

MAP Reading Fluency Early Literacy RIT norms overview

Based on the 2025 MAP Growth Reading norms

Early Literacy RIT is a vertically scaled composite score introduced in MAP® Reading Fluency™ beginning with the 2026–27 school year. NWEA® developed multivariate predictive models that synthesize results from multiple early literacy measures assessed in MAP Reading Fluency benchmark tests to estimate a student’s performance on the MAP Reading RIT scale. The score is available for English benchmark tests for students in kindergarten through grade 5.

Since the composite score is reported on the same underlying RIT scale as MAP Growth™ Reading, the applicable 2025 MAP Growth National Reading norms can be used to interpret the score and provide national context for student achievement and growth. This overview presents student achievement percentiles and conditional growth norms for grades K–5. For a complete description of the norms and methodology, please review the [2025 MAP Growth Norms Technical Manual](#).

Early Literacy RIT norms	
Norm type	National student achievement and growth norms
Scale	MAP Reading RIT
Grades	K–5
Terms	Fall, winter, spring

Interpretation guidance

- The Early Literacy RIT is a predicted RIT score rather than a direct MAP Growth Reading test score. Use it to understand overall early reading achievement and growth patterns across terms, not as a precise point-to-point substitute for a MAP Growth Reading test result.
- Achievement percentiles for the Early Literacy RIT show how a student’s score compares with national peers in the same grade and term. Conditional growth norms show the average score growth for students in the same grade with a similar beginning score and the variability around that average growth.
- The 35th percentile on the Early Literacy RIT serves as the universal screening threshold. Students who score below this threshold are identified as being at risk for reading difficulties and will receive a universal screening flag on the Screener Outcome report.
- These norms apply to the Early Literacy RIT composite score, not to be confused with MAP Reading Fluency individual domain score norms.

How to read the achievement and growth norms table

To find the achievement percentile for a student for a specific term:

1. Find the student's corresponding grade table.
2. Find the appropriate term column in the table (fall, winter, or spring).
3. Find the student's Early Literacy RIT score in that column.
4. Read the percentile in the leftmost column. As Early Literacy RIT scores are rounded to the nearest integer, the same score may appear in more than one row; treat those rows as an approximate percentile range, or use the percentile reported in MAP Reading Fluency.

To find the growth projection for a given term pair for a student:

1. Find the student's corresponding grade table.
2. Locate the student's beginning Early Literacy RIT score in the appropriate term column. If the score appears on multiple rows, use the row aligned with the reported starting percentile.
3. Move across the same row to find the mean column for the selected term pair. The mean shows the average gain attained for students in the same grade with a similar beginning score. Add it to the beginning score to estimate the projected ending score for that term pair.
4. Note the standard deviation (SD) for the gain provided in the right column of the term pair; it helps you understand the degree to which the score gains were spread out around the mean. To compute growth that is one standard deviation above the growth projection (i.e., average), add the beginning Early Literacy RIT score, the mean gain score, and the SD value. To compute growth that is one standard deviation below average, add the beginning score to the mean gain score, but subtract the SD value.

Example

If a fall score for your first-grade student is 139 (10th percentile), the mean Fall-spring conditional growth is 15.2, which would be added to the 139 for the projected spring score (therefore, 154). With a standard deviation of 11.2, the range of projected scores within one standard deviation would be approximately 143 to 165.

Early Literacy RIT achievement and growth: Grade 1

Percentile	Term			Fall-spring cond. growth		Fall-winter cond. growth		Winter-spring cond. growth	
	Fall	Winter	Spring	Mean	SD	Mean	SD	Mean	SD
1	125	130	132	17.5	11.2	13.4	9.6	9.4	9.5
2	129	134	136	16.8	11.2	12.5	9.6	8.9	9.5
3	131	136	139	16.5	11.2	12.1	9.6	8.7	9.5
4	133	138	141	16.2	11.2	11.7	9.6	8.4	9.5
5	134	139	142	16	11.2	11.5	9.6	8.3	9.5
6	135	141	144	15.9	11.2	11.3	9.6	8.1	9.5
7	136	142	145	15.7	11.2	11.1	9.6	7.9	9.5
8	137	143	146	15.5	11.2	10.9	9.6	7.8	9.5
9	138	144	147	15.4	11.2	10.7	9.6	7.7	9.5
10	139	145	148	15.2	11.2	10.5	9.6	7.6	9.5
11	140	145	149	15	11.2	10.3	9.6	7.6	9.5
12	140	146	150	15	11.2	10.3	9.6	7.4	9.5

See the complete achievement and growth norms tables on pages 3-14.

*The 35th percentile score values are bolded in each table to mark the current universal screening threshold.

