

2022 norms for MAP Growth course-specific tests in Algebra 1, Algebra 2, and Geometry

In August 2017, NWEA® released a suite of course-specific MAP® Growth™ tests. The purpose of these tests is to help districts, schools, teachers, and families understand how students are performing at a point in time and over the course of the year in a specific subject. NWEA offers several different course-specific MAP Growth tests.

To provide additional context and better support interpretation of student scores compared with other students who have taken the same test, NWEA has accumulated sufficient test data to support user norms for a subset of these course-specific tests. Updated user norms are now available for Algebra 1, Algebra 2, and Geometry tests. Although they are user norms and not nationally representative like the general MAP Growth norms, they provide contextual information about student performance in the fall, winter, and spring and growth between fall and spring, fall and winter, and winter and spring on these course-specific assessments.

The updated user norms will be available in the MAP Growth reporting system in Summer 2023. For now, partners can utilize the course-specific user norms by leveraging the tables in .pdf format showing achievement and growth percentiles.

Some differences between the course-specific norms and the general MAP Growth norms exist:

- The first major difference between the course-specific norms and the general MAP Growth norms is that the course-specific norms are not grade-specific. The reference group for each test's norms is the entire population of students who took the course-specific test. In contrast, the norms for MAP Growth Reading, Mathematics, Language Usage, and Science are grade specific and adjusted for the number of instructional weeks configured by the partner. Any student who takes one of the course-specific tests will be compared to the students who took the same test during the same term during the 2019–2020, 2020–2021, and 2021–2022 testing years.
- The second major difference is that the course-specific norms are user norms, not nationally representative norms like the general norms. Nationally representative norms can be calculated when
 - The number of responses is very large;
 - The data set includes responses from all or most US states;
 - The data set includes a distribution across urban, rural, and suburban districts and schools;
 - The data set includes large and small districts and schools; and
 - The data set includes high and low socioeconomic groups.

For nationally representative norms, the sample is “sculpted” to mirror the national population of students as a whole. Such nationally representative norms permit comparisons of individual or group performance to students across the nation.

In the case of the course-specific user norms for Algebra 1, Algebra 2, and Geometry, student performance is compared to other students who took these assessments. The volumes and representation across the previously mentioned types of districts, schools, and test takers are not robust enough to support nationally representative norms.

The table below shows the ways in which the user norms for the course-specific math tests differ from the nationally representative norms used for the MAP Growth tests.

Algebra 1	COURSE-SPECIFIC	MAP GROWTH NORMS
WITHIN-YEAR GROWTH NORMS	Fall-to-winter Winter-to-spring Fall-to-spring	Fall-to-winter Winter-to-spring Fall-to-spring
BETWEEN-YEAR GROWTH NORMS	N/A	Fall-to-fall Winter-to-winter Spring-to-spring
ACHIEVEMENT NORMS	Fall, winter, spring norms that are not specific to a student's grade	Fall, winter, spring norms that are specific to a student's grade
INSTRUCTIONAL WEEKS	Not adjusted for instructional weeks as configured by each partner	Adjusted for instructional weeks as configured by each partner

