.06054	0.27227	0.45847	427.92135	33.69864	5
7	GP	9	-0.86163	0.49616	0.44534	444.37780	32.73355	5
7	GP	10	-0.67269	0.70883	0.43523	460.00956	31.99044	5
7	GP	11	-0.49122	0.91309	0.42763	475.02315	31.43183	5
7	GP	12	-0.31519	1.11123	0.42219	489.58692	31.03197	6
7	GP	13	-0.14287	1.30520	0.41868	503.84417	30.77398	6
7	GP	14	0.02725	1.49668	0.41699	517.91841	30.64976	6
7	GP	15	0.19668	1.68739	0.41708	531.93605	30.65638	7
7	GP	16	0.36680	1.87888	0.41898	546.01103	30.79603	7
7	GP	17	0.53913	2.07285	0.42282	560.26828	31.07828	7
7	GP	18	0.71534	2.27120	0.42882	574.84748	31.51929	7
7	GP	19	0.89738	2.47610	0.43736	589.90812	32.14700	8
7	GP	20	1.08769	2.69031	0.44889	605.65307	32.99449	8
7	GP	21	1.28940	2.91736	0.46422	622.34179	34.12128	8
7	GP	22	1.50679	3.16205	0.48470	640.32709	35.62661	9
7	GP	23	1.74614	3.43146	0.51238	660.12936	37.66115	9
7	GP	24	2.01736	3.73675	0.55102	682.56891	40.50129	9
7	GP	25	2.33769	4.09731	0.60794	709.07093	44.68504	9
7	GP	26	2.74190	4.55229	0.69953	742.51305	51.41713	9
7	GP	27	3.31919	5.20209	0.87869	790.27490	64.58581	9
7	GP	28	4.48322	6.51232	1.48028	886.57993	108.80412	9

TABLE 15 Year 9 Numeracy Score Equivalence Table

Year	Domain	Raw Score	Delta-Centered Logit	Logit	Logit SE	Scale Score	Scale SE	Band
9	Numeracy	0	-6.20694	-2.98030	1.53000	272.36969	91.88086	5
9	Numeracy	1	-4.97213	-1.94121	0.90739	334.77000	54.49135	5
9	Numeracy	2	-4.34945	-1.41722	0.71733	366.23709	43.07771	5
9	Numeracy	3	-3.91896	-1.05497	0.61702	387.99123	37.05381	5
9	Numeracy	4	-3.58558	-0.77443	0.55275	404.83846	33.19421	5
9	Numeracy	5	-3.31080	-0.54320	0.50746	418.72448	30.47442	5
9	Numeracy	6	-3.07509	-0.34485	0.47346	430.63596	28.43262	5
9	Numeracy	7	-2.86713	-0.16985	0.44721	441.14521	26.85623	5
9	Numeracy	8	-2.67988	-0.01228	0.42608	450.60773	25.58732	5
9	Numeracy	9	-2.50861	0.13184	0.40873	459.26255	24.54540	5
9	Numeracy	10	-2.34999	0.26532	0.39424	467.27840	23.67523	5
9	Numeracy	11	-2.20162	0.39018	0.38198	474.77660	22.93899	5
9	Numeracy	12	-2.06170	0.50792	0.37149	481.84723	22.30903	6
9	Numeracy	13	-1.92883	0.61973	0.36243	488.56173	21.76495	6
9	Numeracy	14	-1.80193	0.72651	0.35453	494.97418	21.29054	6
9	Numeracy	15	-1.68014	0.82900	0.34762	501.12899	20.87557	6
9	Numeracy	16	-1.56274	0.92779	0.34150	507.06161	20.50805	6
9	Numeracy	17	-1.44915	1.02338	0.33613	512.80207	20.18556	6
9	Numeracy	18	-1.33888	1.11617	0.33136	518.37437	19.89911	6
9	Numeracy	19	-1.23154	1.20650	0.32711	523.79894	19.64389	6
9	Numeracy	20	-1.12676	1.29467	0.32333	529.09380	19.41689	6
9	Numeracy	21	-1.02425	1.38093	0.31997	534.27396	19.21511	7
9	Numeracy	22	-0.92372	1.46553	0.31698	539.35443	19.03555	7
9	Numeracy	23	-0.82495	1.54864	0.31434	544.34542	18.87701	7
9	Numeracy	24	-0.72771	1.63047	0.31202	549.25955	18.73769	7
9	Numeracy	25	-0.63181	1.71117	0.31000	554.10581	18.61638	7
9	Numeracy	26	-0.53706	1.79090	0.30826	558.89383	18.51189	7
9	Numeracy	27	-0.44330	1.86980	0.30679	563.63200	18.42361	7
9	Numeracy	28	-0.35035	1.94802	0.30558	568.32933	18.35095	7
9	Numeracy	29	-0.25806	2.02568	0.30462	572.99303	18.29330	7
9	Numeracy	30	-0.16629	2.10291	0.30391	577.63092	18.25066	7
9	Numeracy	31	-0.07488	2.17983	0.30345	582.25018	18.22304	8
9	Numeracy	32	0.01631	2.25656	0.30322	586.85804	18.20922	8
9	Numeracy	33	0.10742	2.33323	0.30324	591.46229	18.21043	8
9	Numeracy	34	0.19863	2.40999	0.30350	596.07194	18.22604	8
9	Numeracy	35	0.29005	2.48692	0.30401	600.69181	18.25667	8
9	Numeracy	36	0.38186	2.56417	0.30478	605.33089	18.30291	8
9	Numeracy	37	0.47420	2.64188	0.30581	609.99760	18.36476	8
9	Numeracy	38	0.56723	2.72016	0.30712	614.69853	18.44343	8
9	Numeracy	39	0.66116	2.79920	0.30869	619.44511	18.53771	8
9	Numeracy	40	0.75613	2.87912	0.31057	624.24454	18.65061	8
9	Numeracy	41	0.85236	2.96010	0.31277	629.10761	18.78273	8
9	Numeracy	42	0.95004	3.04230	0.31530	634.04396	18.93466	9
9	Numeracy	43	1.04941	3.12592	0.31819	639.06558	19.10822	9
9	Numeracy	44	1.15072	3.21117	0.32147	644.18508	19.30519	9