Early Literacy RIT achievement and growth norms: Kindergarten

Percentile	Term			Fall-spring cond. growth		Fall-winter cond. growth		Winter-spring cond. growth	
	Fall	Winter	Spring	Mean	SD	Mean	SD	Mean	SD
1	116	120	122	18.6	10.4	14.6	8.8	10.1	8.8
2	119	123	126	17.9	10.4	13.7	8.8	9.6	8.8
3	120	125	128	17.7	10.4	13.4	8.8	9.3	8.8
4	122	127	130	17.3	10.4	12.8	8.8	9	8.8
5	123	128	131	17.1	10.4	12.5	8.8	8.8	8.8
6	124	129	132	16.9	10.4	12.2	8.8	8.7	8.8
7	124	130	133	16.9	10.4	12.2	8.8	8.5	8.8
8	125	131	134	16.7	10.4	11.9	8.8	8.3	8.8
9	126	131	135	16.4	10.4	11.6	8.8	8.3	8.8
10	126	132	136	16.4	10.4	11.6	8.8	8.2	8.8
11	127	133	136	16.2	10.4	11.3	8.8	8	8.8
12	127	133	137	16.2	10.4	11.3	8.8	8	8.8
13	128	134	138	16	10.4	11	8.8	7.9	8.8
14	128	134	138	16	10.4	11	8.8	7.9	8.8
15	128	135	139	16	10.4	11	8.8	7.7	8.8
16	129	135	139	15.8	10.4	10.7	8.8	7.7	8.8
17	129	136	140	15.8	10.4	10.7	8.8	7.5	8.8
18	130	136	140	15.6	10.4	10.4	8.8	7.5	8.8
19	130	136	141	15.6	10.4	10.4	8.8	7.5	8.8
20	130	137	141	15.6	10.4	10.4	8.8	7.4	8.8
21	131	137	142	15.4	10.4	10.1	8.8	7.4	8.8
22	131	138	142	15.4	10.4	10.1	8.8	7.2	8.8
23	131	138	143	15.4	10.4	10.1	8.8	7.2	8.8
24	131	138	143	15.4	10.4	10.1	8.8	7.2	8.8
25	132	139	143	15.2	10.4	9.8	8.8	7.1	8.8
26	132	139	144	15.2	10.4	9.8	8.8	7.1	8.8
27	132	139	144	15.2	10.4	9.8	8.8	7.1	8.8
28	133	140	145	15	10.4	9.5	8.8	6.9	8.8
29	133	140	145	15	10.4	9.5	8.8	6.9	8.8
30	133	140	145	15	10.4	9.5	8.8	6.9	8.8
31	133	141	146	15	10.4	9.5	8.8	6.7	8.8
32	134	141	146	14.8	10.4	9.2	8.8	6.7	8.8
33	134	141	146	14.8	10.4	9.2	8.8	6.7	8.8
34	134	141	147	14.8	10.4	9.2	8.8	6.7	8.8
35*	134	142	147	14.8	10.4	9.2	8.8	6.6	8.8
36	135	142	147	14.5	10.4	8.9	8.8	6.6	8.8
37	135	142	148	14.5	10.4	8.9	8.8	6.6	8.8
38	135	143	148	14.5	10.4	8.9	8.8	6.4	8.8
39	135	143	148	14.5	10.4	8.9	8.8	6.4	8.8
40	136	143	149	14.3	10.4	8.6	8.8	6.4	8.8
41	136	144	149	14.3	10.4	8.6	8.8	6.3	8.8
42	136	144	149	14.3	10.4	8.6	8.8	6.3	8.8
43	136	144	150	14.3	10.4	8.6	8.8	6.3	8.8
44	137	144	150	14.1	10.4	8.3	8.8	6.3	8.8
45	137	145	150	14.1	10.4	8.3	8.8	6.1	8.8
46	137	145	151	14.1	10.4	8.3	8.8	6.1	8.8
47	137	145	151	14.1	10.4	8.3	8.8	6.1	8.8
48	138	145	151	13.9	10.4	8	8.8	6.1	8.8
49	138	146	152	13.9	10.4	8	8.8	6	8.8
50	138	146	152	13.9	10.4	8	8.8	6	8.8

Early Literacy RIT achievement and growth norms: Kindergarten (cont'd)

Percentile	Term			Fall-spring cond. growth		Fall-winter cond. growth		Winter-spring cond. growth	
	Fall	Winter	Spring	Mean	SD	Mean	SD	Mean	SD
51	138	146	152	13.9	10.4	8	8.8	6	8.8
52	139	147	153	13.7	10.4	7.7	8.8	5.8	8.8
53	139	147	153	13.7	10.4	7.7	8.8	5.8	8.8
54	139	147	153	13.7	10.4	7.7	8.8	5.8	8.8
55	139	147	154	13.7	10.4	7.7	8.8	5.8	8.8
56	139	148	154	13.7	10.4	7.7	8.8	5.6	8.8
57	140	148	154	13.5	10.4	7.4	8.8	5.6	8.8
58	140	148	155	13.5	10.4	7.4	8.8	5.6	8.8
59	140	149	155	13.5	10.4	7.4	8.8	5.5	8.8
60	140	149	155	13.5	10.4	7.4	8.8	5.5	8.8
61	141	149	156	13.3	10.4	7.1	8.8	5.5	8.8
62	141	149	156	13.3	10.4	7.1	8.8	5.5	8.8
63	141	150	156	13.3	10.4	7.1	8.8	5.3	8.8
64	141	150	157	13.3	10.4	7.1	8.8	5.3	8.8
65	142	150	157	13.1	10.4	6.8	8.8	5.3	8.8
66	142	151	157	13.1	10.4	6.8	8.8	5.2	8.8
67	142	151	158	13.1	10.4	6.8	8.8	5.2	8.8
68	142	151	158	13.1	10.4	6.8	8.8	5.2	8.8
69	143	151	158	12.8	10.4	6.5	8.8	5.2	8.8
70	143	152	159	12.8	10.4	6.5	8.8	5	8.8
71	143	152	159	12.8	10.4	6.5	8.8	5	8.8
72	144	152	159	12.6	10.4	6.2	8.8	5	8.8
73	144	153	160	12.6	10.4	6.2	8.8	4.8	8.8
74	144	153	160	12.6	10.4	6.2	8.8	4.8	8.8
75	144	153	161	12.6	10.4	6.2	8.8	4.8	8.8
76	145	154	161	12.4	10.4	5.9	8.8	4.7	8.8
77	145	154	161	12.4	10.4	5.9	8.8	4.7	8.8
78	145	155	162	12.4	10.4	5.9	8.8	4.5	8.8
79	146	155	162	12.2	10.4	5.6	8.8	4.5	8.8
80	146	155	163	12.2	10.4	5.6	8.8	4.5	8.8
81	146	156	163	12.2	10.4	5.6	8.8	4.4	8.8
82	147	156	164	12	10.4	5.3	8.8	4.4	8.8
83	147	157	164	12	10.4	5.3	8.8	4.2	8.8
84	147	157	165	12	10.4	5.3	8.8	4.2	8.8
85	148	157	165	11.8	10.4	5	8.8	4.2	8.8
86	148	158	166	11.8	10.4	5	8.8	4	8.8
87	149	158	166	11.6	10.4	4.7	8.8	4	8.8
88	149	159	167	11.6	10.4	4.7	8.8	3.9	8.8
89	150	160	168	11.4	10.4	4.4	8.8	3.7	8.8
90	150	160	168	11.4	10.4	4.4	8.8	3.7	8.8
91	151	161	169	11.2	10.4	4.1	8.8	3.6	8.8
92	151	161	170	11.2	10.4	4.1	8.8	3.6	8.8
93	152	162	171	10.9	10.4	3.8	8.8	3.4	8.8
94	153	163	172	10.7	10.4	3.5	8.8	3.3	8.8
95	153	164	173	10.7	10.4	3.5	8.8	3.1	8.8
96	154	165	174	10.5	10.4	3.2	8.8	2.9	8.8
97	156	167	176	10.1	10.4	2.5	8.8	2.6	8.8
98	157	169	178	9.9	10.4	2.2	8.8	2.3	8.8
99	160	172	182	9.3	10.4	1.3	8.8	1.8	8.8