FALL TO SPRING

Percentile	Achievement Norm Score			Fall-Spring Cond. Growth		Spring Percentile and Score																			
						5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	
	Fall	Winter	Spring	Mean	SD	204	212	216	220	224	227	229	232	234	237	239	242	245	247	250	254	257	262	269	
5	202	204	204	6.6	10.2	34	61	78	87	93	96	98	99	99	99	99	99	99	99	99	99	99	99	99	
10	208	210	212	6.9	10.2	15	37	56	70	80	87	92	95	97	99	99	99	99	99	99	99	99	99	99	
15	212	214	216	7.1	10.2	7	23	40	54	67	77	84	90	93	96	98	99	99	99	99	99	99	99	99	
20	215	218	220	7.3	10.2	4	15	28	42	55	66	76	83	88	93	95	97	99	99	99	99	99	99	99	
25	218	221	224	7.4	10.2	2	9	19	31	43	54	65	74	81	87	92	95	97	98	99	99	99	99	99	
30	220	224	227	7.5	10.2	1	6	14	24	35	46	57	67	75	82	88	92	95	97	99	99	99	99	99	
35	223	226	229	7.7	10.2	1	3	8	15	24	34	45	55	64	73	80	87	91	95	97	99	99	99	99	
40	225	228	232	7.8	10.2	1	2	5	11	18	27	37	47	56	66	74	82	88	92	96	98	99	99	99	
45	227	231	234	7.9	10.2	1	1	4	8	13	21	29	39	48	58	67	76	83	89	94	97	99	99	99	
50	229	233	237	8.0	10.2	1	1	2	5	9	15	23	31	40	50	59	69	77	85	90	95	98	99	99	
55	231	235	239	8.1	10.2	1	1	1	3	6	11	17	24	32	42	51	61	70	79	86	92	96	99	99	
60	233	238	242	8.2	10.2	1	1	1	2	4	8	12	18	25	34	43	53	63	73	81	89	95	98	99	
65	235	240	245	8.3	10.2	1	1	1	1	3	5	8	13	19	27	35	45	55	65	75	84	92	97	99	
70	237	242	247	8.4	10.2	1	1	1	1	2	3	6	9	14	20	28	37	47	57	68	79	88	95	99	
75	240	245	250	8.5	10.2	1	1	1	1	1	2	3	5	8	13	19	26	35	45	57	69	81	91	98	
80	243	248	254	8.7	10.2	1	1	1	1	1	1	1	1	3	5	7	11	17	24	33	44	57	71	85	96
85	246	252	257	8.8	10.2	1	1	1	1	1	1	1	1	1	2	4	7	10	16	23	33	45	60	77	93
90	250	256	262	9.1	10.2	1	1	1	1	1	1	1	1	1	1	2	3	5	8	12	19	30	44	63	85
95	256	263	269	9.4	10.2	1	1	1	1	1	1	1	1	1	1	1	2	4	7	12	22	38	66	99	

FALL TO WINTER

Percentile	Achievement Norm Score			Fall-Winter Cond. Growth		Winter Percentile and Score																			
						5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	
	Fall	Winter	Spring	Mean	SD	204	210	214	218	221	224	226	228	231	233	235	238	240	242	245	248	252	256	263	
5	202	204	204	4.1	7.8	37	69	86	94	97	99	99	99	99	99	99	99	99	99	99	99	99	99	99	
10	208	210	212	4.1	7.8	14	40	62	77	87	93	96	98	99	99	99	99	99	99	99	99	99	99	99	
15	212	214	216	4.1	7.8	5	22	42	59	73	83	90	94	97	99	99	99	99	99	99	99	99	99	99	
20	215	218	220	4.1	7.8	2	12	28	44	59	72	82	89	93	96	98	99	99	99	99	99	99	99	99	
25	218	221	224	4.1	7.8	1	6	16	30	44	58	70	79	87	92	95	98	99	99	99	99	99	99	99	
30	220	224	227	4.1	7.8	1	4	11	22	34	48	60	71	80	87	92	96	98	99	99	99	99	99	99	
35	223	226	229	4.1	7.8	1	1	5	12	22	33	45	57	68	78	85	91	95	98	99	99	99	99	99	
40	225	228	232	4.1	7.8	1	1	3	8	15	24	35	47	59	69	79	86	92	96	98	99	99	99	99	
45	227	231	234	4.1	7.8	1	1	2	5	10	17	26	37	48	60	70	80	87	93	96	99	99	99	99	
50	229	233	237	4.1	7.8	1	1	1	3	6	11	19	28	38	50	61	72	81	88	94	97	99	99	99	
55	231	235	239	4.1	7.8	1	1	1	1	4	7	13	20	29	40	51	62	73	83	90	95	98	99	99	
60	233	238	242	4.1	7.8	1	1	1	1	2	4	8	14	21	30	41	53	64	75	85	92	97	99	99	
65	235	240	245	4.1	7.8	1	1	1	1	1	2	5	9	14	22	31	42	54	67	78	88	95	99	99	
70	237	242	247	4.1	7.8	1	1	1	1	1	1	3	5	9	15	23	33	44	57	70	82	91	97	99	
75	240	245	250	4.1	7.8	1	1	1	1	1	1	1	2	4	8	13	20	30	42	55	70	83	94	99	
80	243	248	254	4.1	7.8	1	1	1	1	1	1	1	1	1	2	4	7	11	18	28	40	55	72	87	98
85	246	252	257	4.1	7.8	1	1	1	1	1	1	1	1	1	1	3	6	10	16	26	40	58	78	95	
90	250	256	262	4.1	7.8	1	1	1	1	1	1	1	1	1	1	1	2	4	7	13	22	38	60	86	
95	256	263	269	4.1	7.8	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3	6	14	30	62	