Year	Domain	Raw Score	Delta-Centered Logit	Logit	Logit SE	Scale Score	Scale SE	Band
9	Numeracy	45	1.25424	3.29828	0.32518	649.41629	19.52798	9
9	Numeracy	46	1.36028	3.38751	0.32935	654.77480	19.77840	9
9	Numeracy	47	1.46919	3.47916	0.33404	660.27865	20.06005	9
9	Numeracy	48	1.58138	3.57357	0.33930	665.94823	20.37593	9
9	Numeracy	49	1.69730	3.67112	0.34522	671.80639	20.73144	9
9	Numeracy	50	1.81749	3.77226	0.35199	677.88013	21.13800	9
9	Numeracy	51	1.94262	3.87755	0.35962	684.20310	21.59620	9
9	Numeracy	52	2.07347	3.98766	0.36832	690.81552	22.11866	10
9	Numeracy	53	2.21102	4.10341	0.37834	697.76663	22.72039	10
9	Numeracy	54	2.35651	4.22584	0.38995	705.11890	23.41761	10
9	Numeracy	55	2.51152	4.35628	0.40359	712.95220	24.23673	10
9	Numeracy	56	2.67817	4.49652	0.41983	721.37401	25.21199	10
9	Numeracy	57	2.85935	4.64898	0.43953	730.52967	26.39503	10
9	Numeracy	58	3.05918	4.81714	0.46395	740.62815	27.86152	10
9	Numeracy	59	3.28379	5.00615	0.49536	751.97874	29.74778	10
9	Numeracy	60	3.54302	5.22429	0.53738	765.07867	32.27120	10
9	Numeracy	61	3.85408	5.48605	0.59738	780.79810	35.87437	10
9	Numeracy	62	4.25172	5.82066	0.69217	800.89239	41.56678	10
9	Numeracy	63	4.82542	6.30343	0.87356	829.88410	52.45976	10
9	Numeracy	64	5.98881	7.28242	1.47708	888.67523	88.70286	10

