

6

FLORIDA
FAST

GRADE

7

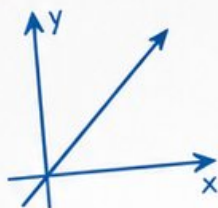
MATH

PRACTICE TESTS



Standards Aligned
Problem Solving For
Comprehensive
Assessment Programs

$$y = mx + b$$



$$2(x - 3) = 4x + 6$$

6 PRINTED
TESTS2 ONLINE
TESTS

USE THESE TWO
ADDITIONAL ONLINE
PRACTICE TESTS
FOR EXTRA REVIEW AFTER
THE PRINTED TESTS
IN THIS BOOK.



Build
Confidence



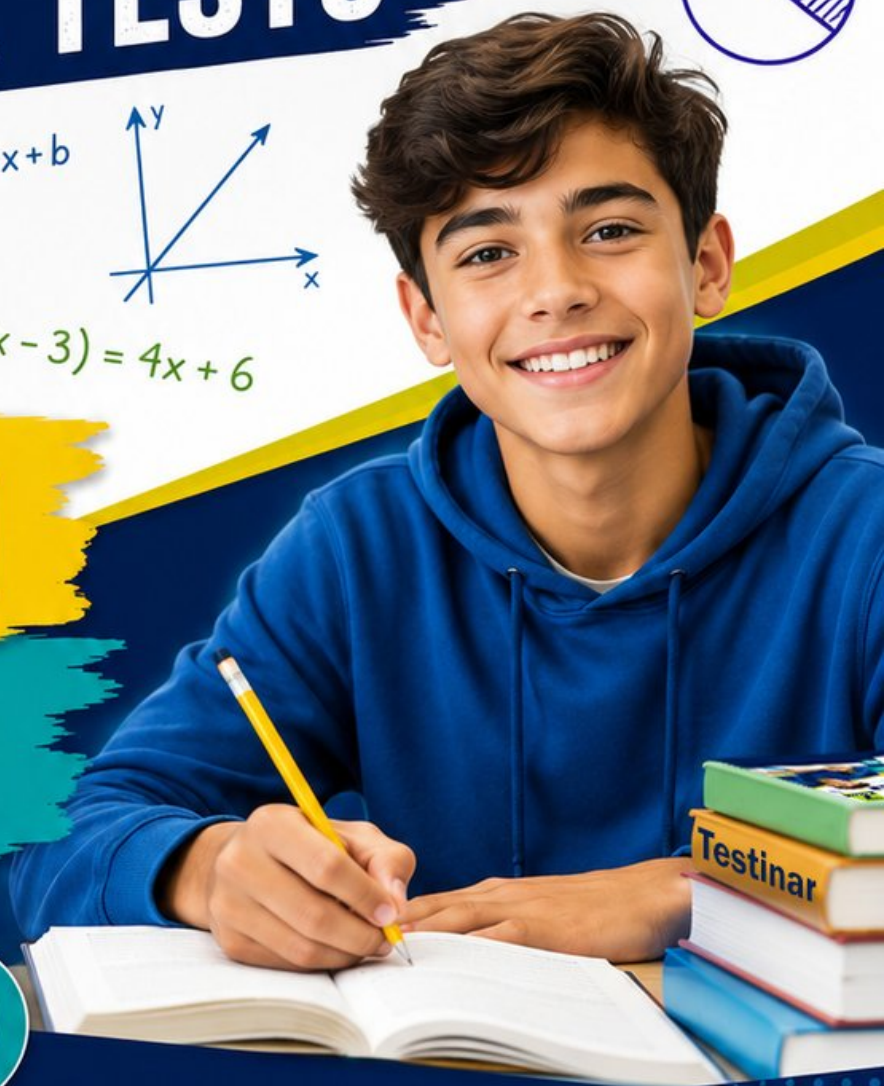
Strengthen
Math Skills



Detailed Answers
& Explanations

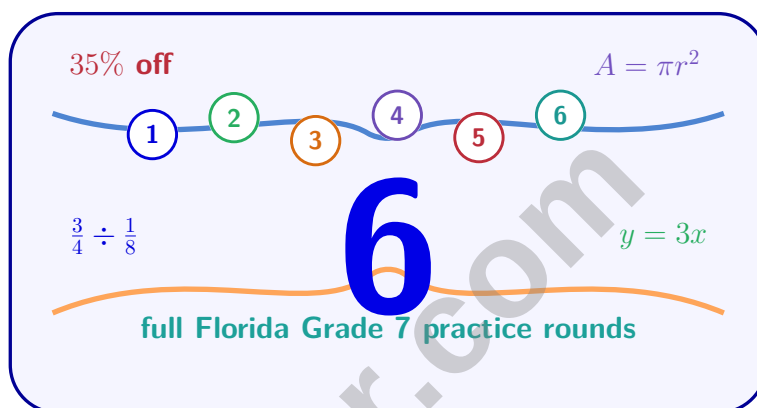


Improve Test
Performance



6 Florida FAST Grade 7 Math Practice Tests

FAST-Aligned Practice with Review, Keys, and Explanations



Six complete 40-question Grade 7 FAST practice rounds with proportional relationships, percents, rational numbers, expressions, equations, geometry, statistics, probability, answer keys, and clear explanations for every item.

Jay Daie and Reza Nazari



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Welcome, Florida Grade 7 Problem Solver!

Six focused rounds for sharper FAST math thinking

This book gives you six full Grade 7 FAST math practice tests. Each round is built to help you notice structure, compare quantities, use proportional reasoning, handle rational numbers, and explain your thinking with care.

Your Florida Practice Promise

I will read every question carefully, choose a strategy that fits, write enough work to prove my answer, and use corrections as training for the next test.

Read

Model

Verify

How to Use This Book

A six-session plan for confident Grade 7 review

1. **Warm up with the review pages.** Notice the big ideas before starting the tests.
2. **Complete one test at a time.** Treat each 40-question round like a real practice session.
3. **Show your reasoning.** Jot a proportion, equation, diagram, number line, or quick estimate when it helps.