WINTER TO SPRING

Percentile	Achievement Norm Score			Winter-Spring Cond. Growth		Spring Percentile and Score																				
						5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95		
	Fall	Winter	Spring	Mean	Sd	204	212	216	220	224	227	229	232	234	237	239	242	245	247	250	254	257	262	269		
5	202	204	204	4.2	8.8	33	65	82	91	96	98	99	99	99	99	99	99	99	99	99	99	99	99	99		
10	208	210	212	4.1	8.8	13	38	60	76	86	92	96	98	99	99	99	99	99	99	99	99	99	99	99		
15	212	214	216	4.1	8.8	6	23	42	60	73	83	90	94	97	98	99	99	99	99	99	99	99	99	99		
20	215	218	220	4.0	8.8	2	12	26	42	57	69	79	87	92	95	98	99	99	99	99	99	99	99	99		
25	218	221	224	4.0	8.8	1	6	16	29	43	57	69	78	86	91	95	97	99	99	99	99	99	99	99		
30	220	224	227	4.0	8.8	1	3	10	19	31	44	56	67	77	84	90	94	97	99	99	99	99	99	99		
35	223	226	229	4.0	8.8	1	2	6	14	23	35	47	59	69	79	86	91	95	98	99	99	99	99	99		
40	225	228	232	3.9	8.8	1	1	4	9	17	27	38	50	61	71	80	87	92	96	98	99	99	99	99		
45	227	231	234	3.9	8.8	1	1	2	5	10	17	26	37	48	59	70	79	86	92	96	98	99	99	99		
50	229	233	237	3.9	8.8	1	1	1	3	7	12	20	29	39	50	61	72	81	88	94	97	99	99	99		
55	231	235	239	3.8	8.8	1	1	1	2	4	8	14	22	31	41	53	64	74	83	90	95	98	99	99		
60	233	238	242	3.8	8.8	1	1	1	1	2	4	8	13	20	29	39	51	62	73	83	91	96	99	99		
65	235	240	245	3.8	8.8	1	1	1	1	1	3	5	9	15	22	31	42	53	66	77	87	94	98	99		
70	237	242	247	3.8	8.8	1	1	1	1	1	2	3	6	10	16	24	33	45	57	70	81	91	97	99		
75	240	245	250	3.7	8.8	1	1	1	1	1	1	1	1	1	3	5	9	15	22	32	44	57	71	84	94	99
80	243	248	254	3.7	8.8	1	1	1	1	1	1	1	1	1	1	3	5	8	14	21	31	44	59	74	89	98
85	246	252	257	3.6	8.8	1	1	1	1	1	1	1	1	1	1	1	2	3	6	11	17	27	41	58	78	94
90	250	256	262	3.6	8.8	1	1	1	1	1	1	1	1	1	1	1	2	4	8	15	25	40	62	87	99	
95	256	263	269	3.5	8.8	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	3	7	15	32	63	

