

## APPENDIX E. SCORE EQUIVALENCE TABLES

### E.1 Year 3 Reading Score Equivalence Table

Year	Domain	Raw	logit_Delta-Centred	logit_se	Transformed_Logit	NAPLAN ScaleScore	Scale Score_SE	Band
3	R	0	-5.330	1.537	-6.221	3.3	103.4	1
3	R	1	-4.093	0.921	-5.003	85.2	62.0	1
3	R	2	-3.456	0.737	-4.376	127.4	49.6	1
3	R	3	-3.003	0.642	-3.930	157.4	43.2	1
3	R	4	-2.642	0.583	-3.575	181.3	39.2	1
3	R	5	-2.336	0.541	-3.274	201.6	36.4	1
3	R	6	-2.067	0.511	-3.009	219.4	34.3	1
3	R	7	-1.824	0.487	-2.769	235.5	32.8	1
3	R	8	-1.600	0.469	-2.549	250.3	31.5	1
3	R	9	-1.391	0.454	-2.343	264.2	30.5	1
3	R	10	-1.194	0.442	-2.149	277.2	29.7	2
3	R	11	-1.006	0.432	-1.964	289.7	29.0	2
3	R	12	-0.826	0.423	-1.787	301.6	28.5	2
3	R	13	-0.653	0.416	-1.616	313.1	28.0	2
3	R	14	-0.484	0.410	-1.450	324.2	27.6	3
3	R	15	-0.320	0.406	-1.288	335.1	27.3	3
3	R	16	-0.159	0.402	-1.130	345.8	27.1	3
3	R	17	-0.001	0.400	-0.974	356.3	26.9	3
3	R	18	0.156	0.398	-0.820	366.7	26.8	3
3	R	19	0.312	0.398	-0.666	377.0	26.7	4
3	R	20	0.467	0.398	-0.513	387.3	26.8	4
3	R	21	0.623	0.399	-0.359	397.6	26.9	4
3	R	22	0.781	0.402	-0.204	408.0	27.0	4
3	R	23	0.940	0.406	-0.047	418.6	27.3	4
3	R	24	1.104	0.411	0.113	429.4	27.7	5
3	R	25	1.271	0.418	0.279	440.5	28.1	5
3	R	26	1.446	0.428	0.450	452.1	28.8	5
3	R	27	1.629	0.440	0.631	464.2	29.6	5
3	R	28	1.823	0.456	0.822	477.1	30.7	5
3	R	29	2.033	0.477	1.029	491.0	32.1	6
3	R	30	2.265	0.505	1.257	506.3	33.9	6
3	R	31	2.529	0.543	1.517	523.8	36.5	6
3	R	32	2.841	0.600	1.824	544.5	40.4	6
3	R	33	3.236	0.692	2.213	570.6	46.6	6
3	R	34	3.804	0.871	2.772	608.3	58.6	6
3	R	35	4.958	1.471	3.909	684.7	98.9	6

**E.2 Year 3 Spelling Score Equivalence Table**

Year	Domain	Raw	logit_Delta-Centred	logit_se	Transformed_Logit	NAPLAN ScaleScore	Scale Score_SE	Band
3	S	0	-4.840	1.542	-6.188	228.3	58.8	1
3	S	1	-3.605	0.937	-4.911	277.0	35.7	2
3	S	2	-2.953	0.762	-4.236	302.7	29.0	2
3	S	3	-2.471	0.674	-3.737	321.8	25.7	2
3	S	4	-2.070	0.621	-3.322	337.5	23.7	3
3	S	5	-1.718	0.585	-2.958	351.4	22.3	3
3	S	6	-1.400	0.559	-2.629	364.0	21.3	3
3	S	7	-1.105	0.539	-2.324	375.6	20.5	4
3	S	8	-0.829	0.524	-2.038	386.5	20.0	4
3	S	9	-0.566	0.513	-1.767	396.8	19.5	4
3	S	10	-0.313	0.505	-1.505	406.8	19.2	4
3	S	11	-0.067	0.500	-1.250	416.5	19.0	4
3	S	12	0.176	0.498	-0.998	426.1	19.0	5
3	S	13	0.418	0.498	-0.748	435.7	19.0	5
3	S	14	0.662	0.502	-0.496	445.3	19.1	5
3	S	15	0.910	0.508	-0.239	455.0	19.4	5
3	S	16	1.166	0.519	0.025	465.1	19.8	5
3	S	17	1.434	0.535	0.303	475.7	20.4	5
3	S	18	1.721	0.558	0.599	487.0	21.3	6
3	S	19	2.036	0.592	0.926	499.4	22.6	6
3	S	20	2.397	0.644	1.299	513.7	24.5	6
3	S	21	2.838	0.732	1.755	531.0	27.9	6
3	S	22	3.449	0.907	2.387	555.1	34.6	6
3	S	23	4.643	1.509	3.623	602.2	57.5	6

**E.3 Year 3 Grammar and Punctuation Score Equivalence Table**

Year	Domain	Raw	logit_Delta-Centred	logit_se	Transformed_Logit	NAPLAN ScaleScore	Scale Score_SE	Band
3	GP	0	-4.167	1.485	-4.302	91.7	109.1	1
3	GP	1	-2.999	0.884	-3.371	160.2	65.0	1
3	GP	2	-2.416	0.706	-2.906	194.3	51.9	1
3	GP	3	-2.005	0.616	-2.578	218.4	45.2	1
3	GP	4	-1.677	0.560	-2.317	237.6	41.2	1
3	GP	5	-1.397	0.523	-2.093	254.0	38.5	1
3	GP	6	-1.147	0.498	-1.894	268.7	36.6	1
3	GP	7	-0.918	0.479	-1.711	282.1	35.2	2
3	GP	8	-0.703	0.466	-1.540	294.7	34.3	2
3	GP	9	-0.497	0.457	-1.376	306.8	33.6	2
3	GP	10	-0.298	0.452	-1.217	318.5	33.2	2
3	GP	11	-0.102	0.449	-1.061	329.9	33.0	3
3	GP	12	0.094	0.449	-0.905	341.4	33.0	3
3	GP	13	0.290	0.452	-0.748	352.9	33.2	3
3	GP	14	0.491	0.458	-0.589	364.6	33.7	3
3	GP	15	0.698	0.467	-0.424	376.8	34.4	4
3	GP	16	0.914	0.481	-0.251	389.5	35.3	4
3	GP	17	1.146	0.499	-0.066	403.0	36.7	4
3	GP	18	1.397	0.525	0.135	417.8	38.6	4
3	GP	19	1.680	0.562	0.360	434.4	41.3	5
3	GP	20	2.010	0.618	0.623	453.7	45.4	5
3	GP	21	2.423	0.708	0.952	477.9	52.0	5
3	GP	22	3.008	0.886	1.419	512.2	65.1	6
3	GP	23	4.179	1.487	2.352	580.8	109.3	6