4. **Correct actively.** Rework missed items before reading the explanation.
5. **Choose the next target.** After each test, name one skill and one habit to improve.

Florida review rhythm: Work a test, score it, study your misses, then come back ready for the next round with one clear goal.



What Is Inside?

Six FAST tests, 240 questions, and a complete review path

Part	What You Will Practice
Tests 1–3	Proportional relationships, unit rates, percents, rational-number operations, and careful reading.
Tests 4–6	Expressions, equations, inequalities, scale drawings, geometry, and multi-step problem solving.
Answer Pages	Compact keys and explanations that show why each answer works.

The tests are mixed on purpose. Grade 7 success means recognizing which idea is being tested even when the next question changes format.



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- 1) A rectangular prism with a square base has a base perimeter of 20 cm and a height of 8 cm. What is the volume? (Hint: find the side length of the square first.)

☐ A. 100 cm^3

☐ C. 200 cm^3

☐ B. 160 cm^3

☐ D. 400 cm^3

- 2) Solve for x : $8(x + 1) = 72$

☐ A. $x = 8$

☐ C. $x = 10$

☐ B. $x = 9$

☐ D. $x = 11$

- 3) A square has vertices at $(0, 0)$, $(2, 0)$, $(2, 2)$, and $(0, 2)$. If the square is reflected over the line $y = -x$, what is the x -coordinate of the image of the vertex originally at $(2, 0)$?

- 4) A cyclist rides at 12 kilometers per hour. The table below shows distance traveled at different times. Which entry breaks the proportional pattern?

Time (h)	0.5	1	1.5	2
Distance (km)	6	12	18	25

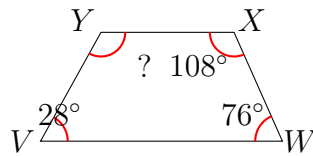
☐ A. Time 0.5 h

☐ C. Time 1.5 h

☐ B. Time 1 h

☐ D. Time 2 h





5)

What is the missing angle measure in the quadrilateral?