Early Literacy RIT achievement and growth norms: Grade 1

	Term			Fall-spring cond. growth		Fall-winter cond. growth		Winter-spring cond. growth	
Percentile	Fall	Winter	Spring	Mean	SD	Mean	SD	Mean	SD
1	125	130	132	17.5	11.2	13.4	9.6	9.4	9.5
2	129	134	136	16.8	11.2	12.5	9.6	8.9	9.5
3	131	136	139	16.5	11.2	12.1	9.6	8.7	9.5
4	133	138	141	16.2	11.2	11.7	9.6	8.4	9.5
5	134	139	142	16	11.2	11.5	9.6	8.3	9.5
6	135	141	144	15.9	11.2	11.3	9.6	8.1	9.5
7	136	142	145	15.7	11.2	11.1	9.6	7.9	9.5
8	137	143	146	15.5	11.2	10.9	9.6	7.8	9.5
9	138	144	147	15.4	11.2	10.7	9.6	7.7	9.5
10	139	145	148	15.2	11.2	10.5	9.6	7.6	9.5
11	140	145	149	15	11.2	10.3	9.6	7.6	9.5
12	140	146	150	15	11.2	10.3	9.6	7.4	9.5
13	141	147	150	14.9	11.2	10.1	9.6	7.3	9.5
14	141	147	151	14.9	11.2	10.1	9.6	7.3	9.5
15	142	148	152	14.7	11.2	9.9	9.6	7.2	9.5
16	143	149	152	14.5	11.2	9.7	9.6	7.1	9.5
17	143	149	153	14.5	11.2	9.7	9.6	7.1	9.5
18	144	150	154	14.4	11.2	9.5	9.6	6.9	9.5
19	144	150	154	14.4	11.2	9.5	9.6	6.9	9.5
20	145	151	155	14.2	11.2	9.3	9.6	6.8	9.5
21	145	151	155	14.2	11.2	9.3	9.6	6.8	9.5
22	145	152	156	14.2	11.2	9.3	9.6	6.7	9.5
23	146	152	156	14	11.2	9.1	9.6	6.7	9.5
24	146	153	157	14	11.2	9.1	9.6	6.5	9.5
25	147	153	157	13.9	11.2	8.9	9.6	6.5	9.5
26	147	153	158	13.9	11.2	8.9	9.6	6.5	9.5
27	147	154	158	13.9	11.2	8.9	9.6	6.4	9.5
28	148	154	159	13.7	11.2	8.6	9.6	6.4	9.5
29	148	155	159	13.7	11.2	8.6	9.6	6.3	9.5
30	149	155	160	13.5	11.2	8.4	9.6	6.3	9.5
31	149	156	160	13.5	11.2	8.4	9.6	6.2	9.5
32	149	156	161	13.5	11.2	8.4	9.6	6.2	9.5
33	150	156	161	13.4	11.2	8.2	9.6	6.2	9.5
34	150	157	161	13.4	11.2	8.2	9.6	6	9.5
35*	150	157	162	13.4	11.2	8.2	9.6	6	9.5
36	151	157	162	13.2	11.2	8	9.6	6	9.5
37	151	158	163	13.2	11.2	8	9.6	5.9	9.5
38	151	158	163	13.2	11.2	8	9.6	5.9	9.5
39	152	159	164	13.1	11.2	7.8	9.6	5.8	9.5
40	152	159	164	13.1	11.2	7.8	9.6	5.8	9.5
41	152	159	164	13.1	11.2	7.8	9.6	5.8	9.5
42	153	160	165	12.9	11.2	7.6	9.6	5.7	9.5
43	153	160	165	12.9	11.2	7.6	9.6	5.7	9.5
44	153	160	166	12.9	11.2	7.6	9.6	5.7	9.5
45	154	161	166	12.7	11.2	7.4	9.6	5.5	9.5
46	154	161	166	12.7	11.2	7.4	9.6	5.5	9.5
47	154	161	167	12.7	11.2	7.4	9.6	5.5	9.5
48	155	162	167	12.6	11.2	7.2	9.6	5.4	9.5
49	155	162	167	12.6	11.2	7.2	9.6	5.4	9.5
50	155	163	168	12.6	11.2	7.2	9.6	5.3	9.5

Early Literacy RIT achievement and growth norms: Grade 1 (cont'd)

	Term			Fall-spring cond. growth		Fall-winter cond. growth		Winter-spring cond. growth	
Percentile	Fall	Winter	Spring	Mean	SD	Mean	SD	Mean	SD
51	156	163	168	12.4	11.2	7	9.6	5.3	9.5
52	156	163	169	12.4	11.2	7	9.6	5.3	9.5
53	156	164	169	12.4	11.2	7	9.6	5.2	9.5
54	157	164	169	12.2	11.2	6.8	9.6	5.2	9.5
55	157	164	170	12.2	11.2	6.8	9.6	5.2	9.5
56	157	165	170	12.2	11.2	6.8	9.6	5	9.5
57	158	165	171	12.1	11.2	6.6	9.6	5	9.5
58	158	165	171	12.1	11.2	6.6	9.6	5	9.5
59	158	166	171	12.1	11.2	6.6	9.6	4.9	9.5
60	159	166	172	11.9	11.2	6.4	9.6	4.9	9.5
61	159	166	172	11.9	11.2	6.4	9.6	4.9	9.5
62	159	167	173	11.9	11.2	6.4	9.6	4.8	9.5
63	160	167	173	11.7	11.2	6.2	9.6	4.8	9.5
64	160	168	173	11.7	11.2	6.2	9.6	4.7	9.5
65	160	168	174	11.7	11.2	6.2	9.6	4.7	9.5
66	161	168	174	11.6	11.2	6	9.6	4.7	9.5
67	161	169	175	11.6	11.2	6	9.6	4.5	9.5
68	161	169	175	11.6	11.2	6	9.6	4.5	9.5
69	162	169	176	11.4	11.2	5.8	9.6	4.5	9.5
70	162	170	176	11.4	11.2	5.8	9.6	4.4	9.5
71	162	170	176	11.4	11.2	5.8	9.6	4.4	9.5
72	163	171	177	11.2	11.2	5.6	9.6	4.3	9.5
73	163	171	177	11.2	11.2	5.6	9.6	4.3	9.5
74	164	172	178	11.1	11.2	5.4	9.6	4.2	9.5
75	164	172	178	11.1	11.2	5.4	9.6	4.2	9.5
76	164	172	179	11.1	11.2	5.4	9.6	4.2	9.5
77	165	173	179	10.9	11.2	5.2	9.6	4	9.5
78	165	173	180	10.9	11.2	5.2	9.6	4	9.5
79	166	174	180	10.7	11.2	5	9.6	3.9	9.5
80	166	174	181	10.7	11.2	5	9.6	3.9	9.5
81	167	175	181	10.6	11.2	4.8	9.6	3.8	9.5
82	167	175	182	10.6	11.2	4.8	9.6	3.8	9.5
83	168	176	183	10.4	11.2	4.6	9.6	3.7	9.5
84	168	176	183	10.4	11.2	4.6	9.6	3.7	9.5
85	169	177	184	10.2	11.2	4.4	9.6	3.5	9.5
86	169	178	185	10.2	11.2	4.4	9.6	3.4	9.5
87	170	178	185	10.1	11.2	4.1	9.6	3.4	9.5
88	170	179	186	10.1	11.2	4.1	9.6	3.3	9.5
89	171	180	187	9.9	11.2	3.9	9.6	3.2	9.5
90	172	181	188	9.7	11.2	3.7	9.6	3	9.5
91	173	181	189	9.6	11.2	3.5	9.6	3	9.5
92	173	182	190	9.6	11.2	3.5	9.6	2.9	9.5
93	174	183	191	9.4	11.2	3.3	9.6	2.8	9.5
94	175	184	192	9.3	11.2	3.1	9.6	2.7	9.5
95	177	186	193	8.9	11.2	2.7	9.6	2.4	9.5
96	178	187	195	8.8	11.2	2.5	9.6	2.3	9.5
97	180	189	197	8.4	11.2	2.1	9.6	2	9.5
98	182	191	200	8.1	11.2	1.7	9.6	1.8	9.5
99	185	195	204	7.6	11.2	1.1	9.6	1.3	9.5