**E.4 Year 3 Numeracy Score Equivalence Table**

Year	Domain	Raw	logit_Delta-Centred	logit_se	Transformed_Logit	NAPLAN ScaleScore	Scale Score_SE	Band
3	N	0	-5.296	1.507	-7.967	0.0	90.5	1
3	N	1	-4.101	0.903	-6.498	61.2	54.2	1
3	N	2	-3.493	0.724	-5.749	106.1	43.5	1
3	N	3	-3.058	0.632	-5.215	138.2	38.0	1
3	N	4	-2.709	0.575	-4.785	164.0	34.5	1
3	N	5	-2.411	0.535	-4.419	186.0	32.1	1
3	N	6	-2.147	0.506	-4.095	205.5	30.4	1
3	N	7	-1.908	0.484	-3.800	223.1	29.0	1
3	N	8	-1.687	0.466	-3.529	239.4	28.0	1
3	N	9	-1.481	0.452	-3.275	254.7	27.1	1
3	N	10	-1.286	0.440	-3.035	269.1	26.4	1
3	N	11	-1.099	0.431	-2.806	282.9	25.9	2
3	N	12	-0.920	0.423	-2.585	296.1	25.4	2
3	N	13	-0.746	0.417	-2.372	308.9	25.1	2
3	N	14	-0.577	0.412	-2.164	321.4	24.8	2
3	N	15	-0.411	0.409	-1.959	333.7	24.6	3
3	N	16	-0.248	0.407	-1.758	345.8	24.4	3
3	N	17	-0.086	0.405	-1.559	357.7	24.3	3
3	N	18	0.076	0.405	-1.360	369.7	24.3	3
3	N	19	0.238	0.406	-1.161	381.6	24.4	4
3	N	20	0.400	0.408	-0.961	393.6	24.5	4
3	N	21	0.565	0.411	-0.759	405.8	24.7	4
3	N	22	0.733	0.416	-0.552	418.2	25.0	4
3	N	23	0.905	0.422	-0.341	430.9	25.3	5
3	N	24	1.083	0.429	-0.122	444.0	25.8	5
3	N	25	1.267	0.439	0.105	457.7	26.4	5
3	N	26	1.462	0.451	0.344	472.0	27.1	5
3	N	27	1.668	0.467	0.597	487.2	28.0	6
3	N	28	1.889	0.486	0.870	503.6	29.2	6
3	N	29	2.131	0.510	1.168	521.5	30.6	6
3	N	30	2.401	0.542	1.500	541.4	32.5	6
3	N	31	2.710	0.584	1.879	564.2	35.1	6
3	N	32	3.075	0.645	2.328	591.2	38.7	6
3	N	33	3.533	0.740	2.891	625.0	44.5	6
3	N	34	4.172	0.923	3.677	672.2	55.4	6
3	N	35	5.405	1.536	5.194	763.3	92.2	6

**E.5 Year 5 Reading Score Equivalence Table**

Year	Domain	Raw	logit_Delta-Centred	logit_se	Transformed_Logit	NAPLAN ScaleScore	Scale Score_SE	Band
5	R	0	-4.698	1.472	-4.929	90.2	99.0	3
5	R	1	-3.542	0.871	-3.677	174.4	58.6	3
5	R	2	-2.973	0.691	-3.061	215.9	46.5	3
5	R	3	-2.578	0.598	-2.633	244.7	40.2	3
5	R	4	-2.267	0.540	-2.296	267.3	36.3	3
5	R	5	-2.006	0.499	-2.014	286.3	33.6	3
5	R	6	-1.779	0.470	-1.768	302.9	31.6	3
5	R	7	-1.575	0.447	-1.547	317.7	30.1	3
5	R	8	-1.388	0.429	-1.345	331.3	28.9	3
5	R	9	-1.214	0.415	-1.157	344.0	27.9	3
5	R	10	-1.051	0.403	-0.980	355.9	27.1	3
5	R	11	-0.895	0.394	-0.811	367.2	26.5	3
5	R	12	-0.746	0.386	-0.650	378.1	26.0	4
5	R	13	-0.602	0.381	-0.494	388.5	25.6	4
5	R	14	-0.462	0.376	-0.343	398.7	25.3	4
5	R	15	-0.325	0.372	-0.194	408.7	25.1	4
5	R	16	-0.190	0.370	-0.048	418.5	24.9	4
5	R	17	-0.057	0.369	0.097	428.3	24.8	5
5	R	18	0.076	0.369	0.241	438.0	24.8	5
5	R	19	0.209	0.369	0.385	447.7	24.8	5
5	R	20	0.343	0.371	0.530	457.4	25.0	5
5	R	21	0.479	0.374	0.677	467.3	25.2	5
5	R	22	0.618	0.378	0.827	477.4	25.4	5
5	R	23	0.759	0.384	0.980	487.7	25.8	6
5	R	24	0.906	0.391	1.139	498.4	26.3	6
5	R	25	1.058	0.400	1.304	509.5	26.9	6
5	R	26	1.218	0.411	1.477	521.2	27.6	6
5	R	27	1.388	0.425	1.662	533.5	28.6	7
5	R	28	1.571	0.443	1.860	546.9	29.8	7
5	R	29	1.771	0.465	2.076	561.4	31.3	7
5	R	30	1.995	0.495	2.318	577.7	33.3	7
5	R	31	2.251	0.536	2.596	596.4	36.0	8
5	R	32	2.558	0.594	2.927	618.7	40.0	8
5	R	33	2.949	0.688	3.351	647.2	46.3	8
5	R	34	3.515	0.868	3.964	688.4	58.4	8
5	R	35	4.669	1.469	5.214	772.5	98.8	8

**E.6 Year 5 Spelling Score Equivalence Table**

Year	Domain	Raw	logit_Delta-Centred	logit_se	Transformed_Logit	NAPLAN ScaleScore	Scale Score_SE	Band
5	S	0	-5.090	1.551	-4.344	298.6	59.1	3
5	S	1	-3.840	0.939	-3.156	343.9	35.8	3
5	S	2	-3.181	0.759	-2.528	367.8	28.9	3
5	S	3	-2.701	0.667	-2.072	385.2	25.4	4
5	S	4	-2.310	0.611	-1.701	399.3	23.3	4
5	S	5	-1.973	0.573	-1.380	411.6	21.8	4
5	S	6	-1.671	0.546	-1.093	422.5	20.8	4
5	S	7	-1.392	0.528	-0.827	432.6	20.1	5
5	S	8	-1.128	0.515	-0.577	442.2	19.6	5
5	S	9	-0.875	0.506	-0.335	451.4	19.3	5
5	S	10	-0.627	0.500	-0.100	460.3	19.1	5
5	S	11	-0.383	0.497	0.132	469.2	19.0	5
5	S	12	-0.140	0.497	0.363	478.0	18.9	6
5	S	13	0.103	0.497	0.594	486.8	19.0	6
5	S	14	0.348	0.500	0.828	495.7	19.1	6
5	S	15	0.597	0.505	1.064	504.7	19.2	6
5	S	16	0.850	0.511	1.305	513.9	19.5	6
5	S	17	1.110	0.520	1.552	523.3	19.8	6
5	S	18	1.381	0.534	1.809	533.1	20.3	7
5	S	19	1.666	0.552	2.081	543.5	21.0	7
5	S	20	1.974	0.578	2.373	554.6	22.0	7
5	S	21	2.316	0.616	2.699	567.0	23.5	7
5	S	22	2.713	0.674	3.076	581.4	25.7	7
5	S	23	3.206	0.770	3.546	599.3	29.3	8
5	S	24	3.895	0.957	4.200	624.2	36.5	8
5	S	25	5.201	1.588	5.442	671.5	60.5	8