☐ A. 108°
☐ C. 148°
☐ B. 128°
☐ D. 168°

6) A simulation models the probability of a customer making a purchase as $\frac{2}{5}$. Which of the following spinners would be most appropriate for this simulation?

☐ A. A spinner with 3 equal sections, 1 shaded

☐ C. A spinner with 10 equal sections, 4 shaded

☐ B. A spinner with 5 equal sections, 2 shaded

☐ D. A spinner with 5 equal sections, 3 shaded

7) A cylindrical tank has a total surface area of 703.36 m^2 and a radius of 8 m. What is the height? Use $\pi \approx 3.14$.

☐ A. 6 m

☐ C. 10 m

☐ B. 8 m

☐ D. 12 m

8) A clothing store manager wants to find out which style of jeans is most popular among teenagers in her city. If she only surveys customers who shop at her store on Saturday afternoons, what type of bias is present?

☐ A. Convenience sampling

☐ C. Leading question bias

☐ B. Voluntary response bias

☐ D. Non-response bias

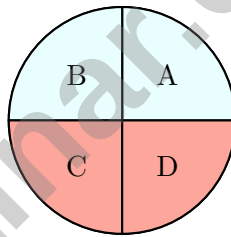

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9) Two exam score distributions have overlapping ranges but different centers. Which pair of statistics best justifies moving a class to a harder curriculum?

- ☐ A. Comparing means only ☐ D. Comparing minimums and maximums
- ☐ B. Comparing ranges only
- ☐ C. Comparing medians and MAD

10) A histogram shows the distribution of test scores for two classes with the same mean (80) but different shapes: Class A is symmetric (bell-shaped), Class B is right-skewed (tail on right). What does this tell you about variability?

- ☐ A. Class A has higher variability ☐ D. Both classes have the same variability
- ☐ B. Class B has higher variability
- ☐ C. You cannot determine variability from shape alone



11)

A spinner has four equal sections labeled A, B, C, D , where sections A and B are blue and sections C and D are red. What is the probability of landing on a red section?

- ☐ A. $\frac{1}{4}$ ☐ C. $\frac{2}{3}$
- ☐ B. $\frac{1}{2}$ ☐ D. $\frac{3}{4}$



- 1) A rectangular garden is 20 meters by 30 meters. A scale drawing is made with a scale of 1 cm : 2 m. What are the dimensions of the drawing?

☐ A. 10 cm by 15 cm

☐ B. 20 cm by 30 cm

☐ C. 40 cm by 60 cm

☐ D. 100 cm by 150 cm
- 2) A membership fee was \$200 per year. This year it was raised by 12%. How much is the new fee?

☐ A. \$212

☐ B. \$220

☐ C. \$224

☐ D. \$232
- 3) A spinner is spun twice, and the compound event is “the first spin is different from the second spin.” If the spinner has 3 equal sections, how many successful outcomes are there?

☐ A. 3

☐ B. 6

☐ C. 9

☐ D. 12
- 4) A spinner with 5 equal sections is spun twice. How many total outcomes are possible?

☐ A. 5

☐ B. 10

☐ C. 20

☐ D. 25
- 5) Which scenario describes dependent events?

☐ A. Rolling two separate dice

☐ B. Drawing two cards without replacement

☐ C. Spinning a spinner twice with equal sections

☐ D. Flipping a coin twice



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- 6) A basketball player tracked free-throw success in practice sessions. The results are:

Session	Attempts	Made
Session 1	50	38
Session 2	75	54
Session 3	100	76

What is the overall experimental probability of success across all three sessions?

- ☐ A. 0.75 ☐ C. $\frac{168}{225}$
☐ B. 0.76 ☐ D. 0.71
- 7) A student estimated her test score would be 88% but she scored 80%. What is the percent error?
- ☐ A. 90% ☐ C. 11%
☐ B. 9% ☐ D. 10%
- 8) Expand and simplify: $-1(x + 5) + 2x$
- ☐ A. $x - 5$ ☐ C. $x + 5$
☐ B. $-x - 5$ ☐ D. $3x - 5$
- 9) Which is the simplest form of $10 - 15$?
- ☐ A. -5 ☐ C. 25
☐ B. 5 ☐ D. -25
- 10) A soccer field is 100 yards long. On a scale drawing where $\frac{1}{2}$ inch = 10 yards, how long is the field on the drawing?
- ☐ A. 2 inches ☐ C. 20 inches
☐ B. 10 inches ☐ D. 5 inches



1) A cube has edge length 6 cm. Find its surface area.

