

2017 National Assessment of Educational Progress Grade 4 Mathematics Results



Table of Contents

Achievement Level Descriptions	1
Florida Complete Results	2
Overall Student Results, Florida and National Public	3
Average Scale Score Gaps, Florida and National Public	
Average Scale Score Race/Ethnicity Gaps	4
Average Scale Score National School Lunch Program (NSLP) Gaps	5
Average Scale Score Student with Disabilities (SD) Gaps	6
Average Scale Score English Language Learner (ELL) Gaps	7

Achievement Level Descriptions NAEP Grade 4 Mathematics (Scale Score Range: 0-500)

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Basic	Fourth-grade students performing at the <i>Basic</i> level should show some evidence of understanding the mathematical concepts and procedures in the five NAEP content areas (number properties and operations; measurement; geometry; data analysis, statistics, and probability; algebra).
(214)	Fourth-graders performing at the <i>Basic</i> level should be able to estimate and use basic facts to perform simple computations with whole numbers, show some understanding of fractions and decimals, and solve some simple real-world problems in all NAEP content areas. Students at this level should be able to use—though not always accurately—four-function calculators, rulers, and geometric shapes. Their written responses will often be minimal and presented without supporting information.
Proficient (249)	Fourth-grade students performing at the <i>Proficient</i> level should consistently apply integrated procedural knowledge and conceptual understanding to problem solving in the five NAEP content areas (number properties and operations; measurement; geometry; data analysis, statistics, and probability; algebra). Fourth-graders performing at the <i>Proficient</i> level should be able to use whole numbers to estimate, compute, and determine whether results are reasonable. They should have a conceptual understanding of fractions and decimals; be able to solve real-world problems in all NAEP content areas; and use four-function calculators, rulers, and geometric shapes appropriately. Students performing at the <i>Proficient</i> level should employ problem-solving strategies such as identifying and using appropriate information. Their written solutions should be organized and presented both with supporting information and explanations of how they were achieved.
Advanced	Fourth-grade students performing at the <i>Advanced</i> level should apply integrated procedural knowledge and conceptual understanding to complex and nonroutine real-world problem solving in the five NAEP content areas (number properties and operations; measurement; geometry; data analysis, statistics, and probability; algebra).
(282)	Fourth-graders performing at the <i>Advanced</i> level should be able to solve complex and nonroutine real-world problems in all NAEP content areas. They should display mastery in the use of four-function calculators, rulers, and geometric shapes. The students are expected to draw logical conclusions and justify answers and solution processes by explaining why, as well as how, they were achieved. They should go beyond the obvious in their interpretations and be able to communicate their thoughts clearly and concisely.



NAEP Grade 4 Mathematics

Florida Complete Results

	ASSESSMENT		AVERA	GE SCORE	ACHIEVEMENT LEVELS			
	Grade			Difference from National public (NP)	At or above Basic	At or above Proficient	At Advanced	
Mathematics (scale range 0–500)	4	2017	246	7 个	88	48	9	
Mathematics (scale range 0–500)	4	2015	243	3 🛧	85	42	7	
Mathematics (scale range 0–500)	4	2013	242	# 🔶	84	41	6	
Mathematics (scale range 0–500)	4	2011	240	# 🔶	84	37	5	
Mathematics (scale range 0–500)	4	2009	242	3 🛧	86	40	5	
Mathematics (scale range 0–500)	4	2007	242	3 🛧	86	40	6	
Mathematics (scale range 0–500)	4	2005	239	2 🛧	82	37	5	
Mathematics (scale range 0–500)	4	2003	234	# 🔶	76	31	4	
Mathematics (scale range 0–500)	4	1996¹	216	-7 🔸	55	15	1	
Mathematics (scale range 0–500)	4	1992¹	214	-5 🔸	52	13	1	

\mathbf{T} Not significantly different

Significantly lower than Significantly higher than National public from National public National public

Rounds to zero.

¹ Accommodations were not permitted for this assessment.