**E.7 Year 5 Grammar and Punctuation Score Equivalence Table**

Year	Domain	Raw	logit_Delta-Centred	logit_se	Transformed_Logit	NAPLAN ScaleScore	Scale Score_SE	Band
5	GP	0	-4.531	1.502	-4.010	113.2	110.4	3
5	GP	1	-3.341	0.896	-3.002	187.3	65.9	3
5	GP	2	-2.741	0.717	-2.493	224.7	52.7	3
5	GP	3	-2.316	0.626	-2.133	251.1	46.0	3
5	GP	4	-1.976	0.569	-1.845	272.3	41.8	3
5	GP	5	-1.686	0.532	-1.599	290.4	39.1	3
5	GP	6	-1.428	0.505	-1.381	306.4	37.1	3
5	GP	7	-1.191	0.486	-1.180	321.2	35.7	3
5	GP	8	-0.969	0.472	-0.992	335.0	34.7	3
5	GP	9	-0.758	0.463	-0.813	348.2	34.0	3
5	GP	10	-0.553	0.456	-0.640	360.9	33.5	3
5	GP	11	-0.352	0.453	-0.470	373.4	33.3	3
5	GP	12	-0.153	0.452	-0.301	385.8	33.2	4
5	GP	13	0.046	0.454	-0.132	398.2	33.4	4
5	GP	14	0.248	0.458	0.039	410.8	33.7	4
5	GP	15	0.455	0.465	0.215	423.7	34.1	4
5	GP	16	0.670	0.474	0.396	437.1	34.9	5
5	GP	17	0.895	0.487	0.587	451.1	35.8	5
5	GP	18	1.135	0.505	0.790	466.0	37.1	5
5	GP	19	1.393	0.527	1.009	482.1	38.8	6
5	GP	20	1.679	0.558	1.252	499.9	41.0	6
5	GP	21	2.003	0.599	1.526	520.1	44.1	6
5	GP	22	2.385	0.660	1.850	543.9	48.5	7
5	GP	23	2.864	0.757	2.255	573.7	55.6	7
5	GP	24	3.533	0.944	2.822	615.3	69.4	8
5	GP	25	4.811	1.569	3.905	694.9	115.3	8

**E.8 Year 5 Numeracy Score Equivalence Table**

Year	Domain	Raw	logit_Delta-Centred	logit_se	Transformed_Logit	NAPLAN ScaleScore	Scale Score_SE	Band
5	N	0	-5.242	1.482	-5.010	150.5	89.0	3
5	N	1	-4.075	0.879	-3.788	223.9	52.8	3
5	N	2	-3.496	0.700	-3.181	260.3	42.0	3
5	N	3	-3.090	0.607	-2.757	285.8	36.4	3
5	N	4	-2.770	0.549	-2.421	306.0	33.0	3
5	N	5	-2.500	0.509	-2.138	322.9	30.5	3
5	N	6	-2.264	0.479	-1.891	337.8	28.8	3
5	N	7	-2.051	0.456	-1.668	351.2	27.4	3
5	N	8	-1.855	0.438	-1.463	363.5	26.3	3
5	N	9	-1.673	0.424	-1.272	374.9	25.5	4
5	N	10	-1.502	0.413	-1.093	385.7	24.8	4
5	N	11	-1.339	0.403	-0.922	396.0	24.2	4
5	N	12	-1.182	0.395	-0.758	405.8	23.7	4
5	N	13	-1.031	0.389	-0.600	415.3	23.4	4
5	N	14	-0.884	0.384	-0.446	424.6	23.1	4
5	N	15	-0.741	0.380	-0.296	433.6	22.8	5
5	N	16	-0.600	0.377	-0.148	442.5	22.6	5
5	N	17	-0.461	0.375	-0.002	451.2	22.5	5
5	N	18	-0.323	0.374	0.142	459.9	22.4	5
5	N	19	-0.186	0.373	0.286	468.5	22.4	5
5	N	20	-0.048	0.374	0.430	477.2	22.4	5
5	N	21	0.090	0.375	0.574	485.8	22.5	6
5	N	22	0.229	0.377	0.720	494.6	22.6	6
5	N	23	0.370	0.380	0.868	503.5	22.8	6
5	N	24	0.513	0.383	1.018	512.5	23.0	6
5	N	25	0.660	0.388	1.171	521.7	23.3	6
5	N	26	0.810	0.393	1.329	531.2	23.6	7
5	N	27	0.965	0.400	1.491	540.9	24.0	7
5	N	28	1.126	0.408	1.660	551.0	24.5	7
5	N	29	1.294	0.417	1.836	561.6	25.1	7
5	N	30	1.470	0.428	2.020	572.7	25.7	7
5	N	31	1.656	0.441	2.215	584.4	26.5	8
5	N	32	1.855	0.457	2.423	596.9	27.5	8
5	N	33	2.069	0.476	2.647	610.3	28.6	8
5	N	34	2.303	0.501	2.892	625.0	30.1	8
5	N	35	2.563	0.531	3.164	641.4	31.9	8
5	N	36	2.859	0.573	3.475	660.0	34.4	8
5	N	37	3.208	0.632	3.841	682.0	37.9	8
5	N	38	3.646	0.726	4.300	709.6	43.6	8
5	N	39	4.262	0.906	4.945	748.3	54.4	8
5	N	40	5.468	1.514	6.208	824.1	90.9	8



**E.9 Year 7 Reading Score Equivalence Table**

Year	Domain	Raw	logit_Delta-Centred	logit_se	Transformed_Logit	NAPLAN ScaleScore	Scale Score_SE	Band
7	R	0	-5.066	1.466	-4.013	151.9	98.6	4
7	R	1	-3.916	0.864	-2.883	227.8	58.1	4
7	R	2	-3.354	0.684	-2.331	265.0	46.0	4
7	R	3	-2.966	0.589	-1.951	290.6	39.6	4
7	R	4	-2.664	0.530	-1.654	310.5	35.6	4
7	R	5	-2.413	0.488	-1.408	327.1	32.8	4
7	R	6	-2.196	0.457	-1.194	341.5	30.8	4
7	R	7	-2.002	0.434	-1.004	354.3	29.2	4
7	R	8	-1.826	0.415	-0.831	365.9	27.9	4
7	R	9	-1.664	0.399	-0.672	376.6	26.8	4
7	R	10	-1.513	0.386	-0.524	386.6	26.0	4
7	R	11	-1.370	0.376	-0.384	396.0	25.3	4
7	R	12	-1.235	0.367	-0.251	404.9	24.7	4
7	R	13	-1.106	0.359	-0.124	413.4	24.1	4
7	R	14	-0.981	0.352	-0.002	421.6	23.7	4
7	R	15	-0.861	0.347	0.116	429.6	23.3	5
7	R	16	-0.744	0.342	0.231	437.3	23.0	5
7	R	17	-0.631	0.338	0.343	444.8	22.7	5
7	R	18	-0.519	0.335	0.452	452.2	22.5	5
7	R	19	-0.409	0.332	0.560	459.4	22.3	5
7	R	20	-0.301	0.330	0.666	466.6	22.2	5
7	R	21	-0.195	0.328	0.770	473.6	22.1	5
7	R	22	-0.089	0.327	0.875	480.6	22.0	6
7	R	23	0.017	0.327	0.978	487.6	22.0	6
7	R	24	0.122	0.327	1.081	494.5	22.0	6
7	R	25	0.227	0.327	1.185	501.5	22.0	6
7	R	26	0.333	0.328	1.289	508.5	22.1	6
7	R	27	0.440	0.330	1.393	515.5	22.2	6
7	R	28	0.547	0.332	1.499	522.6	22.3	6
7	R	29	0.657	0.335	1.606	529.8	22.5	6
7	R	30	0.768	0.338	1.716	537.2	22.8	7
7	R	31	0.882	0.343	1.828	544.7	23.0	7
7	R	32	0.999	0.348	1.942	552.4	23.4	7
7	R	33	1.120	0.354	2.061	560.4	23.8	7
7	R	34	1.245	0.361	2.184	568.7	24.3	7
7	R	35	1.376	0.370	2.313	577.3	24.9	7
7	R	36	1.514	0.380	2.448	586.4	25.6	8
7	R	37	1.660	0.393	2.592	596.1	26.4	8
7	R	38	1.817	0.408	2.745	606.4	27.5	8
7	R	39	1.987	0.427	2.913	617.7	28.7	8
7	R	40	2.175	0.451	3.097	630.1	30.3	8
7	R	41	2.386	0.481	3.304	644.0	32.4	9
7	R	42	2.630	0.523	3.544	660.2	35.2	9
7	R	43	2.925	0.582	3.834	679.7	39.2	9
7	R	44	3.305	0.677	4.207	704.7	45.5	9
7	R	45	3.859	0.857	4.751	741.3	57.7	9
7	R	46	5.001	1.458	5.872	816.7	98.1	9