☐ A. 36 cm^2

☐ C. 144 cm^2

☐ B. 72 cm^2

☐ D. 216 cm^2

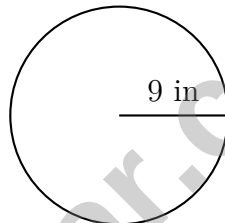
2) When a cube is cut by a plane passing through the midpoints of four edges (forming a square), what is the relationship between this square and the cube's faces?

☐ A. The square is congruent to the cube's faces

☐ C. The square has a side length $\frac{1}{\sqrt{2}}$ times the cube's edge

☐ B. The square has the same perimeter as the cube's faces

☐ D. The square has area $\frac{1}{2}$ the area of a face



3) Radius = 9 in

What is the circumference of this circle? Use $\pi \approx \frac{22}{7}$.

☐ A. $\frac{198}{7}$ in

☐ C. $\frac{99}{7}$ in

☐ B. $\frac{396}{7}$ in

☐ D. $\frac{792}{7}$ in

4) A bag holds 30 marbles: 12 are red, 10 are blue, and 8 are green. What is the probability of drawing a marble that is NOT red?

☐ A. $\frac{10}{30}$

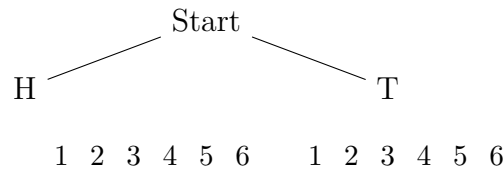
☐ C. $\frac{3}{5}$

☐ B. $\frac{16}{30}$

☐ D. $\frac{2}{5}$



- 5) A fair six-sided die is rolled and a coin is flipped. Which of the following is the correct way to count the sample space?



- ☐ A. $6 + 2 = 8$ outcomes ☐ C. $6 - 2 = 4$ outcomes
☐ B. $6 \times 2 = 12$ outcomes ☐ D. $\frac{6}{2} = 3$ outcomes
- 6) Which number is a perfect square?
- ☐ A. 15 ☐ C. 35
☐ B. 25 ☐ D. 45
- 7) An electronics store marks up a TV by 25%. If the cost is c dollars, which expression shows the selling price?
- ☐ A. $c + 0.25c = 1.25c$ ☐ C. $0.25c$
☐ B. $c - 0.25c$ ☐ D. $c \div 1.25$
- 8) Two dot plots show monthly snowfall (in inches) for Mountain Town A and B. Town A: 2, 4, 4, 6, 6, 6, 6, 8, 10. Town B: 0, 1, 5, 8, 12, 14. The town council needs predictable snow for budget planning. Which town's snowfall is more predictable?
- ☐ A. Town A (data clusters at 4–8 inches) ☐ C. Town A's range (8 inches) is smaller, but Town B is more predictable due to higher peak values
☐ B. Town B (wider range allows better diversity) ☐ D. Town B (extreme values of 0 and 14 are more informative for planning)



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Florida FAST Grade 7 Practice Test Answer Keys**How to use this section with a Grade 7 student:**

1. check the answer first and circle any item that needs another look
2. retry the problem with fresh work before reading the explanation
3. write one short lesson learned from each missed or guessed item

A strong review routine turns every correction into a sharper plan for the next Florida FAST practice test.