TABLE 16 Year 9 Non-Calculator Score Equivalence Table

Year	Domain	Raw Score	Delta-Centered Logit	Logit	Logit SE	Scale Score	Scale SE	Band
9	NC	0	-5.24855	-2.17382	1.52171	320.80110	91.38302	5
9	NC	1	-4.03461	-1.15229	0.91328	382.14689	54.84506	5
9	NC	2	-3.41110	-0.62760	0.73365	413.65602	44.05777	5
9	NC	3	-2.96458	-0.25186	0.64129	436.22027	38.51129	5
9	NC	4	-2.60514	0.05061	0.58425	454.38446	35.08588	5
9	NC	5	-2.29765	0.30937	0.54509	469.92373	32.73421	5
9	NC	6	-2.02435	0.53935	0.51674	483.73469	31.03171	6
9	NC	7	-1.77498	0.74919	0.49544	496.33618	29.75258	6
9	NC	8	-1.54308	0.94434	0.47901	508.05549	28.76591	6
9	NC	9	-1.32435	1.12840	0.46606	519.10882	27.98823	6
9	NC	10	-1.11575	1.30393	0.45576	529.64989	27.36969	6
9	NC	11	-0.91510	1.47278	0.44753	539.78982	26.87545	7
9	NC	12	-0.72074	1.63634	0.44099	549.61206	26.48270	7
9	NC	13	-0.53133	1.79572	0.43592	559.18328	26.17824	7
9	NC	14	-0.34575	1.95189	0.43212	568.56173	25.95004	7
9	NC	15	-0.16295	2.10572	0.42955	577.79966	25.79570	7
9	NC	16	0.01806	2.25804	0.42820	586.94691	25.71463	8
9	NC	17	0.19831	2.40972	0.42807	596.05573	25.70682	8
9	NC	18	0.37882	2.56162	0.42923	605.17776	25.77648	8
9	NC	19	0.56074	2.71470	0.43177	614.37065	25.92902	8
9	NC	20	0.74530	2.87001	0.43583	623.69745	26.17283	8
9	NC	21	0.93391	3.02872	0.44162	633.22844	26.52054	8
9	NC	22	1.12821	3.19223	0.44939	643.04768	26.98715	9
9	NC	23	1.33018	3.36218	0.45954	653.25366	27.59669	9
9	NC	24	1.54233	3.54071	0.47261	663.97490	28.38158	9
9	NC	25	1.76792	3.73054	0.48939	675.37473	29.38926	9
9	NC	26	2.01146	3.93548	0.51106	687.68196	30.69061	10
9	NC	27	2.27941	4.16096	0.53999	701.22268	32.42794	10
9	NC	28	2.58203	4.41562	0.57968	716.51573	34.81143	10
9	NC	29	2.93697	4.71430	0.63728	734.45232	38.27048	10
9	NC	30	3.37932	5.08654	0.72991	756.80639	43.83317	10
9	NC	31	3.99888	5.60790	0.91015	788.11554	54.65710	10
9	NC	32	5.20953	6.62666	1.51861	849.29498	91.19685	10