**E.10 Year 7 Spelling Score Equivalence Table**

Year	Domain	Raw	logit_Delta-Centred	logit_se	Transformed_Logit	NAPLAN ScaleScore	Scale Score_SE	Band
7	S	0	-5.929	1.640	-4.182	304.8	62.5	4
7	S	1	-4.544	0.989	-2.715	360.7	37.7	4
7	S	2	-3.803	0.793	-1.930	390.6	30.2	4
7	S	3	-3.279	0.692	-1.374	411.8	26.4	4
7	S	4	-2.860	0.631	-0.930	428.7	24.0	5
7	S	5	-2.501	0.589	-0.550	443.2	22.4	5
7	S	6	-2.180	0.559	-0.210	456.2	21.3	5
7	S	7	-1.885	0.536	0.102	468.1	20.4	5
7	S	8	-1.611	0.518	0.393	479.1	19.8	6
7	S	9	-1.353	0.503	0.666	489.5	19.2	6
7	S	10	-1.109	0.491	0.924	499.4	18.7	6
7	S	11	-0.876	0.481	1.171	508.8	18.3	6
7	S	12	-0.652	0.473	1.408	517.8	18.0	6
7	S	13	-0.436	0.467	1.638	526.6	17.8	6
7	S	14	-0.223	0.463	1.863	535.1	17.7	7
7	S	15	-0.014	0.462	2.084	543.6	17.6	7
7	S	16	0.194	0.462	2.305	552.0	17.6	7
7	S	17	0.404	0.464	2.527	560.5	17.7	7
7	S	18	0.617	0.469	2.753	569.1	17.9	7
7	S	19	0.835	0.476	2.984	577.9	18.1	7
7	S	20	1.061	0.486	3.224	587.0	18.5	8
7	S	21	1.298	0.499	3.475	596.6	19.0	8
7	S	22	1.549	0.515	3.741	606.7	19.6	8
7	S	23	1.820	0.537	4.027	617.6	20.5	8
7	S	24	2.116	0.565	4.341	629.6	21.5	8
7	S	25	2.449	0.603	4.694	643.0	23.0	9
7	S	26	2.837	0.656	5.105	658.7	25.0	9
7	S	27	3.312	0.733	5.609	677.9	27.9	9
7	S	28	3.930	0.846	6.263	702.8	32.3	9
7	S	29	4.769	1.041	7.153	736.7	39.7	9
7	S	30	6.183	1.672	8.651	793.8	63.7	9

**E.11 Year 7 Grammar and Punctuation Score Equivalence Table**

Year	Domain	Raw	logit_Delta-Centred	logit_se	Transformed_Logit	NAPLAN ScaleScore	Scale Score_SE	Band
7	GP	0	-4.525	1.482	-3.337	162.6	109.0	4
7	GP	1	-3.359	0.881	-2.336	236.2	64.7	4
7	GP	2	-2.779	0.702	-1.838	272.8	51.6	4
7	GP	3	-2.372	0.611	-1.489	298.4	44.9	4
7	GP	4	-2.049	0.555	-1.212	318.8	40.8	4
7	GP	5	-1.775	0.517	-0.976	336.2	38.0	4
7	GP	6	-1.531	0.490	-0.767	351.5	36.0	4
7	GP	7	-1.309	0.471	-0.577	365.5	34.6	4
7	GP	8	-1.102	0.456	-0.399	378.6	33.5	4
7	GP	9	-0.905	0.446	-0.230	391.0	32.8	4
7	GP	10	-0.715	0.439	-0.067	403.0	32.3	4
7	GP	11	-0.530	0.435	0.092	414.7	31.9	4
7	GP	12	-0.347	0.432	0.249	426.2	31.8	5
7	GP	13	-0.165	0.432	0.405	437.7	31.8	5
7	GP	14	0.018	0.434	0.563	449.3	31.9	5
7	GP	15	0.204	0.438	0.722	461.0	32.2	5
7	GP	16	0.394	0.445	0.885	473.0	32.7	5
7	GP	17	0.590	0.453	1.054	485.4	33.3	6
7	GP	18	0.796	0.464	1.230	498.3	34.1	6
7	GP	19	1.013	0.479	1.416	512.0	35.2	6
7	GP	20	1.245	0.497	1.616	526.7	36.5	6
7	GP	21	1.498	0.521	1.833	542.6	38.3	7
7	GP	22	1.779	0.553	2.074	560.3	40.7	7
7	GP	23	2.100	0.597	2.349	580.6	43.9	7
7	GP	24	2.481	0.659	2.677	604.7	48.5	8
7	GP	25	2.963	0.758	3.090	635.0	55.7	9
7	GP	26	3.638	0.946	3.670	677.7	69.6	9
7	GP	27	4.924	1.573	4.774	758.8	115.7	9

**E.12 Year 7 Numeracy Score Equivalence Table**

Year	Domain	Raw	logit_Delta-Centred	logit_se	Transformed_Logit	NAPLAN ScaleScore	Scale Score_SE	Band
7	Num_all	0	-5.638	1.465	-4.608	174.6	88.0	4
7	Num_all	1	-4.489	0.863	-3.386	248.0	51.8	4
7	Num_all	2	-3.928	0.681	-2.791	283.8	40.9	4
7	Num_all	3	-3.543	0.586	-2.381	308.3	35.2	4
7	Num_all	4	-3.244	0.525	-2.063	327.4	31.6	4
7	Num_all	5	-2.996	0.483	-1.800	343.3	29.0	4
7	Num_all	6	-2.783	0.451	-1.573	356.9	27.1	4
7	Num_all	7	-2.594	0.427	-1.372	368.9	25.6	4
7	Num_all	8	-2.424	0.407	-1.191	379.8	24.4	4
7	Num_all	9	-2.268	0.390	-1.026	389.8	23.4	4
7	Num_all	10	-2.123	0.376	-0.872	399.0	22.6	4
7	Num_all	11	-1.988	0.364	-0.729	407.6	21.9	4
7	Num_all	12	-1.861	0.354	-0.593	415.7	21.3	4
7	Num_all	13	-1.740	0.345	-0.465	423.4	20.7	4
7	Num_all	14	-1.625	0.337	-0.343	430.7	20.3	5
7	Num_all	15	-1.515	0.330	-0.226	437.8	19.8	5
7	Num_all	16	-1.409	0.324	-0.113	444.5	19.5	5
7	Num_all	17	-1.307	0.319	-0.005	451.1	19.2	5
7	Num_all	18	-1.208	0.314	0.101	457.4	18.9	5
7	Num_all	19	-1.112	0.310	0.203	463.5	18.6	5
7	Num_all	20	-1.018	0.306	0.303	469.5	18.4	5
7	Num_all	21	-0.926	0.303	0.400	475.4	18.2	5
7	Num_all	22	-0.836	0.300	0.496	481.1	18.0	6
7	Num_all	23	-0.748	0.297	0.590	486.8	17.8	6
7	Num_all	24	-0.661	0.295	0.682	492.3	17.7	6
7	Num_all	25	-0.576	0.293	0.773	497.8	17.6	6
7	Num_all	26	-0.491	0.291	0.863	503.1	17.5	6
7	Num_all	27	-0.408	0.290	0.951	508.5	17.4	6
7	Num_all	28	-0.325	0.289	1.039	513.8	17.3	6
7	Num_all	29	-0.243	0.288	1.127	519.0	17.3	6
7	Num_all	30	-0.161	0.287	1.214	524.2	17.2	6
7	Num_all	31	-0.079	0.287	1.300	529.4	17.2	6
7	Num_all	32	0.002	0.287	1.387	534.6	17.2	7
7	Num_all	33	0.083	0.287	1.473	539.8	17.2	7
7	Num_all	34	0.165	0.287	1.560	545.0	17.2	7
7	Num_all	35	0.246	0.287	1.646	550.2	17.3	7
7	Num_all	36	0.328	0.288	1.734	555.4	17.3	7
7	Num_all	37	0.411	0.289	1.821	560.7	17.4	7
7	Num_all	38	0.494	0.291	1.910	566.0	17.5	7
7	Num_all	39	0.578	0.292	1.999	571.4	17.5	7
7	Num_all	40	0.663	0.294	2.089	576.8	17.7	7
7	Num_all	41	0.749	0.296	2.181	582.3	17.8	8
7	Num_all	42	0.836	0.299	2.274	587.9	17.9	8
7	Num_all	43	0.926	0.302	2.369	593.6	18.1	8
7	Num_all	44	1.017	0.305	2.465	599.4	18.3	8
7	Num_all	45	1.110	0.309	2.564	605.3	18.5	8
7	Num_all	46	1.205	0.313	2.666	611.4	18.8	8
7	Num_all	47	1.303	0.318	2.770	617.7	19.1	8
7	Num_all	48	1.405	0.323	2.878	624.2	19.4	8
7	Num_all	49	1.510	0.329	2.990	630.9	19.8	8
7	Num_all	50	1.619	0.336	3.106	637.9	20.2	9