Early Literacy RIT achievement and growth norms: Grade 2

Percentile	Term			Fall-spring cond. growth		Fall-winter cond. growth		Winter-spring cond. growth	
	Fall	Winter	Spring	Mean	SD	Mean	SD	Mean	SD
1	130	137	141	17	9	11.8	8.4	9.5	8.3
2	135	142	146	16.3	9	11.1	8.4	8.9	8.3
3	138	144	149	15.9	9	10.7	8.4	8.7	8.3
4	140	147	151	15.7	9	10.5	8.4	8.3	8.3
5	142	149	153	15.4	9	10.2	8.4	8.1	8.3
6	143	150	155	15.3	9	10.1	8.4	8	8.3
7	145	151	156	15	9	9.8	8.4	7.9	8.3
8	146	153	157	14.8	9	9.7	8.4	7.6	8.3
9	147	154	158	14.7	9	9.6	8.4	7.5	8.3
10	148	155	159	14.6	9	9.5	8.4	7.4	8.3
11	149	156	160	14.4	9	9.3	8.4	7.3	8.3
12	150	157	161	14.3	9	9.2	8.4	7.2	8.3
13	151	157	162	14.2	9	9.1	8.4	7.2	8.3
14	152	158	163	14	9	9	8.4	7.1	8.3
15	152	159	164	14	9	9	8.4	7	8.3
16	153	160	164	13.9	9	8.8	8.4	6.9	8.3
17	154	160	165	13.8	9	8.7	8.4	6.9	8.3
18	154	161	166	13.8	9	8.7	8.4	6.7	8.3
19	155	162	166	13.6	9	8.6	8.4	6.6	8.3
20	156	162	167	13.5	9	8.4	8.4	6.6	8.3
21	156	163	168	13.5	9	8.4	8.4	6.5	8.3
22	157	163	168	13.4	9	8.3	8.4	6.5	8.3
23	157	164	169	13.4	9	8.3	8.4	6.4	8.3
24	158	165	169	13.2	9	8.2	8.4	6.3	8.3
25	159	165	170	13.1	9	8.1	8.4	6.3	8.3
26	159	166	171	13.1	9	8.1	8.4	6.2	8.3
27	160	166	171	13	9	7.9	8.4	6.2	8.3
28	160	167	172	13	9	7.9	8.4	6.1	8.3
29	161	167	172	12.8	9	7.8	8.4	6.1	8.3
30	161	168	173	12.8	9	7.8	8.4	6	8.3
31	162	168	173	12.7	9	7.7	8.4	6	8.3
32	162	169	174	12.7	9	7.7	8.4	5.8	8.3
33	163	169	174	12.6	9	7.5	8.4	5.8	8.3
34	163	170	175	12.6	9	7.5	8.4	5.7	8.3
35*	163	170	175	12.6	9	7.5	8.4	5.7	8.3
36	164	171	175	12.4	9	7.4	8.4	5.6	8.3
37	164	171	176	12.4	9	7.4	8.4	5.6	8.3
38	165	171	176	12.3	9	7.3	8.4	5.6	8.3
39	165	172	177	12.3	9	7.3	8.4	5.5	8.3
40	166	172	177	12.2	9	7.2	8.4	5.5	8.3
41	166	173	178	12.2	9	7.2	8.4	5.4	8.3
42	167	173	178	12	9	7	8.4	5.4	8.3
43	167	174	179	12	9	7	8.4	5.3	8.3
44	167	174	179	12	9	7	8.4	5.3	8.3
45	168	175	180	11.9	9	6.9	8.4	5.2	8.3
46	168	175	180	11.9	9	6.9	8.4	5.2	8.3
47	169	175	180	11.8	9	6.8	8.4	5.2	8.3
48	169	176	181	11.8	9	6.8	8.4	5.1	8.3
49	170	176	181	11.6	9	6.6	8.4	5.1	8.3
50	170	177	182	11.6	9	6.6	8.4	4.9	8.3

Early Literacy RIT achievement and growth norms: Grade 2 (cont'd)