TABLE 17 Year 9 Calculator Score Equivalence Table

Year	Domain	Raw Score	Delta-Centered Logit	Logit	Logit SE	Scale Score	Scale SE	Band
9	CA	0	-5.85348	-2.68286	1.68987	290.23180	101.48150	5
9	CA	1	-4.37909	-1.44217	1.00841	364.73877	60.55789	5
9	CA	2	-3.60082	-0.78725	0.79243	404.06858	47.58768	5
9	CA	3	-3.07692	-0.34639	0.67977	430.54348	40.82212	5
9	CA	4	-2.67493	-0.00812	0.61056	450.85755	36.66587	5
9	CA	5	-2.34138	0.27257	0.56368	467.71379	33.85059	5
9	CA	6	-2.05105	0.51688	0.53003	482.38530	31.82981	6
9	CA	7	-1.79029	0.73631	0.50483	495.56270	30.31648	6
9	CA	8	-1.55089	0.93776	0.48551	507.66034	29.15626	6
9	CA	9	-1.32753	1.12572	0.47033	518.94787	28.24466	6
9	CA	10	-1.11643	1.30336	0.45836	529.61566	27.52582	6
9	CA	11	-0.91476	1.47307	0.44899	539.80723	26.96313	7
9	CA	12	-0.72032	1.63669	0.44179	549.63308	26.53075	7
9	CA	13	-0.53128	1.79577	0.43647	559.18628	26.21127	7
9	CA	14	-0.34605	1.95164	0.43284	568.54672	25.99327	7
9	CA	15	-0.16323	2.10548	0.43079	577.78525	25.87017	7
9	CA	16	0.01850	2.25841	0.43023	586.96913	25.83654	8
9	CA	17	0.20043	2.41150	0.43114	596.16262	25.89118	8
9	CA	18	0.38380	2.56581	0.43354	605.42938	26.03531	8
9	CA	19	0.56995	2.72245	0.43747	614.83606	26.27132	8
9	CA	20	0.76025	2.88259	0.44302	624.45292	26.60461	8
9	CA	21	0.95624	3.04751	0.45033	634.35683	27.04360	9
9	CA	22	1.15964	3.21868	0.45962	644.63608	27.60149	9
9	CA	23	1.37247	3.39777	0.47119	655.39094	28.29630	9
9	CA	24	1.59720	3.58688	0.48551	666.74754	29.15626	9
9	CA	25	1.83698	3.78866	0.50327	678.86500	30.22280	9
9	CA	26	2.09607	4.00668	0.52593	691.95772	31.58359	10
9	CA	27	2.38084	4.24632	0.55538	706.34879	33.35215	10
9	CA	28	2.70139	4.51606	0.59545	722.54744	35.75847	10
9	CA	29	3.07560	4.83096	0.65332	741.45808	39.23373	10
9	CA	30	3.53926	5.22113	0.74650	764.88890	44.82945	10
9	CA	31	4.18370	5.76342	0.92790	797.45496	55.72304	10
9	CA	32	5.42438	6.80745	1.54210	860.15193	92.60749	10

TABLE 18 Year 9 Reading Score Equivalence Table

Year	Domain	Raw Score	Delta-Centered Logit	Logit	Logit SE	Scale Score	Scale SE	Band
9	Reading	0	-5.50146	-3.65640	1.48735	175.83911	100.04372	5
9	Reading	1	-4.32744	-2.46630	0.88296	255.88888	59.39060	5
9	Reading	2	-3.74211	-1.87295	0.70237	295.79942	47.24356	5
9	Reading	3	-3.33242	-1.45765	0.60838	323.73377	40.92150	5
9	Reading	4	-3.00933	-1.13013	0.54884	345.76377	36.91666	5
9	Reading	5	-2.73833	-0.85542	0.50706	364.24161	34.10641	5
9	Reading	6	-2.50234	-0.61620	0.47589	380.33228	32.00982	5
9	Reading	7	-2.29163	-0.40260	0.45146	394.69967	30.36658	5
9	Reading	8	-2.10003	-0.20837	0.43173	407.76418	29.03948	5
9	Reading	9	-1.92342	-0.02934	0.41543	419.80628	27.94310	5
9	Reading	10	-1.75888	0.13745	0.40172	431.02509	27.02092	5
9	Reading	11	-1.60425	0.29420	0.39003	441.56857	26.23461	5
9	Reading	12	-1.45788	0.44257	0.37996	451.54840	25.55727	5
9	Reading	13	-1.31851	0.58385	0.37119	461.05132	24.96738	5
9	Reading	14	-1.18508	0.71911	0.36360	470.14932	24.45685	5
9	Reading	15	-1.05677	0.84918	0.35693	478.89823	24.00821	6
9	Reading	16	-0.93287	0.97478	0.35108	487.34647	23.61472	6
9	Reading	17	-0.81278	1.09651	0.34595	495.53441	23.26966	6
9	Reading	18	-0.69599	1.21490	0.34147	503.49768	22.96832	6
9	Reading	19	-0.58203	1.33042	0.33758	511.26791	22.70667	6
9	Reading	20	-0.47051	1.44347	0.33424	518.87200	22.48201	6
9	Reading	21	-0.36104	1.55444	0.33141	526.33618	22.29165	6
9	Reading	22	-0.25330	1.66366	0.32907	533.68265	22.13426	7
9	Reading	23	-0.14696	1.77145	0.32718	540.93294	22.00713	7
9	Reading	24	-0.04172	1.87814	0.32575	548.10924	21.91094	7
9	Reading	25	0.06269	1.98398	0.32474	555.22836	21.84301	7
9	Reading	26	0.16660	2.08931	0.32419	562.31318	21.80601	7
9	Reading	27	0.27025	2.19438	0.32407	569.38051	21.79794	7
9	Reading	28	0.37393	2.29948	0.32439	576.44986	21.81947	7
9	Reading	29	0.47794	2.40491	0.32519	583.54140	21.87328	8
9	Reading	30	0.58257	2.51098	0.32646	590.67599	21.95870	8
9	Reading	31	0.68815	2.61800	0.32825	597.87449	22.07910	8
9	Reading	32	0.79502	2.72634	0.33059	605.16177	22.23650	8
9	Reading	33	0.90357	2.83638	0.33352	612.56340	22.43358	8
9	Reading	34	1.01420	2.94852	0.33713	620.10628	22.67640	8
9	Reading	35	1.12741	3.06328	0.34148	627.82539	22.96899	8
9	Reading	36	1.24375	3.18122	0.34668	635.75839	23.31876	9
9	Reading	37	1.36388	3.30299	0.35285	643.94901	23.73377	9
9	Reading	38	1.48859	3.42941	0.36018	652.45241	24.22681	9
9	Reading	39	1.61885	3.56145	0.36886	661.33383	24.81065	9
9	Reading	40	1.75589	3.70037	0.37919	670.67801	25.50548	9
9	Reading	41	1.90125	3.84772	0.39167	680.58922	26.34493	9
9	Reading	42	2.05701	4.00562	0.40683	691.21006	27.36463	10
9	Reading	43	2.22601	4.17693	0.42555	702.73290	28.62380	10
9	Reading	44	2.41227	4.36574	0.44914	715.43284	30.21053	10