Algebra 2

FALL TO SPRING

Percentile		Achievement Norm Score			Fall-Spring Cond. Growth		Spring Percentile and Score																			
		Fall	Winter	Spring	Mean	SD	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	
							215	222	227	231	234	237	240	242	245	247	249	252	254	257	260	263	267	272	279	
5	212	213	215	8.8	10.8	30	55	72	82	89	93	96	98	99	99	99	99	99	99	99	99	99	99	99	99	
10	218	220	222	8.5	10.8	15	35	52	65	76	83	89	93	95	97	98	99	99	99	99	99	99	99	99	99	
15	222	225	227	8.3	10.8	8	23	38	52	63	73	81	86	91	94	96	98	99	99	99	99	99	99	99	99	
20	225	228	231	8.1	10.8	5	16	28	41	53	64	73	80	86	90	94	96	98	99	99	99	99	99	99	99	
25	228	232	234	7.9	10.8	3	10	20	31	43	54	63	72	79	85	90	93	96	98	99	99	99	99	99	99	
30	231	234	237	7.8	10.8	1	6	14	23	33	43	53	62	71	78	84	89	93	96	98	99	99	99	99	99	
35	233	237	240	7.6	10.8	1	4	10	18	27	36	46	55	64	72	79	85	90	94	96	98	99	99	99	99	
40	235	239	242	7.5	10.8	1	3	7	14	21	30	39	48	58	66	74	81	87	91	95	97	99	99	99	99	
45	238	242	245	7.4	10.8	1	2	4	9	15	22	30	38	47	56	65	73	80	86	91	95	98	99	99	99	
50	240	244	247	7.2	10.8	1	1	3	6	11	17	24	32	40	49	58	67	75	82	88	93	97	99	99	99	
55	242	247	249	7.1	10.8	1	1	2	4	8	13	19	26	34	42	51	60	69	77	85	91	95	98	99	99	
60	244	249	252	7.0	10.8	1	1	1	3	6	9	14	20	28	36	44	53	63	72	80	87	93	97	99	99	
65	246	251	254	6.9	10.8	1	1	1	2	4	7	11	16	22	29	37	46	56	65	75	83	91	96	99	99	
70	249	254	257	6.7	10.8	1	1	1	1	2	4	7	10	15	21	28	36	45	55	66	76	85	93	98	99	
75	251	257	260	6.6	10.8	1	1	1	1	1	3	5	8	11	16	22	30	39	48	59	70	81	91	98	99	
80	254	260	263	6.5	10.8	1	1	1	1	1	1	3	4	7	11	15	21	29	38	49	60	73	85	96	99	
85	257	264	267	6.3	10.8	1	1	1	1	1	1	1	1	1	3	4	7	10	15	21	29	38	50	64	79	93
90	262	268	272	6.0	10.8	1	1	1	1	1	1	1	1	1	2	3	4	7	11	16	23	33	47	64	84	99
95	268	275	279	5.7	10.8	1	1	1	1	1	1	1	1	1	1	1	2	4	6	10	17	27	43	69	99	

FALL TO WINTER

Percentile		Achievement Norm Score			Fall-Winter Cond. Growth		Winter Percentile and Score																		
		Fall	Winter	Spring	Mean	SD	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95
							213	220	225	228	232	234	237	239	242	244	247	249	251	254	257	260	264	268	275
5	212	213	215	5.3	9.0	33	62	80	89	94	97	99	99	99	99	99	99	99	99	99	99	99	99	99	99
10	218	220	222	5.1	9.0	14	37	57	72	83	90	94	97	98	99	99	99	99	99	99	99	99	99	99	99
15	222	225	227	5.0	9.0	6	22	40	56	69	79	87	92	95	97	99	99	99	99	99	99	99	99	99	99
20	225	228	231	4.9	9.0	3	14	28	43	57	69	79	86	91	95	97	98	99	99	99	99	99	99	99	99
25	228	232	234	4.8	9.0	2	8	18	31	44	57	68	77	84	90	94	96	98	99	99	99	99	99	99	99
30	231	234	237	4.7	9.0	1	4	11	21	32	44	56	66	75	83	89	93	96	98	99	99	99	99	99	99
35	233	237	240	4.7	9.0	1	3	7	15	25	36	47	58	68	77	84	90	94	97	98	99	99	99	99	99
40	235	239	242	4.6	9.0	1	2	5	11	18	28	38	49	60	70	78	85	91	95	97	99	99	99	99	99
45	238	242	245	4.5	9.0	1	1	2	6	11	18	27	37	47	58	68	77	84	90	95	98	99	99	99	99
50	240	244	247	4.4	9.0	1	1	1	4	8	13	20	29	39	49	59	69	78	86	92	96	98	99	99	99
55	242	247	249	4.4	9.0	1	1	1	2	5	9	15	22	31	40	51	61	71	80	88	94	97	99	99	99
60	244	249	252	4.3	9.0	1	1	1	1	3	6	10	16	24	32	42	53	64	74	83	90	96	99	99	99
65	246	251	254	4.2	9.0	1	1	1	1	2	4	7	11	17	25	34	44	55	66	77	86	93	98	99	99
70	249	254	257	4.2	9.0	1	1	1	1	1	2	4	6	10	16	23	32	42	54	66	78	88	95	99	99
75	251	257	260	4.1	9.0	1	1	1	1	1	1	2	4	7	11	17	25	34	45	58	71	83	93	99	99
80	254	260	263	4.0	9.0	1	1	1	1	1	1	1	2	4	6	10	16	23	33	45	59	74	88	97	99
85	257	264	267	3.9	9.0	1	1	1	1	1	1	1	1	2	3	6	9	15	22	33	46	62	80	94	99
90	262	268	272	3.7	9.0	1	1	1	1	1	1	1	1	1	1	2	3	6	10	16	26	41	61	85	99
95	268	275	279	3.6	9.0	1	1	1	1	1	1	1	1	1	1	1	1	1	3	5	10	19	36	65	99