**E.13 Year 7 Numeracy Score Equivalence Table**

Year	Domain	Raw	logit_Delta-Centred	logit_se	Transformed_Logit	NAPLAN ScaleScore	Scale Score_SE	Band
7	Num_all	51	1.733	0.344	3.227	645.1	20.7	9
7	Num_all	52	1.853	0.353	3.355	652.8	21.2	9
7	Num_all	53	1.980	0.364	3.489	660.9	21.8	9
7	Num_all	54	2.114	0.376	3.632	669.5	22.6	9
7	Num_all	55	2.259	0.390	3.786	678.7	23.4	9
7	Num_all	56	2.415	0.407	3.952	688.6	24.4	9
7	Num_all	57	2.586	0.428	4.133	699.6	25.7	9
7	Num_all	58	2.776	0.453	4.336	711.7	27.2	9
7	Num_all	59	2.992	0.486	4.565	725.5	29.2	9
7	Num_all	60	3.243	0.529	4.832	741.5	31.8	9
7	Num_all	61	3.548	0.591	5.156	761.0	35.5	9
7	Num_all	62	3.942	0.687	5.575	786.1	41.3	9
7	Num_all	63	4.514	0.871	6.183	822.7	52.3	9
7	Num_all	64	5.681	1.478	7.423	897.1	88.7	9

**E.14 Year 7 Numeracy Non-Calculator Score Equivalence Table**

Year	Domain	Raw	logit_Delta-Centred	logit_se	Transformed_Logit	NAPLAN ScaleScore	Scale Score_SE	Band
7	NoCalc	0	-4.872	1.493	-3.794	223.5	89.7	4
7	NoCalc	1	-3.692	0.889	-2.540	298.8	53.4	4
7	NoCalc	2	-3.100	0.710	-1.911	336.6	42.6	4
7	NoCalc	3	-2.683	0.617	-1.467	363.2	37.1	4
7	NoCalc	4	-2.351	0.560	-1.115	384.4	33.6	4
7	NoCalc	5	-2.071	0.520	-0.816	402.3	31.2	4
7	NoCalc	6	-1.823	0.491	-0.553	418.1	29.5	4
7	NoCalc	7	-1.599	0.469	-0.315	432.4	28.2	5
7	NoCalc	8	-1.393	0.452	-0.096	445.6	27.1	5
7	NoCalc	9	-1.199	0.439	0.110	457.9	26.3	5
7	NoCalc	10	-1.016	0.428	0.305	469.6	25.7	5
7	NoCalc	11	-0.840	0.420	0.492	480.9	25.2	6
7	NoCalc	12	-0.670	0.413	0.672	491.7	24.8	6
7	NoCalc	13	-0.505	0.408	0.848	502.3	24.5	6
7	NoCalc	14	-0.343	0.405	1.020	512.6	24.3	6
7	NoCalc	15	-0.183	0.403	1.190	522.8	24.2	6
7	NoCalc	16	-0.024	0.402	1.359	533.0	24.1	7
7	NoCalc	17	0.134	0.403	1.528	543.1	24.2	7
7	NoCalc	18	0.294	0.404	1.697	553.3	24.3	7
7	NoCalc	19	0.455	0.407	1.868	563.5	24.5	7
7	NoCalc	20	0.619	0.412	2.043	574.0	24.7	7
7	NoCalc	21	0.787	0.418	2.221	584.7	25.1	8
7	NoCalc	22	0.961	0.426	2.406	595.8	25.6	8
7	NoCalc	23	1.142	0.436	2.599	607.4	26.2	8
7	NoCalc	24	1.333	0.449	2.802	619.6	27.0	8
7	NoCalc	25	1.537	0.466	3.018	632.6	28.0	8
7	NoCalc	26	1.758	0.488	3.253	646.7	29.3	9
7	NoCalc	27	2.002	0.517	3.512	662.3	31.0	9
7	NoCalc	28	2.279	0.556	3.807	680.0	33.4	9
7	NoCalc	29	2.607	0.614	4.156	700.9	36.9	9
7	NoCalc	30	3.020	0.706	4.595	727.3	42.4	9
7	NoCalc	31	3.607	0.886	5.219	764.8	53.2	9
7	NoCalc	32	4.783	1.489	6.469	839.8	89.4	9

**E.15 Year 7 Numeracy Calculator Score Equivalence Table**

Year	Domain	Raw	logit_Delta-Centred	logit_se	Transformed_Logit	NAPLAN ScaleScore	Scale Score_SE	Band
7	Calc	0	-5.048	1.522	-3.981	212.3	91.4	4
7	Calc	1	-3.832	0.912	-2.689	289.9	54.8	4
7	Calc	2	-3.209	0.730	-2.027	329.6	43.9	4
7	Calc	3	-2.765	0.636	-1.555	358.0	38.2	4
7	Calc	4	-2.411	0.577	-1.178	380.6	34.7	4
7	Calc	5	-2.110	0.536	-0.859	399.8	32.2	4
7	Calc	6	-1.847	0.505	-0.578	416.6	30.3	4
7	Calc	7	-1.609	0.482	-0.326	431.8	28.9	5
7	Calc	8	-1.391	0.463	-0.094	445.7	27.8	5
7	Calc	9	-1.188	0.449	0.122	458.7	26.9	5
7	Calc	10	-0.996	0.437	0.326	470.9	26.2	5
7	Calc	11	-0.813	0.428	0.521	482.6	25.7	6
7	Calc	12	-0.637	0.421	0.708	493.8	25.3	6
7	Calc	13	-0.466	0.415	0.889	504.8	24.9	6
7	Calc	14	-0.299	0.411	1.067	515.4	24.7	6
7	Calc	15	-0.134	0.409	1.242	525.9	24.6	6
7	Calc	16	0.029	0.408	1.416	536.4	24.5	7
7	Calc	17	0.193	0.409	1.590	546.8	24.6	7
7	Calc	18	0.357	0.411	1.764	557.3	24.7	7
7	Calc	19	0.524	0.415	1.941	567.9	24.9	7
7	Calc	20	0.694	0.420	2.122	578.8	25.2	7
7	Calc	21	0.869	0.427	2.309	590.0	25.6	8
7	Calc	22	1.051	0.436	2.502	601.6	26.2	8
7	Calc	23	1.242	0.448	2.705	613.8	26.9	8
7	Calc	24	1.444	0.462	2.919	626.7	27.8	8
7	Calc	25	1.661	0.481	3.150	640.5	28.9	9
7	Calc	26	1.898	0.505	3.402	655.7	30.3	9
7	Calc	27	2.163	0.537	3.683	672.5	32.3	9
7	Calc	28	2.466	0.580	4.006	691.9	34.9	9
7	Calc	29	2.827	0.643	4.390	715.0	38.6	9
7	Calc	30	3.285	0.741	4.877	744.2	44.5	9
7	Calc	31	3.934	0.928	5.566	785.6	55.7	9
7	Calc	32	5.190	1.550	6.901	865.8	93.1	9