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Practice Test Answers and Explanations

Practice Test 1 Answers and Explanations

- 1) **Choice C is correct.** (7.G.4-7.G.6) Side of square = $20/4 = 5$ cm. Base area = $5^2 = 25$ cm². Volume = $25 \times 8 = 200$ cm³.
- 2) **Choice A is correct.** (7.EE.4a) Distribute: $8x + 8 = 72$. Subtract 8: $8x = 64$. Divide by 8: $x = 8$.
- 3) **The correct answer is 0.** (7.G.1-7.G.5) Reflection over $y = -x$ uses the rule $(x, y) \rightarrow (-y, -x)$. Applying this to $(2, 0)$: $(2, 0) \rightarrow (-0, -2) = (0, -2)$. The x -coordinate of the image is 0.
- 4) **Choice D is correct.** (7.RP.1-7.RP.3) At 12 km/h: $0.5 \times 12 = 6$, $1 \times 12 = 12$, $1.5 \times 12 = 18$. But $2 \times 12 = 24 \neq 25$.
- 5) **Choice C is correct.** (7.G.1-7.G.5) The angles in a quadrilateral sum to 360° . Since $28 + 76 + 108 = 212$, the missing angle is $360 - 212 = 148^\circ$.
- 6) **Choice B is correct.** (7.SP.5-7.SP.8) $\frac{2}{5}$ probability requires 2 favorable outcomes out of 5 equally likely ones. Option B directly represents this ratio.
- 7) **Choice A is correct.** (7.G.4-7.G.6) $SA = 2\pi r^2 + 2\pi rh \Rightarrow 703.36 = 2(3.14)(64) + 2(3.14)(8)(h) \Rightarrow 703.36 = 401.92 + 50.24h \Rightarrow 301.44 = 50.24h \Rightarrow h = 6$ m.
- 8) **Choice A is correct.** (7.SP.1-7.SP.4) Surveying only customers at one store at one time is a convenience sample because it only includes people who are easy to reach, not a random selection of all teenagers in the city.
- 9) **Choice C is correct.** (7.SP.1-7.SP.4) Medians show typical performance (center). MAD shows consistency. Together, they reveal whether the entire class has shifted up (higher median) with stable performance (stable MAD), justifying curriculum advancement.
- 10) **Choice C is correct.** (7.SP.1-7.SP.4) Shape (skewness) describes asymmetry, but variability (spread) is measured by range, IQR, or standard deviation. Two distributions can have different shapes but similar spreads, or vice versa.
- 11) **Choice B is correct.** (7.SP.5-7.SP.8) Red sections: C and D (2 out of 4). $P(\text{red}) = \frac{2}{4} = \frac{1}{2}$.
- 12) **The correct answer is 40.** (7.G.1-7.G.5) Perimeter scales linearly by the scale factor. Larger perimeter = $16 \times 2.5 = 40$ inches.
- 13) **Choice B is correct.** (7.SP.5-7.SP.8) Numbers greater than 2: $\{3, 4\} = 2$ outcomes. Heads: 1 outcome. Favorable: $3H, 4H = 2$ outcomes.
- 14) **Choice A is correct.** (7.SP.3) Median indicates typical/central value. Class 1's higher median shows higher typical performance, but overlap in distributions means some Class 2 students may score above some Class 1 students.
- 15) **Choice A is correct.** (7.SP.5-7.SP.8) $P(4 \text{ first}) = \frac{1}{6}$; numbers less than 4 are 1, 2, 3, so $P(\text{less than 4}) = \frac{3}{6} = \frac{1}{2}$. Product: $\frac{1}{6} \cdot \frac{1}{2} = \frac{1}{12} = \frac{3}{36}$.
- 16) **Choice D is correct.** (7.SP.6) Compare relative frequencies: Hearts $\frac{140}{500} = 0.28$, Diamonds $\frac{125}{500} = 0.25$, Clubs $\frac{128}{500} = 0.256$, Spades $\frac{107}{500} = 0.214$. Spades has the lowest.
- 17) **Choice B is correct.** (7.SP.5-7.SP.8) Flipping 10 heads in a row has a very small probability ($\frac{1}{1024} \approx 0.001$) but is possible. Rolling a 7 on a standard die is impossible (probability = 0).
- 18) **Choice C is correct.** (7.SP.1-7.SP.4) $\frac{35}{105} = \frac{x}{3150}$. Reduce: $\frac{1}{3} = \frac{x}{3150} \Rightarrow x = 1050$.
- 19) **The correct answer is 14.** (7.G.4-7.G.6) $C = 2\pi r \Rightarrow 88 = 2 \times \frac{22}{7} \times r \Rightarrow 88 = \frac{44}{7}r \Rightarrow r = 88 \times \frac{7}{44} = 14$ cm.
- 20) **Choice C is correct.** (7.RP.3) Estimate 1: $\frac{|72-80|}{80} \times 100\% = 10\%$. Estimate 2: $\frac{|88-80|}{80} \times 100\% = 10\%$. Both estimates are equally far from the actual value (8 units away).
- 21) **The correct answer is A,C.** (7.G.1-7.G.5) A: Two triangles with the same three side lengths are congruent by SSS. C: Two triangles with two equal sides and an equal included angle are congruent by SAS. B is incorrect because AAA determines similarity, not congruence (triangles can be different sizes). D is incorrect because two angles and two separate sides (not necessarily properly positioned) do not guarantee congruence.
- 22) **Choice A is correct.** (7.EE.1-7.EE.2) Correct: $-2(x) - 2(-3) = -2x + 6$. Student forgot that negative times negative is positive.
- 23) **Choice B is correct.** (7.NS.1-7.NS.3) The key principle (7.NS.1c): $a - (-b) = a + b$. This works because we are undoing a debt or reversing a loss. Choice B correctly identifies this conceptual principle.
- 24) **Choice D is correct.** (7.RP.1-7.RP.3) Convert 25 feet to inches: $25 \times 12 = 300$ inches. Scale = $5 : 300 = 1 : 60$.
- 25) **Choice D is correct.** (7.RP.3) $200 = P \times 0.08 \times 5 \Rightarrow 200 = 0.4P \Rightarrow P = \500 .