Percentile	Term			Fall-spring cond. growth		Fall-winter cond. growth		Winter-spring cond. growth	
	Fall	Winter	Spring	Mean	SD	Mean	SD	Mean	SD
51	170	177	182	11.6	9	6.6	8.4	4.9	8.3
52	171	178	183	11.5	9	6.5	8.4	4.8	8.3
53	171	178	183	11.5	9	6.5	8.4	4.8	8.3
54	172	178	183	11.4	9	6.4	8.4	4.8	8.3
55	172	179	184	11.4	9	6.4	8.4	4.7	8.3
56	173	179	184	11.2	9	6.3	8.4	4.7	8.3
57	173	180	185	11.2	9	6.3	8.4	4.6	8.3
58	174	180	185	11.1	9	6.1	8.4	4.6	8.3
59	174	181	186	11.1	9	6.1	8.4	4.5	8.3
60	174	181	186	11.1	9	6.1	8.4	4.5	8.3
61	175	181	187	11	9	6	8.4	4.5	8.3
62	175	182	187	11	9	6	8.4	4.4	8.3
63	176	182	187	10.8	9	5.9	8.4	4.4	8.3
64	176	183	188	10.8	9	5.9	8.4	4.3	8.3
65	177	183	188	10.7	9	5.8	8.4	4.3	8.3
66	177	184	189	10.7	9	5.8	8.4	4.2	8.3
67	178	184	189	10.6	9	5.6	8.4	4.2	8.3
68	178	185	190	10.6	9	5.6	8.4	4	8.3
69	179	185	190	10.4	9	5.5	8.4	4	8.3
70	179	186	191	10.4	9	5.5	8.4	3.9	8.3
71	180	186	191	10.3	9	5.4	8.4	3.9	8.3
72	180	187	192	10.3	9	5.4	8.4	3.8	8.3
73	181	187	192	10.2	9	5.2	8.4	3.8	8.3
74	181	188	193	10.2	9	5.2	8.4	3.7	8.3
75	182	188	193	10	9	5.1	8.4	3.7	8.3
76	182	189	194	10	9	5.1	8.4	3.6	8.3
77	183	189	194	9.9	9	5	8.4	3.6	8.3
78	183	190	195	9.9	9	5	8.4	3.5	8.3
79	184	191	196	9.7	9	4.9	8.4	3.4	8.3
80	184	191	196	9.7	9	4.9	8.4	3.4	8.3
81	185	192	197	9.6	9	4.7	8.4	3.3	8.3
82	186	192	198	9.5	9	4.6	8.4	3.3	8.3
83	186	193	198	9.5	9	4.6	8.4	3.1	8.3
84	187	194	199	9.3	9	4.5	8.4	3	8.3
85	188	194	200	9.2	9	4.3	8.4	3	8.3
86	189	195	200	9.1	9	4.2	8.4	2.9	8.3
87	189	196	201	9.1	9	4.2	8.4	2.8	8.3
88	190	197	202	8.9	9	4.1	8.4	2.7	8.3
89	191	198	203	8.8	9	4	8.4	2.6	8.3
90	192	199	204	8.7	9	3.8	8.4	2.5	8.3
91	193	200	205	8.5	9	3.7	8.4	2.4	8.3
92	194	201	206	8.4	9	3.6	8.4	2.2	8.3
93	195	202	207	8.3	9	3.5	8.4	2.1	8.3
94	197	203	209	8	9	3.2	8.4	2	8.3
95	198	205	210	7.9	9	3.1	8.4	1.8	8.3
96	200	207	212	7.6	9	2.8	8.4	1.6	8.3
97	202	209	214	7.3	9	2.6	8.4	1.3	8.3
98	205	212	217	6.9	9	2.2	8.4	1	8.3
99	210	217	222	6.3	9	1.5	8.4	0.4	8.3

Early Literacy RIT achievement and growth norms: Grade 3

Percentile	Term			Fall-spring cond. growth		Fall-winter cond. growth		Winter-spring cond. growth	
	Fall	Winter	Spring	Mean	SD	Mean	SD	Mean	SD
1	142	148	152	14.9	8.9	10.4	8.4	8.5	8.3
2	147	153	157	14.2	8.9	9.8	8.4	8	8.3
3	150	156	160	13.8	8.9	9.4	8.4	7.6	8.3
4	153	158	162	13.4	8.9	9.1	8.4	7.4	8.3
5	155	160	164	13.1	8.9	8.8	8.4	7.2	8.3
6	156	162	166	13	8.9	8.7	8.4	7	8.3
7	158	163	167	12.7	8.9	8.5	8.4	6.9	8.3
8	159	164	168	12.6	8.9	8.3	8.4	6.8	8.3
9	160	166	169	12.4	8.9	8.2	8.4	6.5	8.3
10	161	167	171	12.3	8.9	8.1	8.4	6.4	8.3
11	162	168	172	12.2	8.9	8	8.4	6.3	8.3
12	163	169	172	12	8.9	7.9	8.4	6.2	8.3
13	164	169	173	11.9	8.9	7.7	8.4	6.2	8.3
14	165	170	174	11.8	8.9	7.6	8.4	6.1	8.3
15	166	171	175	11.6	8.9	7.5	8.4	6	8.3
16	166	172	176	11.6	8.9	7.5	8.4	5.9	8.3
17	167	173	176	11.5	8.9	7.4	8.4	5.8	8.3
18	168	173	177	11.3	8.9	7.2	8.4	5.8	8.3
19	169	174	178	11.2	8.9	7.1	8.4	5.7	8.3
20	169	175	179	11.2	8.9	7.1	8.4	5.5	8.3
21	170	175	179	11.1	8.9	7	8.4	5.5	8.3
22	171	176	180	10.9	8.9	6.9	8.4	5.4	8.3
23	171	177	180	10.9	8.9	6.9	8.4	5.3	8.3
24	172	177	181	10.8	8.9	6.8	8.4	5.3	8.3
25	172	178	182	10.8	8.9	6.8	8.4	5.2	8.3
26	173	178	182	10.7	8.9	6.6	8.4	5.2	8.3
27	173	179	183	10.7	8.9	6.6	8.4	5.1	8.3
28	174	179	183	10.5	8.9	6.5	8.4	5.1	8.3
29	175	180	184	10.4	8.9	6.4	8.4	5	8.3
30	175	180	184	10.4	8.9	6.4	8.4	5	8.3
31	176	181	185	10.3	8.9	6.3	8.4	4.9	8.3
32	176	181	185	10.3	8.9	6.3	8.4	4.9	8.3
33	177	182	186	10.1	8.9	6.1	8.4	4.8	8.3
34	177	182	186	10.1	8.9	6.1	8.4	4.8	8.3
35*	178	183	187	10	8.9	6	8.4	4.7	8.3
36	178	183	187	10	8.9	6	8.4	4.7	8.3
37	179	184	188	9.9	8.9	5.9	8.4	4.6	8.3
38	179	184	188	9.9	8.9	5.9	8.4	4.6	8.3
39	180	185	189	9.7	8.9	5.8	8.4	4.4	8.3
40	180	185	189	9.7	8.9	5.8	8.4	4.4	8.3
41	181	186	190	9.6	8.9	5.7	8.4	4.3	8.3
42	181	186	190	9.6	8.9	5.7	8.4	4.3	8.3
43	181	187	191	9.6	8.9	5.7	8.4	4.2	8.3
44	182	187	191	9.5	8.9	5.5	8.4	4.2	8.3
45	182	188	192	9.5	8.9	5.5	8.4	4.1	8.3
46	183	188	192	9.3	8.9	5.4	8.4	4.1	8.3
47	183	189	192	9.3	8.9	5.4	8.4	4	8.3
48	184	189	193	9.2	8.9	5.3	8.4	4	8.3
49	184	189	193	9.2	8.9	5.3	8.4	4	8.3
50	185	190	194	9.1	8.9	5.2	8.4	3.9	8.3