**E.16 Year 9 Reading Score Equivalence Table**

Year	Domain	Raw	logit_Delta-Centred	logit_se	Transformed_Logit	NAPLAN ScaleScore	Scale Score_SE	Band
9	R	0	-5.040	1.475	-3.500	186.4	99.2	5
9	R	1	-3.878	0.871	-2.379	261.8	58.6	5
9	R	2	-3.307	0.689	-1.828	298.8	46.3	5
9	R	3	-2.913	0.593	-1.448	324.4	39.9	5
9	R	4	-2.606	0.533	-1.152	344.3	35.8	5
9	R	5	-2.351	0.491	-0.906	360.8	33.0	5
9	R	6	-2.131	0.459	-0.694	375.1	30.9	5
9	R	7	-1.936	0.435	-0.505	387.8	29.2	5
9	R	8	-1.759	0.415	-0.335	399.3	27.9	5
9	R	9	-1.597	0.399	-0.178	409.8	26.8	5
9	R	10	-1.446	0.386	-0.032	419.6	25.9	5
9	R	11	-1.304	0.375	0.104	428.8	25.2	5
9	R	12	-1.169	0.365	0.234	437.5	24.6	5
9	R	13	-1.041	0.357	0.358	445.9	24.0	5
9	R	14	-0.918	0.351	0.477	453.8	23.6	5
9	R	15	-0.799	0.345	0.591	461.6	23.2	5
9	R	16	-0.684	0.340	0.703	469.0	22.9	5
9	R	17	-0.571	0.336	0.811	476.3	22.6	5
9	R	18	-0.461	0.333	0.917	483.5	22.4	6
9	R	19	-0.353	0.330	1.022	490.5	22.2	6
9	R	20	-0.246	0.328	1.125	497.4	22.1	6
9	R	21	-0.141	0.327	1.227	504.3	22.0	6
9	R	22	-0.036	0.326	1.328	511.1	22.0	6
9	R	23	0.069	0.326	1.429	517.9	21.9	6
9	R	24	0.174	0.327	1.530	524.7	22.0	6
9	R	25	0.279	0.327	1.631	531.5	22.0	7
9	R	26	0.385	0.329	1.734	538.4	22.1	7
9	R	27	0.492	0.331	1.837	545.3	22.3	7
9	R	28	0.601	0.334	1.942	552.4	22.5	7
9	R	29	0.711	0.337	2.048	559.6	22.7	7
9	R	30	0.825	0.342	2.158	566.9	23.0	7
9	R	31	0.941	0.347	2.270	574.5	23.3	7
9	R	32	1.061	0.353	2.386	582.3	23.8	8
9	R	33	1.186	0.361	2.507	590.4	24.3	8
9	R	34	1.317	0.369	2.632	598.8	24.8	8
9	R	35	1.454	0.380	2.765	607.8	25.6	8
9	R	36	1.600	0.393	2.906	617.2	26.4	8
9	R	37	1.757	0.408	3.057	627.4	27.4	8
9	R	38	1.927	0.427	3.221	638.4	28.7	9
9	R	39	2.115	0.451	3.402	650.6	30.3	9
9	R	40	2.326	0.481	3.606	664.3	32.4	9
9	R	41	2.570	0.523	3.842	680.2	35.2	9
9	R	42	2.865	0.582	4.126	699.3	39.2	10
9	R	43	3.245	0.677	4.493	724.0	45.5	10
9	R	44	3.800	0.857	5.028	760.0	57.7	10
9	R	45	4.941	1.458	6.129	834.1	98.1	10



**E.17 Year 9 Spelling Score Equivalence Table**

Year	Domain	Raw	logit_Delta-Centred	logit_se	Transformed_Logit	NAPLAN ScaleScore	Scale Score_SE	Band
9	S	0	-5.797	1.595	-3.343	336.8	60.8	5
9	S	1	-4.489	0.973	-1.845	393.8	37.1	5
9	S	2	-3.777	0.788	-1.030	424.9	30.0	5
9	S	3	-3.252	0.691	-0.430	447.8	26.3	5
9	S	4	-2.829	0.629	0.054	466.2	24.0	5
9	S	5	-2.469	0.585	0.465	481.9	22.3	6
9	S	6	-2.154	0.553	0.827	495.7	21.1	6
9	S	7	-1.869	0.528	1.152	508.1	20.1	6
9	S	8	-1.607	0.510	1.452	519.5	19.4	6
9	S	9	-1.360	0.497	1.735	530.3	18.9	7
9	S	10	-1.125	0.487	2.004	540.5	18.6	7
9	S	11	-0.896	0.480	2.266	550.5	18.3	7
9	S	12	-0.672	0.476	2.522	560.3	18.1	7
9	S	13	-0.451	0.474	2.775	569.9	18.1	7
9	S	14	-0.229	0.474	3.029	579.6	18.1	7
9	S	15	-0.007	0.475	3.283	589.3	18.1	8
9	S	16	0.217	0.477	3.540	599.1	18.2	8
9	S	17	0.445	0.481	3.800	609.0	18.3	8
9	S	18	0.676	0.485	4.065	619.0	18.5	8
9	S	19	0.912	0.491	4.334	629.3	18.7	8
9	S	20	1.153	0.498	4.611	639.9	19.0	9
9	S	21	1.402	0.507	4.896	650.7	19.3	9
9	S	22	1.661	0.518	5.191	662.0	19.7	9
9	S	23	1.931	0.532	5.500	673.8	20.3	9
9	S	24	2.217	0.550	5.827	686.2	21.0	10
9	S	25	2.524	0.575	6.179	699.6	21.9	10
9	S	26	2.862	0.611	6.566	714.4	23.3	10
9	S	27	3.248	0.663	7.007	731.2	25.3	10
9	S	28	3.715	0.751	7.541	751.5	28.6	10
9	S	29	4.352	0.926	8.271	779.3	35.3	10
9	S	30	5.574	1.531	9.669	832.6	58.4	10

**E.18 Year 9 Grammar and Punctuation Score Equivalence Table**

Year	Domain	Raw	logit_Delta-Centred	logit_se	Transformed_Logit	NAPLAN ScaleScore	Scale Score_SE	Band
9	GP	0	-4.522	1.505	-2.465	226.8	110.6	5
9	GP	1	-3.330	0.901	-1.415	303.9	66.2	5
9	GP	2	-2.724	0.724	-0.882	343.1	53.2	5
9	GP	3	-2.292	0.634	-0.501	371.1	46.6	5
9	GP	4	-1.943	0.579	-0.193	393.7	42.6	5
9	GP	5	-1.642	0.543	0.072	413.2	39.9	5
9	GP	6	-1.371	0.517	0.310	430.7	38.0	5
9	GP	7	-1.122	0.499	0.530	446.9	36.7	5
9	GP	8	-0.887	0.486	0.737	462.1	35.7	5
9	GP	9	-0.661	0.477	0.935	476.7	35.1	5
9	GP	10	-0.443	0.471	1.128	490.8	34.6	6
9	GP	11	-0.228	0.468	1.318	504.7	34.4	6
9	GP	12	-0.014	0.468	1.506	518.6	34.4	6
9	GP	13	0.200	0.469	1.694	532.4	34.5	7
9	GP	14	0.417	0.474	1.885	546.5	34.8	7
9	GP	15	0.639	0.480	2.080	560.8	35.3	7
9	GP	16	0.868	0.490	2.282	575.7	36.1	7
9	GP	17	1.108	0.504	2.494	591.2	37.1	8
9	GP	18	1.364	0.523	2.720	607.8	38.5	8
9	GP	19	1.642	0.550	2.964	625.8	40.4	8
9	GP	20	1.952	0.587	3.237	645.8	43.1	9
9	GP	21	2.311	0.642	3.553	669.1	47.2	9
9	GP	22	2.754	0.732	3.944	697.8	53.8	10
9	GP	23	3.371	0.910	4.487	737.7	66.9	10
9	GP	24	4.576	1.516	5.549	815.7	111.4	10