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Hi, Persistent Problem Solver!

◇ Some Grade 7 questions ask you to hold several ideas in your mind at once. That can feel hard, and that is exactly why practice matters. ◇

★ **Remember this:** You showed persistence by continuing through the set. That habit is powerful because difficult problems often open after one more good attempt. You practiced across 6 full Grade 7 practice tests, and that repeated effort matters. ★

Persistence Tools

- **Try a Smaller Case:** Use an easier number to see the pattern.
- **Draw It:** Make the situation visible.
- **Restate It:** Say the question in your own words.
- **Check One Step:** Fix the first unclear place.

Grade 7 test-day tip: When stuck, do not restart everything. Find the first step you trust, then rebuild from there.

If you want to share something or ask a question, please email me at jay@testinar.com.

Jay Daie

Your Persistence Coach

PRACTICE TODAY. SUCCEED TOMORROW!

This book includes **6** full-length Math practice tests and **2** online tests to help Grade 7 students build confidence, strengthen skills, and excel on standardized assessments.

Each practice test is carefully crafted to reflect the latest standards and includes a variety of question types, realistic test conditions, and detailed answer explanations.

Perfect for classroom use, homework, test preparation, and extra practice at home.



THIS BOOK INCLUDES:

6 Full-Length Printed Tests

2 Online Practice Tests

 Detailed Answers & Explanations



MORE PRACTICE. GREATER RESULTS.

Give your child the tools to build strong math skills, confidence, and a positive attitude toward learning.

WHAT YOU'LL GAIN



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Practice regularly to feel prepared and test-ready.



Strengthen Math Skills

Develop key math concepts and problem solving abilities.



Improve Understanding

Learn with clear explanations and step-by-step solutions.



Test Confidence

Familiarize with test formats and improve accuracy and speed.



Boost Performance

Apply your knowledge and achieve your best score!

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- ✓ The Number System
- ✓ Expressions & Equations
- ✓ Geometry
- ✓ Percents & Decimals
- ✓ Statistics & Probability
- ✓ Data Analysis
- ✓ Measurement & Conversions
- ✓ Algebraic Thinking
- ✓ And More!



2 ONLINE TESTS

Use these two additional online practice tests for extra review after the printed tests in this book.



2 EXTRA ONLINE TEST ACCESS CODE IS INSIDE THE BOOK!

Don't lose it—your extra practice and success start here!



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