Early Literacy RIT achievement and growth norms: Grade 3 (cont'd)

Percentile	Term			Fall-spring cond. growth		Fall-winter cond. growth		Winter-spring cond. growth	
	Fall	Winter	Spring	Mean	SD	Mean	SD	Mean	SD
51	185	190	194	9.1	8.9	5.2	8.4	3.9	8.3
52	186	191	195	8.9	8.9	5	8.4	3.8	8.3
53	186	191	195	8.9	8.9	5	8.4	3.8	8.3
54	187	192	196	8.8	8.9	4.9	8.4	3.7	8.3
55	187	192	196	8.8	8.9	4.9	8.4	3.7	8.3
56	187	193	197	8.8	8.9	4.9	8.4	3.6	8.3
57	188	193	197	8.7	8.9	4.8	8.4	3.6	8.3
58	188	194	197	8.7	8.9	4.8	8.4	3.4	8.3
59	189	194	198	8.5	8.9	4.7	8.4	3.4	8.3
60	189	194	198	8.5	8.9	4.7	8.4	3.4	8.3
61	190	195	199	8.4	8.9	4.6	8.4	3.3	8.3
62	190	195	199	8.4	8.9	4.6	8.4	3.3	8.3
63	191	196	200	8.3	8.9	4.4	8.4	3.2	8.3
64	191	196	200	8.3	8.9	4.4	8.4	3.2	8.3
65	192	197	201	8.1	8.9	4.3	8.4	3.1	8.3
66	192	197	201	8.1	8.9	4.3	8.4	3.1	8.3
67	193	198	202	8	8.9	4.2	8.4	3	8.3
68	193	198	202	8	8.9	4.2	8.4	3	8.3
69	194	199	203	7.8	8.9	4.1	8.4	2.9	8.3
70	194	199	203	7.8	8.9	4.1	8.4	2.9	8.3
71	195	200	204	7.7	8.9	3.9	8.4	2.8	8.3
72	195	200	204	7.7	8.9	3.9	8.4	2.8	8.3
73	196	201	205	7.6	8.9	3.8	8.4	2.7	8.3
74	196	202	205	7.6	8.9	3.8	8.4	2.6	8.3
75	197	202	206	7.4	8.9	3.7	8.4	2.6	8.3
76	198	203	207	7.3	8.9	3.6	8.4	2.5	8.3
77	198	203	207	7.3	8.9	3.6	8.4	2.5	8.3
78	199	204	208	7.2	8.9	3.4	8.4	2.3	8.3
79	199	205	208	7.2	8.9	3.4	8.4	2.2	8.3
80	200	205	209	7	8.9	3.3	8.4	2.2	8.3
81	201	206	210	6.9	8.9	3.2	8.4	2.1	8.3
82	201	206	210	6.9	8.9	3.2	8.4	2.1	8.3
83	202	207	211	6.8	8.9	3.1	8.4	2	8.3
84	203	208	212	6.6	8.9	3	8.4	1.9	8.3
85	204	209	213	6.5	8.9	2.8	8.4	1.8	8.3
86	204	209	213	6.5	8.9	2.8	8.4	1.8	8.3
87	205	210	214	6.4	8.9	2.7	8.4	1.7	8.3
88	206	211	215	6.2	8.9	2.6	8.4	1.6	8.3
89	207	212	216	6.1	8.9	2.5	8.4	1.5	8.3
90	208	213	217	6	8.9	2.3	8.4	1.3	8.3
91	209	214	218	5.8	8.9	2.2	8.4	1.2	8.3
92	210	215	219	5.7	8.9	2.1	8.4	1.1	8.3
93	212	217	221	5.4	8.9	1.9	8.4	0.9	8.3
94	213	218	222	5.3	8.9	1.7	8.4	0.8	8.3
95	215	220	224	5	8.9	1.5	8.4	0.6	8.3
96	217	222	226	4.7	8.9	1.2	8.4	0.4	8.3
97	219	224	228	4.5	8.9	1	8.4	0.1	8.3
98	222	227	231	4.1	8.9	0.6	8.4	0	8.3
99	227	232	236	3.4	8.9	0	8.4	0	8.3

Early Literacy RIT achievement and growth norms: Grade 4

Percentile	Term			Fall-spring cond. growth		Fall-winter cond. growth		Winter-spring cond. growth	
	Fall	Winter	Spring	Mean	SD	Mean	SD	Mean	SD
1	154	158	161	11.8	8.5	8.5	8	7.1	8
2	159	163	166	11.1	8.5	7.9	8	6.6	8
3	162	166	169	10.7	8.5	7.6	8	6.2	8
4	164	168	171	10.4	8.5	7.3	8	6	8
5	166	170	173	10.2	8.5	7.1	8	5.8	8
6	168	172	174	9.9	8.5	6.9	8	5.6	8
7	169	173	176	9.8	8.5	6.7	8	5.5	8
8	171	174	177	9.5	8.5	6.5	8	5.4	8
9	172	176	178	9.4	8.5	6.4	8	5.2	8
10	173	177	179	9.2	8.5	6.3	8	5.1	8
11	174	178	180	9.1	8.5	6.1	8	4.9	8
12	175	179	181	9	8.5	6	8	4.8	8
13	176	179	182	8.8	8.5	5.9	8	4.8	8
14	176	180	183	8.8	8.5	5.9	8	4.7	8
15	177	181	184	8.7	8.5	5.8	8	4.6	8
16	178	182	184	8.6	8.5	5.7	8	4.5	8
17	179	182	185	8.4	8.5	5.5	8	4.5	8
18	179	183	186	8.4	8.5	5.5	8	4.4	8
19	180	184	187	8.3	8.5	5.4	8	4.3	8
20	181	184	187	8.2	8.5	5.3	8	4.3	8
21	181	185	188	8.2	8.5	5.3	8	4.2	8
22	182	186	188	8	8.5	5.2	8	4.1	8
23	183	186	189	7.9	8.5	5.1	8	4.1	8
24	183	187	190	7.9	8.5	5.1	8	4	8
25	184	187	190	7.8	8.5	4.9	8	4	8
26	184	188	191	7.8	8.5	4.9	8	3.9	8
27	185	189	191	7.6	8.5	4.8	8	3.8	8
28	185	189	192	7.6	8.5	4.8	8	3.8	8
29	186	190	192	7.5	8.5	4.7	8	3.7	8
30	186	190	193	7.5	8.5	4.7	8	3.7	8
31	187	191	193	7.4	8.5	4.6	8	3.5	8
32	188	191	194	7.2	8.5	4.5	8	3.5	8
33	188	192	194	7.2	8.5	4.5	8	3.4	8
34	189	192	195	7.1	8.5	4.3	8	3.4	8
35*	189	193	195	7.1	8.5	4.3	8	3.3	8
36	189	193	196	7.1	8.5	4.3	8	3.3	8
37	190	194	196	7	8.5	4.2	8	3.2	8
38	190	194	197	7	8.5	4.2	8	3.2	8
39	191	194	197	6.8	8.5	4.1	8	3.2	8
40	191	195	198	6.8	8.5	4.1	8	3.1	8
41	192	195	198	6.7	8.5	4	8	3.1	8
42	192	196	199	6.7	8.5	4	8	3	8
43	193	196	199	6.6	8.5	3.9	8	3	8
44	193	197	199	6.6	8.5	3.9	8	2.9	8
45	194	197	200	6.4	8.5	3.8	8	2.9	8
46	194	198	200	6.4	8.5	3.8	8	2.8	8
47	195	198	201	6.3	8.5	3.6	8	2.8	8
48	195	199	201	6.3	8.5	3.6	8	2.7	8
49	195	199	202	6.3	8.5	3.6	8	2.7	8
50	196	199	202	6.2	8.5	3.5	8	2.7	8