Year	Domain	Raw Score	Delta-Centered Logit	Logit	Logit SE	Scale Score	Scale SE	Band
9	Reading	45	2.62184	4.57819	0.47974	729.72288	32.26878	10
9	Reading	46	2.86444	4.82411	0.52098	746.26421	35.04271	10
9	Reading	47	3.15708	5.12076	0.58034	766.21780	39.03545	10
9	Reading	48	3.53431	5.50316	0.67463	791.93919	45.37768	10
9	Reading	49	4.08542	6.06182	0.85497	829.51638	57.50790	10
9	Reading	50	5.22372	7.21571	1.45491	907.13056	97.86171	10

TABLE 19 Year 9 Spelling Score Equivalence Table

Year	Domain	Raw Score	Delta-Centered Logit	Logit	Logit SE	Scale Score	Scale SE	Band
9	Spelling	0	-6.02819	-2.80388	1.60453	357.30422	61.14592	5
9	Spelling	1	-4.70871	-1.45009	0.98063	408.89486	37.37015	5
9	Spelling	2	-3.98742	-0.71005	0.79899	437.09653	30.44815	5
9	Spelling	3	-3.45042	-0.15909	0.70643	458.09268	26.92085	5
9	Spelling	4	-3.00679	0.29608	0.64822	475.43844	24.70256	5
9	Spelling	5	-2.62161	0.69127	0.60686	490.49846	23.12641	6
9	Spelling	6	-2.27791	1.04391	0.57544	503.93697	21.92904	6
9	Spelling	7	-1.96568	1.36426	0.55067	516.14496	20.98510	6
9	Spelling	8	-1.67778	1.65964	0.53100	527.40139	20.23551	6
9	Spelling	9	-1.40877	1.93565	0.51532	537.91967	19.63797	7
9	Spelling	10	-1.15422	2.19681	0.50300	547.87203	19.16848	7
9	Spelling	11	-0.91057	2.44680	0.49362	557.39873	18.81102	7
9	Spelling	12	-0.67492	2.68858	0.48675	566.61255	18.54922	7
9	Spelling	13	-0.44473	2.92475	0.48221	575.61259	18.37621	7
9	Spelling	14	-0.21782	3.15756	0.47980	584.48459	18.28436	8
9	Spelling	15	0.00784	3.38909	0.47941	593.30780	18.26950	8
9	Spelling	16	0.23419	3.62132	0.48097	602.15769	18.32895	8
9	Spelling	17	0.46316	3.85625	0.48446	611.11048	18.46195	8
9	Spelling	18	0.69666	4.09582	0.48992	620.24008	18.67002	8
9	Spelling	19	0.93676	4.34216	0.49731	629.62768	18.95164	8
9	Spelling	20	1.18553	4.59740	0.50676	639.35445	19.31176	9
9	Spelling	21	1.44520	4.86382	0.51837	649.50726	19.75420	9
9	Spelling	22	1.71820	5.14392	0.53237	660.18140	20.28772	9
9	Spelling	23	2.00725	5.44048	0.54925	671.48279	20.93099	9
9	Spelling	24	2.31578	5.75703	0.56996	683.54598	21.72021	9
9	Spelling	25	2.64875	6.09866	0.59639	696.56492	22.72741	10
9	Spelling	26	3.01445	6.47387	0.63220	710.86353	24.09207	10
9	Spelling	27	3.42850	6.89868	0.68467	727.05232	26.09161	10
9	Spelling	28	3.92405	7.40712	0.77135	746.42811	29.39484	10
9	Spelling	29	4.58916	8.08952	0.94584	772.43322	36.04436	10
9	Spelling	30	5.83629	9.36908	1.55325	821.19508	59.19172	10