WINTER TO SPRING

Percentile		Achievement Norm Score			Fall-Winter Cond. Growth		Winter Percentile and Score																		
		Fall	Winter	Spring	Mean	SD	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95
							213	220	225	228	232	234	237	239	242	244	247	249	251	254	257	260	264	268	275
5	212	213	215	5.3	9.0	33	62	80	89	94	97	99	99	99	99	99	99	99	99	99	99	99	99	99	99
10	218	220	222	5.1	9.0	14	37	57	72	83	90	94	97	98	99	99	99	99	99	99	99	99	99	99	99
15	222	225	227	5.0	9.0	6	22	40	56	69	79	87	92	95	97	99	99	99	99	99	99	99	99	99	99
20	225	228	231	4.9	9.0	3	14	28	43	57	69	79	86	91	95	97	98	99	99	99	99	99	99	99	99
25	228	232	234	4.8	9.0	2	8	18	31	44	57	68	77	84	90	94	96	98	99	99	99	99	99	99	99
30	231	234	237	4.7	9.0	1	4	11	21	32	44	56	66	75	83	89	93	96	98	99	99	99	99	99	99
35	233	237	240	4.7	9.0	1	3	7	15	25	36	47	58	68	77	84	90	94	97	98	99	99	99	99	99
40	235	239	242	4.6	9.0	1	2	5	11	18	28	38	49	60	70	78	85	91	95	97	99	99	99	99	99
45	238	242	245	4.5	9.0	1	1	2	6	11	18	27	37	47	58	68	77	84	90	95	98	99	99	99	99
50	240	244	247	4.4	9.0	1	1	1	4	8	13	20	29	39	49	59	69	78	86	92	96	98	99	99	99
55	242	247	249	4.4	9.0	1	1	1	2	5	9	15	22	31	40	51	61	71	80	88	94	97	99	99	99
60	244	249	252	4.3	9.0	1	1	1	1	3	6	10	16	24	32	42	53	64	74	83	90	96	99	99	99
65	246	251	254	4.2	9.0	1	1	1	1	2	4	7	11	17	25	34	44	55	66	77	86	93	98	99	99
70	249	254	257	4.2	9.0	1	1	1	1	1	2	4	6	10	16	23	32	42	54	66	78	88	95	99	99
75	251	257	260	4.1	9.0	1	1	1	1	1	1	2	4	7	11	17	25	34	45	58	71	83	93	99	99
80	254	260	263	4.0	9.0	1	1	1	1	1	1	1	2	4	6	10	16	23	33	45	59	74	88	97	99
85	257	264	267	3.9	9.0	1	1	1	1	1	1	1	1	2	3	6	9	15	22	33	46	62	80	94	99
90	262	268	272	3.7	9.0	1	1	1	1	1	1	1	1	1	1	2	3	6	10	16	26	41	61	85	99
95	268	275	279	3.6	9.0	1	1	1	1	1	1	1	1	1	1	1	1	1	3	5	10	19	36	65	99