Early Literacy RIT achievement and growth norms: Grade 4 (cont'd)

Percentile	Term			Fall-spring cond. growth		Fall-winter cond. growth		Winter-spring cond. growth	
	Fall	Winter	Spring	Mean	SD	Mean	SD	Mean	SD
51	196	200	203	6.2	8.5	3.5	8	2.6	8
52	197	200	203	6	8.5	3.4	8	2.6	8
53	197	201	203	6	8.5	3.4	8	2.5	8
54	198	201	204	5.9	8.5	3.3	8	2.5	8
55	198	202	204	5.9	8.5	3.3	8	2.4	8
56	199	202	205	5.8	8.5	3.2	8	2.4	8
57	199	203	205	5.8	8.5	3.2	8	2.3	8
58	200	203	206	5.6	8.5	3	8	2.3	8
59	200	203	206	5.6	8.5	3	8	2.3	8
60	200	204	207	5.6	8.5	3	8	2.2	8
61	201	204	207	5.5	8.5	2.9	8	2.2	8
62	201	205	208	5.5	8.5	2.9	8	2	8
63	202	205	208	5.4	8.5	2.8	8	2	8
64	202	206	208	5.4	8.5	2.8	8	1.9	8
65	203	206	209	5.2	8.5	2.7	8	1.9	8
66	203	207	209	5.2	8.5	2.7	8	1.8	8
67	204	207	210	5.1	8.5	2.6	8	1.8	8
68	204	208	210	5.1	8.5	2.6	8	1.7	8
69	205	208	211	4.9	8.5	2.4	8	1.7	8
70	205	209	211	4.9	8.5	2.4	8	1.6	8
71	206	209	212	4.8	8.5	2.3	8	1.6	8
72	206	210	212	4.8	8.5	2.3	8	1.5	8
73	207	210	213	4.7	8.5	2.2	8	1.5	8
74	207	211	214	4.7	8.5	2.2	8	1.4	8
75	208	211	214	4.5	8.5	2.1	8	1.4	8
76	209	212	215	4.4	8.5	2	8	1.3	8
77	209	213	215	4.4	8.5	2	8	1.2	8
78	210	213	216	4.3	8.5	1.8	8	1.2	8
79	210	214	216	4.3	8.5	1.8	8	1.1	8
80	211	214	217	4.1	8.5	1.7	8	1.1	8
81	212	215	218	4	8.5	1.6	8	1	8
82	212	216	218	4	8.5	1.6	8	0.9	8
83	213	216	219	3.9	8.5	1.5	8	0.9	8
84	214	217	220	3.7	8.5	1.4	8	0.8	8
85	215	218	220	3.6	8.5	1.2	8	0.6	8
86	215	219	221	3.6	8.5	1.2	8	0.5	8
87	216	219	222	3.5	8.5	1.1	8	0.5	8
88	217	220	223	3.3	8.5	1	8	0.4	8
89	218	221	224	3.2	8.5	0.9	8	0.3	8
90	219	222	225	3.1	8.5	0.8	8	0.2	8
91	220	223	226	2.9	8.5	0.6	8	0.1	8
92	221	224	227	2.8	8.5	0.5	8	0	8
93	222	226	228	2.7	8.5	0.4	8	0	8
94	224	227	230	2.4	8.5	0.2	8	0	8
95	226	229	231	2.1	8.5	0	8	0	8
96	227	231	233	2	8.5	0	8	0	8
97	230	233	235	1.6	8.5	0	8	0	8
98	233	236	239	1.2	8.5	0	8	0	8
99	238	241	243	0.5	8.5	0	8	0	8