TABLE 20 Year 9 Grammar & Punctuation Score Equivalence Table

Year	Domain	Raw Score	Delta-Centered Logit	Logit	Logit SE	Scale Score	Scale SE	Band
9	GP	0	-4.84402	-3.04864	1.51431	183.82653	111.30540	5
9	GP	1	-3.64061	-1.82561	0.90797	273.72216	66.73796	5
9	GP	2	-3.02556	-1.20054	0.72887	319.66630	53.57369	5
9	GP	3	-2.58526	-0.75306	0.63756	352.55715	46.86218	5
9	GP	4	-2.23038	-0.39240	0.58117	379.06652	42.71738	5
9	GP	5	-1.92621	-0.08327	0.54260	401.78831	39.88240	5
9	GP	6	-1.65541	0.19195	0.51477	422.01764	37.83682	5
9	GP	7	-1.40807	0.44332	0.49384	440.49394	36.29842	5
9	GP	8	-1.17783	0.67731	0.47790	457.69276	35.12679	5
9	GP	9	-0.96043	0.89825	0.46551	473.93238	34.21610	5
9	GP	10	-0.75272	1.10935	0.45599	489.44873	33.51635	6
9	GP	11	-0.55228	1.31306	0.44881	504.42190	32.98861	6
9	GP	12	-0.35720	1.51132	0.44364	518.99449	32.60860	6
9	GP	13	-0.16583	1.70581	0.44027	533.28997	32.36090	7
9	GP	14	0.02331	1.89803	0.43861	547.41860	32.23888	7
9	GP	15	0.21163	2.08942	0.43862	561.48622	32.23962	7
9	GP	16	0.40053	2.28140	0.44037	575.59721	32.36825	7
9	GP	17	0.59153	2.47551	0.44401	589.86476	32.63580	8
9	GP	18	0.78635	2.67351	0.44976	604.41823	33.05843	8
9	GP	19	0.98702	2.87745	0.45798	619.40831	33.66262	8
9	GP	20	1.19601	3.08984	0.46932	635.01948	34.49614	9
9	GP	21	1.41668	3.31411	0.48442	651.50386	35.60603	9
9	GP	22	1.65344	3.55473	0.50467	669.19000	37.09445	9
9	GP	23	1.91279	3.81831	0.53215	688.56376	39.11430	10
9	GP	24	2.20485	4.11513	0.57051	710.38074	41.93385	10
9	GP	25	2.54699	4.46285	0.62713	735.93899	46.09555	10
9	GP	26	2.97414	4.89696	0.71842	767.84712	52.80559	10
9	GP	27	3.57548	5.50810	0.89747	812.76736	65.96619	10
9	GP	28	4.76449	6.71649	1.50195	901.58692	110.39691	10