**E.19 Year 9 Numeracy Score Equivalence Table**

Year	Domain	Raw	logit_Delta-Centred	logit_se	Transformed_Logit	NAPLAN ScaleScore	Scale Score_SE	Band
9	Num_all	0	-5.844	1.478	-3.355	249.9	88.8	5
9	Num_all	1	-4.679	0.875	-2.249	316.3	52.5	5
9	Num_all	2	-4.104	0.693	-1.703	349.1	41.6	5
9	Num_all	3	-3.705	0.598	-1.324	371.8	35.9	5
9	Num_all	4	-3.394	0.538	-1.028	389.6	32.3	5
9	Num_all	5	-3.134	0.495	-0.781	404.4	29.8	5
9	Num_all	6	-2.909	0.464	-0.568	417.2	27.8	5
9	Num_all	7	-2.710	0.439	-0.378	428.6	26.4	5
9	Num_all	8	-2.529	0.419	-0.207	438.9	25.2	5
9	Num_all	9	-2.363	0.403	-0.049	448.4	24.2	5
9	Num_all	10	-2.208	0.389	0.098	457.2	23.4	5
9	Num_all	11	-2.063	0.377	0.235	465.5	22.7	5
9	Num_all	12	-1.927	0.367	0.365	473.3	22.1	5
9	Num_all	13	-1.796	0.358	0.489	480.7	21.5	6
9	Num_all	14	-1.672	0.351	0.607	487.8	21.1	6
9	Num_all	15	-1.553	0.344	0.720	494.6	20.7	6
9	Num_all	16	-1.438	0.338	0.829	501.2	20.3	6
9	Num_all	17	-1.327	0.333	0.935	507.5	20.0	6
9	Num_all	18	-1.219	0.328	1.038	513.7	19.7	6
9	Num_all	19	-1.114	0.323	1.137	519.6	19.4	6
9	Num_all	20	-1.011	0.320	1.235	525.5	19.2	6
9	Num_all	21	-0.911	0.316	1.330	531.2	19.0	7
9	Num_all	22	-0.813	0.313	1.423	536.8	18.8	7
9	Num_all	23	-0.716	0.311	1.514	542.3	18.7	7
9	Num_all	24	-0.622	0.308	1.605	547.7	18.5	7
9	Num_all	25	-0.528	0.306	1.693	553.0	18.4	7
9	Num_all	26	-0.436	0.304	1.781	558.3	18.3	7
9	Num_all	27	-0.344	0.303	1.868	563.5	18.2	7
9	Num_all	28	-0.254	0.302	1.954	568.7	18.1	7
9	Num_all	29	-0.164	0.301	2.039	573.8	18.1	7
9	Num_all	30	-0.075	0.300	2.124	578.9	18.0	7
9	Num_all	31	0.015	0.300	2.209	584.0	18.0	8
9	Num_all	32	0.103	0.300	2.293	589.1	18.0	8
9	Num_all	33	0.192	0.300	2.378	594.1	18.0	8
9	Num_all	34	0.281	0.300	2.462	599.2	18.0	8
9	Num_all	35	0.371	0.301	2.547	604.3	18.1	8
9	Num_all	36	0.461	0.302	2.632	609.4	18.1	8
9	Num_all	37	0.551	0.303	2.718	614.6	18.2	8
9	Num_all	38	0.643	0.305	2.805	619.8	18.3	8
9	Num_all	39	0.735	0.307	2.893	625.1	18.4	8
9	Num_all	40	0.829	0.309	2.982	630.4	18.6	8
9	Num_all	41	0.924	0.312	3.072	635.8	18.7	9
9	Num_all	42	1.021	0.315	3.164	641.4	18.9	9
9	Num_all	43	1.120	0.319	3.259	647.0	19.1	9
9	Num_all	44	1.222	0.323	3.355	652.8	19.4	9
9	Num_all	45	1.326	0.328	3.454	658.8	19.7	9
9	Num_all	46	1.434	0.333	3.556	664.9	20.0	9
9	Num_all	47	1.545	0.339	3.662	671.3	20.4	9
9	Num_all	48	1.661	0.346	3.772	677.9	20.8	9
9	Num_all	49	1.782	0.354	3.887	684.8	21.3	9
9	Num_all	50	1.909	0.363	4.008	692.0	21.8	10
9	Num_all	51	2.043	0.374	4.135	699.7	22.5	10
9	Num_all	52	2.186	0.386	4.271	707.8	23.2	10
9	Num_all	53	2.339	0.401	4.416	716.5	24.1	10
9	Num_all	54	2.504	0.418	4.573	726.0	25.1	10

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9	Num_all	55	2.685	0.439	4.745	736.3	26.4	10
9	Num_all	56	2.885	0.464	4.935	747.7	27.9	10
9	Num_all	57	3.112	0.497	5.150	760.6	29.8	10
9	Num_all	58	3.375	0.540	5.400	775.6	32.4	10
9	Num_all	59	3.690	0.601	5.700	793.6	36.1	10
9	Num_all	60	4.094	0.697	6.083	816.7	41.8	10
9	Num_all	61	4.675	0.879	6.635	849.8	52.8	10
9	Num_all	62	5.847	1.484	7.748	916.6	89.1	10

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**E.20 Year 9 Numeracy Non-Calculator Score Equivalence Table**

Year	Domain	Raw	logit_Delta-Centred	logit_se	Transformed_Logit	NAPLAN ScaleScore	Scale Score_SE	Band
9	NoCalc	0	-5.189	1.554	-2.733	287.2	93.3	5
9	NoCalc	1	-3.932	0.937	-1.539	358.9	56.3	5
9	NoCalc	2	-3.273	0.754	-0.913	396.5	45.3	5
9	NoCalc	3	-2.797	0.660	-0.461	423.6	39.6	5
9	NoCalc	4	-2.414	0.600	-0.098	445.5	36.0	5
9	NoCalc	5	-2.089	0.557	0.211	464.0	33.5	5
9	NoCalc	6	-1.802	0.526	0.484	480.4	31.6	6
9	NoCalc	7	-1.543	0.502	0.730	495.2	30.1	6
9	NoCalc	8	-1.305	0.482	0.956	508.7	29.0	6
9	NoCalc	9	-1.084	0.466	1.166	521.4	28.0	6
9	NoCalc	10	-0.876	0.453	1.363	533.2	27.2	7
9	NoCalc	11	-0.678	0.443	1.551	544.5	26.6	7
9	NoCalc	12	-0.489	0.435	1.730	555.2	26.1	7
9	NoCalc	13	-0.307	0.428	1.903	565.7	25.7	7
9	NoCalc	14	-0.129	0.423	2.072	575.8	25.4	7
9	NoCalc	15	0.044	0.420	2.237	585.7	25.2	8
9	NoCalc	16	0.216	0.418	2.400	595.5	25.1	8
9	NoCalc	17	0.386	0.418	2.562	605.2	25.1	8
9	NoCalc	18	0.557	0.419	2.724	614.9	25.2	8
9	NoCalc	19	0.730	0.422	2.888	624.8	25.3	8
9	NoCalc	20	0.905	0.427	3.055	634.8	25.6	9
9	NoCalc	21	1.086	0.434	3.226	645.1	26.1	9
9	NoCalc	22	1.273	0.444	3.404	655.8	26.7	9
9	NoCalc	23	1.471	0.457	3.592	667.0	27.5	9
9	NoCalc	24	1.682	0.474	3.792	679.1	28.5	9
9	NoCalc	25	1.910	0.497	4.009	692.1	29.8	10
9	NoCalc	26	2.164	0.527	4.250	706.6	31.6	10
9	NoCalc	27	2.454	0.568	4.525	723.1	34.1	10
9	NoCalc	28	2.798	0.628	4.852	742.7	37.7	10
9	NoCalc	29	3.232	0.723	5.264	767.5	43.4	10
9	NoCalc	30	3.847	0.906	5.848	802.6	54.4	10
9	NoCalc	31	5.058	1.516	6.998	871.6	91.1	10