Early Literacy RIT achievement and growth norms: Grade 5

Percentile	Term			Fall-spring cond. growth		Fall-winter cond. growth		Winter-spring cond. growth	
	Fall	Winter	Spring	Mean	SD	Mean	SD	Mean	SD
1	163	166	168	10.3	8.2	7.6	7.8	6.5	7.8
2	168	171	173	9.6	8.2	7	7.8	6	7.8
3	171	174	176	9.2	8.2	6.7	7.8	5.6	7.8
4	173	176	178	8.9	8.2	6.4	7.8	5.4	7.8
5	175	178	180	8.6	8.2	6.2	7.8	5.2	7.8
6	177	180	182	8.3	8.2	5.9	7.8	5	7.8
7	178	181	183	8.2	8.2	5.8	7.8	4.8	7.8
8	179	182	184	8.1	8.2	5.7	7.8	4.7	7.8
9	180	183	185	7.9	8.2	5.6	7.8	4.6	7.8
10	181	184	186	7.8	8.2	5.4	7.8	4.5	7.8
11	182	185	187	7.7	8.2	5.3	7.8	4.4	7.8
12	183	186	188	7.5	8.2	5.2	7.8	4.3	7.8
13	184	187	189	7.4	8.2	5.1	7.8	4.2	7.8
14	185	188	190	7.2	8.2	5	7.8	4.1	7.8
15	186	189	191	7.1	8.2	4.8	7.8	4	7.8
16	186	189	191	7.1	8.2	4.8	7.8	4	7.8
17	187	190	192	7	8.2	4.7	7.8	3.8	7.8
18	188	191	193	6.8	8.2	4.6	7.8	3.7	7.8
19	188	191	193	6.8	8.2	4.6	7.8	3.7	7.8
20	189	192	194	6.7	8.2	4.5	7.8	3.6	7.8
21	190	192	195	6.6	8.2	4.4	7.8	3.6	7.8
22	190	193	195	6.6	8.2	4.4	7.8	3.5	7.8
23	191	194	196	6.4	8.2	4.2	7.8	3.4	7.8
24	191	194	196	6.4	8.2	4.2	7.8	3.4	7.8
25	192	195	197	6.3	8.2	4.1	7.8	3.3	7.8
26	192	195	197	6.3	8.2	4.1	7.8	3.3	7.8
27	193	196	198	6.2	8.2	4	7.8	3.2	7.8
28	194	196	198	6	8.2	3.9	7.8	3.2	7.8
29	194	197	199	6	8.2	3.9	7.8	3.1	7.8
30	195	197	199	5.9	8.2	3.7	7.8	3.1	7.8
31	195	198	200	5.9	8.2	3.7	7.8	2.9	7.8
32	196	198	200	5.7	8.2	3.6	7.8	2.9	7.8
33	196	199	201	5.7	8.2	3.6	7.8	2.8	7.8
34	196	199	201	5.7	8.2	3.6	7.8	2.8	7.8
35*	197	200	202	5.6	8.2	3.5	7.8	2.7	7.8
36	197	200	202	5.6	8.2	3.5	7.8	2.7	7.8
37	198	201	203	5.5	8.2	3.4	7.8	2.6	7.8
38	198	201	203	5.5	8.2	3.4	7.8	2.6	7.8
39	199	202	204	5.3	8.2	3.3	7.8	2.5	7.8
40	199	202	204	5.3	8.2	3.3	7.8	2.5	7.8
41	200	202	204	5.2	8.2	3.1	7.8	2.5	7.8
42	200	203	205	5.2	8.2	3.1	7.8	2.4	7.8
43	201	203	205	5.1	8.2	3	7.8	2.4	7.8
44	201	204	206	5.1	8.2	3	7.8	2.3	7.8
45	201	204	206	5.1	8.2	3	7.8	2.3	7.8
46	202	205	207	4.9	8.2	2.9	7.8	2.2	7.8
47	202	205	207	4.9	8.2	2.9	7.8	2.2	7.8
48	203	205	208	4.8	8.2	2.8	7.8	2.2	7.8
49	203	206	208	4.8	8.2	2.8	7.8	2.1	7.8
50	204	206	208	4.7	8.2	2.6	7.8	2.1	7.8

Early Literacy RIT achievement and growth norms: Grade 5 (cont'd)

Percentile	Term			Fall-spring cond. growth		Fall-winter cond. growth		Winter-spring cond. growth	
	Fall	Winter	Spring	Mean	SD	Mean	SD	Mean	SD
51	204	207	209	4.7	8.2	2.6	7.8	1.9	7.8
52	205	207	209	4.5	8.2	2.5	7.8	1.9	7.8
53	205	208	210	4.5	8.2	2.5	7.8	1.8	7.8
54	205	208	210	4.5	8.2	2.5	7.8	1.8	7.8
55	206	209	211	4.4	8.2	2.4	7.8	1.7	7.8
56	206	209	211	4.4	8.2	2.4	7.8	1.7	7.8
57	207	209	211	4.2	8.2	2.3	7.8	1.7	7.8
58	207	210	212	4.2	8.2	2.3	7.8	1.6	7.8
59	208	210	212	4.1	8.2	2.2	7.8	1.6	7.8
60	208	211	213	4.1	8.2	2.2	7.8	1.5	7.8
61	209	211	213	4	8.2	2	7.8	1.5	7.8
62	209	212	214	4	8.2	2	7.8	1.4	7.8
63	209	212	214	4	8.2	2	7.8	1.4	7.8
64	210	213	215	3.8	8.2	1.9	7.8	1.3	7.8
65	210	213	215	3.8	8.2	1.9	7.8	1.3	7.8
66	211	213	215	3.7	8.2	1.8	7.8	1.3	7.8
67	211	214	216	3.7	8.2	1.8	7.8	1.2	7.8
68	212	214	216	3.6	8.2	1.7	7.8	1.2	7.8
69	212	215	217	3.6	8.2	1.7	7.8	1	7.8
70	213	215	217	3.4	8.2	1.5	7.8	1	7.8
71	213	216	218	3.4	8.2	1.5	7.8	0.9	7.8
72	214	216	218	3.3	8.2	1.4	7.8	0.9	7.8
73	214	217	219	3.3	8.2	1.4	7.8	0.8	7.8
74	215	217	219	3.2	8.2	1.3	7.8	0.8	7.8
75	215	218	220	3.2	8.2	1.3	7.8	0.7	7.8
76	216	219	220	3	8.2	1.2	7.8	0.6	7.8
77	217	219	221	2.9	8.2	1.1	7.8	0.6	7.8
78	217	220	222	2.9	8.2	1.1	7.8	0.5	7.8
79	218	220	222	2.7	8.2	0.9	7.8	0.5	7.8
80	218	221	223	2.7	8.2	0.9	7.8	0.4	7.8
81	219	221	223	2.6	8.2	0.8	7.8	0.4	7.8
82	220	222	224	2.5	8.2	0.7	7.8	0.3	7.8
83	220	223	225	2.5	8.2	0.7	7.8	0.2	7.8
84	221	223	225	2.3	8.2	0.6	7.8	0.2	7.8
85	222	224	226	2.2	8.2	0.5	7.8	0	7.8
86	223	225	227	2.1	8.2	0.3	7.8	0	7.8
87	223	226	228	2.1	8.2	0.3	7.8	0	7.8
88	224	227	229	1.9	8.2	0.2	7.8	0	7.8
89	225	227	229	1.8	8.2	0.1	7.8	0	7.8
90	226	228	230	1.6	8.2	0	7.8	0	7.8
91	227	229	231	1.5	8.2	0	7.8	0	7.8
92	228	231	232	1.4	8.2	0	7.8	0	7.8
93	229	232	234	1.2	8.2	0	7.8	0	7.8
94	231	233	235	1	8.2	0	7.8	0	7.8
95	232	235	237	0.8	8.2	0	7.8	0	7.8
96	234	236	238	0.6	8.2	0	7.8	0	7.8
97	236	239	241	0.3	8.2	0	7.8	0	7.8
98	240	242	244	0	8.2	0	7.8	0	7.8
99	244	246	248	0	8.2	0	7.8	0	7.8