TABLE 21 **Years 3, 5, 7, and 9 Persuasive Writing Score Equivalence Table**

Year	Domain	Raw Score	Delta-Centered			Scale Score	Scale SE	Band
			Logit	Logit	Logit SE			
3579	Writing	0	-11.56130	-11.56130	1.58059	123.58384	46.93103	1
3579	Writing	1	-10.28530	-10.28530	0.97552	161.47213	28.96523	1
3579	Writing	2	-9.58163	-9.58163	0.80886	182.36498	24.01675	1
3579	Writing	3	-9.03624	-9.03624	0.73227	198.55875	21.74263	1
3579	Writing	4	-8.55912	-8.55912	0.69179	212.72544	20.54069	1
3579	Writing	5	-8.11505	-8.11505	0.66970	225.91080	19.88479	1
3579	Writing	6	-7.68683	-7.68683	0.65815	238.62555	19.54185	1
3579	Writing	7	-7.26561	-7.26561	0.65307	251.13246	19.39102	1
3579	Writing	8	-6.84642	-6.84642	0.65264	263.57908	19.37825	1
3579	Writing	9	-6.42459	-6.42459	0.65629	276.10410	19.48662	2
3579	Writing	10	-5.99373	-5.99373	0.66360	288.89724	19.70367	2
3579	Writing	11	-5.54733	-5.54733	0.67291	302.15179	19.98011	2
3579	Writing	12	-5.08407	-5.08407	0.68103	315.90694	20.22121	2
3579	Writing	13	-4.61145	-4.61145	0.68562	329.94002	20.35749	3
3579	Writing	14	-4.13850	-4.13850	0.68783	343.98290	20.42311	3
3579	Writing	15	-3.66599	-3.66599	0.69055	358.01271	20.50387	3
3579	Writing	16	-3.18815	-3.18815	0.69505	372.20078	20.63749	3
3579	Writing	17	-2.69970	-2.69970	0.69986	386.70388	20.78031	4
3579	Writing	18	-2.20165	-2.20165	0.70177	401.49203	20.83702	4
3579	Writing	19	-1.70308	-1.70308	0.69838	416.29561	20.73636	4
3579	Writing	20	-1.21560	-1.21560	0.69050	430.76992	20.50239	5
3579	Writing	21	-0.74465	-0.74465	0.68119	444.75341	20.22596	5
3579	Writing	22	-0.28818	-0.28818	0.67279	458.30696	19.97654	5
3579	Writing	23	0.15803	0.15803	0.66590	471.55587	19.77196	5
3579	Writing	24	0.59630	0.59630	0.66009	484.56902	19.59945	6
3579	Writing	25	1.02729	1.02729	0.65523	497.36601	19.45515	6
3579	Writing	26	1.45187	1.45187	0.65163	509.97268	19.34826	6
3579	Writing	27	1.87212	1.87212	0.64976	522.45079	19.29273	6
3579	Writing	28	2.29142	2.29142	0.64982	534.90068	19.29452	7
3579	Writing	29	2.71388	2.71388	0.65108	547.44440	19.33193	7
3579	Writing	30	3.14184	3.14184	0.65143	560.15143	19.34232	7
3579	Writing	31	3.57154	3.57154	0.64816	572.91012	19.24523	7
3579	Writing	32	3.99295	3.99295	0.64055	585.42267	19.01927	8
3579	Writing	33	4.39810	4.39810	0.63115	597.45242	18.74016	8
3579	Writing	34	4.78725	4.78725	0.62332	609.00710	18.50768	8
3579	Writing	35	5.16635	5.16635	0.61901	620.26337	18.37970	8
3579	Writing	36	5.54267	5.54267	0.61868	631.43710	18.36990	8
3579	Writing	37	5.92235	5.92235	0.62175	642.71059	18.46106	9
3579	Writing	38	6.30943	6.30943	0.62724	654.20381	18.62407	9
3579	Writing	39	6.70562	6.70562	0.63419	665.96752	18.83043	9
3579	Writing	40	7.11090	7.11090	0.64237	678.00113	19.07331	9
3579	Writing	41	7.52533	7.52533	0.65290	690.30642	19.38597	10
3579	Writing	42	7.95170	7.95170	0.66840	702.96624	19.84619	10
3579	Writing	43	8.39809	8.39809	0.69361	716.22049	20.59473	10
3579	Writing	44	8.88173	8.88173	0.73684	730.58078	21.87832	10

Year	Domain	Raw Score	Delta- Centered Logit	Logit	Logit SE	Scale Score	Scale SE	Band
3579	Writing	45	9.43857	9.43857	0.81617	747.11452	24.23380	10
3579	Writing	46	10.16002	10.16002	0.98590	768.53588	29.27343	10
3579	Writing	47	11.46100	11.46100	1.59800	807.16470	47.44796	10