NOTE: Detail may not sum to totals because of rounding. Some apparent differences between estimates may not be statistically significant.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1992, 1994, 1996, 1998, 2002, 2003, 2005, 2007, 2009, 2011, 2013, 2015, and 2017 Mathematics, and Reading, and Science, and Writing Assessments.

GRADE 4 | MATHEMATICS

Percentage below Basic, percentage at Basic, percentage at Proficient, percentage at Advanced, percentage at or above Proficient and average scale scores for grade 4 mathematics, by All students [TOTAL] and jurisdiction: 1992, 1996, 2000, 2003, 2005, 2007, 2009, 2011, 2013, 2015, and 2017



below Basic Basic Proficient Advanced

- Not available.

* Significantly different (p < .05) from 2017.

¹ Accommodations were not permitted for this assessment.

NOTE: Some apparent differences between estimates may not be statistically significant.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1992, 1996, 2000, 2003, 2005, 2007, 2009, 2011, 2013, 2015, and 2017 Mathematics Assessments.



NAEP Grade 4 Mathematics - Overall Student Results

	Average Scale Score		Percent A Ba	t or Above sic	Percent At or Above Proficient	
Year	Florida	National Public	Florida	National Public	Florida	National Public
		234		76	31	31
2003	234	234	76	70	31	31
2005	239	237	82	79	37	35
2007	242	239	86	81	40	39
2009	242	239	86	81	40	38
2011	240	240	84	82	37	40
2013	242	241	84	82	41	41
2015	243	240	85	81	42	39
2017	246	239	88	79	48	40

NAEP Grade 4 Mathematics - Average Scale Score







NAEP Grade 4 Mathematics - Average Scale Score Race/Ethnicity Gaps

Year	Florida White	National Public White	Florida Black	National Public Black	Florida Hispanic	National Public Hispanic	Florida W-B Gap	National Public W-B Gap	Florida W-H Gap	National Public W-H Gap
2003	243	243	215	216	232	221	28	27	11	21
2005	247	246	224	220	233	225	23	26	14	21
2007	250	248	225	222	238	227	25	26	13	21
2009	250	248	228	222	238	227	22	26	12	21
2011	250	249	226	224	236	229	23	25	14	20
2013	251	250	228	224	238	230	23	25	12	20
2015	251	248	228	224	240	230	23	24	11	18
2017	255	248	233	223	242	229	22	25	14	19







NAEP Grade 4 Mathematics - Average Scale Score National School Lunch Program (NSLP) Gaps

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					Florida	National Public
		National Public	Florida Not	National Public	Not NSLP-	Not NSLP-
Year	Florida NSLP	NSLP	NSLP	Not NSLP	NSLP Gap	NSLP Gap
2003	222	222	245	244	23	23
2005	229	225	250	248	20	22
2007	233	227	251	249	18	22
2009	235	228	251	250	16	22
2011	232	229	252	252	20	23
2013	233	230	255	254	21	24
2015	235	229	254	253	19	24
2017	239	228	257	253	18	25





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NAEP Grade 4 Mathematics - Average Scale Score Students with Disabilities (SD) Gaps

Year	Florida SD	National Public SD	Florida Not SD	National Public Not SD	Florida Not SD-SD Gap	National Public Not SD-SD Gap
2003	214	214	238	236	24	22
2005	227	218	241	240	14	21
2007	223	220	245	241	22	21
2009	230	220	244	242	14	21
2011	223	218	243	243	20	25
2013	226	218	244	244	18	26
2015	228	217	245	243	17	26
2017	230	214	249	243	19	29





NAEP Grade 4 Mathematics - Average Scale Score English Language Learner (ELL) Gaps Florida and National Public

					Florida	National Public
		National Public	Florida Not	National Public	Not ELL-ELL	Not ELL-ELL
Year	Florida ELL	ELL	ELL	Not ELL	Gap	Gap
2003	222	214	235	236	13	22
2005	219	216	240	239	21	23
2007	223	217	243	242	21	24
2009	226	218	243	242	18	24
2011	219	219	242	243	23	24
2013	218	219	244	244	26	25
2015	220	218	245	243	25	24
2017	223	217	248	242	25	26