**E.21 Year 9 Numeracy Calculator Score Equivalence Table**

Year	Domain	Raw	logit_Delta-Centred	logit_se	Transformed_Logit	NAPLAN ScaleScore	Scale Score_SE	Band
9	Calc	0	-5.159	1.515	-2.705	288.9	91.0	5
9	Calc	1	-3.952	0.907	-1.558	357.8	54.4	5
9	Calc	2	-3.337	0.726	-0.974	392.8	43.6	5
9	Calc	3	-2.901	0.633	-0.560	417.7	38.0	5
9	Calc	4	-2.551	0.575	-0.228	437.7	34.6	5
9	Calc	5	-2.254	0.536	0.055	454.6	32.2	5
9	Calc	6	-1.990	0.508	0.305	469.7	30.5	5
9	Calc	7	-1.750	0.486	0.533	483.4	29.2	6
9	Calc	8	-1.527	0.470	0.745	496.1	28.2	6
9	Calc	9	-1.317	0.457	0.944	508.0	27.5	6
9	Calc	10	-1.117	0.447	1.134	519.5	26.9	6
9	Calc	11	-0.924	0.440	1.317	530.5	26.4	7
9	Calc	12	-0.737	0.434	1.495	541.1	26.1	7
9	Calc	13	-0.554	0.430	1.669	551.6	25.8	7
9	Calc	14	-0.373	0.428	1.840	561.9	25.7	7
9	Calc	15	-0.194	0.427	2.011	572.1	25.6	7
9	Calc	16	-0.015	0.428	2.181	582.3	25.7	8
9	Calc	17	0.165	0.430	2.352	592.6	25.8	8
9	Calc	18	0.348	0.433	2.525	603.0	26.0	8
9	Calc	19	0.534	0.439	2.702	613.6	26.3	8
9	Calc	20	0.726	0.446	2.884	624.5	26.8	8
9	Calc	21	0.925	0.456	3.073	635.9	27.4	9
9	Calc	22	1.133	0.468	3.271	647.8	28.1	9
9	Calc	23	1.354	0.483	3.481	660.4	29.0	9
9	Calc	24	1.592	0.502	3.707	673.9	30.2	9
9	Calc	25	1.851	0.527	3.952	688.7	31.7	10
9	Calc	26	2.139	0.559	4.226	705.1	33.6	10
9	Calc	27	2.468	0.603	4.539	723.9	36.2	10
9	Calc	28	2.858	0.665	4.909	746.1	39.9	10
9	Calc	29	3.344	0.761	5.371	773.9	45.7	10
9	Calc	30	4.017	0.945	6.009	812.2	56.8	10
9	Calc	31	5.285	1.564	7.214	884.6	93.9	10
9	Calc	0	-5.159	1.515	-2.705	288.9	91.0	5

**E.22 Year 3, 5, 7 and 9 Writing Score Equivalence Table**

Year	Domain	Raw	logit_Delta-Centred	logit_se	Transformed_Logit	NAPLAN ScaleScore	Scale Score_SE	Band
3579	W	0	-9.225	1.516	-9.225	89.1	65.2	1
3579	W	1	-8.023	0.915	-8.023	140.9	39.4	1
3579	W	2	-7.404	0.742	-7.404	167.5	31.9	1
3579	W	3	-6.951	0.658	-6.951	187.0	28.3	1
3579	W	4	-6.577	0.609	-6.577	203.1	26.2	1
3579	W	5	-6.243	0.580	-6.243	217.4	25.0	1
3579	W	6	-5.933	0.563	-5.933	230.8	24.2	1
3579	W	7	-5.634	0.554	-5.634	243.6	23.8	1
3579	W	8	-5.339	0.551	-5.339	256.3	23.7	1
3579	W	9	-5.042	0.553	-5.042	269.1	23.8	1
3579	W	10	-4.738	0.559	-4.738	282.2	24.0	2
3579	W	11	-4.424	0.567	-4.424	295.7	24.4	2
3579	W	12	-4.097	0.577	-4.097	309.8	24.8	2
3579	W	13	-3.756	0.587	-3.756	324.4	25.3	3
3579	W	14	-3.402	0.595	-3.402	339.7	25.6	3
3579	W	15	-3.039	0.602	-3.039	355.3	25.9	3
3579	W	16	-2.671	0.605	-2.671	371.1	26.0	3
3579	W	17	-2.300	0.606	-2.300	387.1	26.1	4
3579	W	18	-1.932	0.604	-1.932	402.9	26.0	4
3579	W	19	-1.567	0.602	-1.567	418.6	25.9	4
3579	W	20	-1.204	0.600	-1.204	434.2	25.8	5
3579	W	21	-0.846	0.597	-0.846	449.6	25.7	5
3579	W	22	-0.491	0.593	-0.491	464.9	25.5	5
3579	W	23	-0.141	0.590	-0.141	480.0	25.4	6
3579	W	24	0.204	0.586	0.204	494.8	25.2	6
3579	W	25	0.544	0.584	0.544	509.4	25.1	6
3579	W	26	0.882	0.583	0.882	524.0	25.1	6
3579	W	27	1.220	0.582	1.220	538.5	25.0	7
3579	W	28	1.559	0.583	1.559	553.1	25.1	7
3579	W	29	1.900	0.582	1.900	567.8	25.0	7
3579	W	30	2.241	0.581	2.241	582.4	25.0	8
3579	W	31	2.580	0.578	2.580	597.0	24.9	8
3579	W	32	2.913	0.573	2.913	611.3	24.7	8
3579	W	33	3.238	0.567	3.238	625.3	24.4	8
3579	W	34	3.557	0.562	3.557	639.1	24.2	9
3579	W	35	3.869	0.558	3.869	652.5	24.0	9
3579	W	36	4.175	0.555	4.175	665.6	23.9	9
3579	W	37	4.479	0.553	4.479	678.7	23.8	9
3579	W	38	4.781	0.554	4.781	691.7	23.8	10
3579	W	39	5.084	0.557	5.084	704.7	24.0	10
3579	W	40	5.390	0.564	5.390	717.9	24.3	10
3579	W	41	5.705	0.576	5.705	731.5	24.8	10
3579	W	42	6.034	0.595	6.034	745.6	25.6	10
3579	W	43	6.388	0.625	6.388	760.8	26.9	10
3579	W	44	6.784	0.673	6.784	777.9	29.0	10
3579	W	45	7.256	0.757	7.256	798.2	32.6	10
3579	W	46	7.895	0.929	7.895	825.7	40.0	10
3579	W	47	9.115	1.532	9.115	878.2	65.9	10