

7 Georgia Milestones Grade 7 Math Practice Tests



ONLINE

7 PRINTED TESTS + 2 ONLINE TESTS

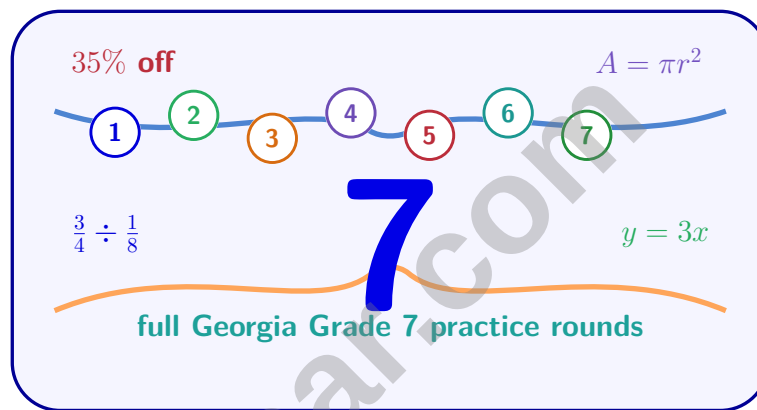


**Standards Aligned Problem Solving
For Comprehensive Assessment Programs**



8 Georgia Milestones Grade 7 Math Practice Tests

Smart practice around Georgia Grade 7 percent applications, equations, geometry, samples, box plots, and probability



Eight complete 40-question Grade 7 Milestones 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, Georgia Grade 7 Problem Solver!

Eight focused rounds for sharper Milestones math thinking

This book gives you seven full Grade 7 Milestones 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 Georgia 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

An eight-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.

Georgia 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?

Eight Milestones tests, 280 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.
Tests 7–8	Statistics, probability, mixed review, stamina, and choosing efficient strategies.
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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& answers

Table of Contents

★ Practice Test 1	_____	15
★ Practice Test 2	_____	29
★ Practice Test 3	_____	45
★ Practice Test 4	_____	60
★ Practice Test 5	_____	74
★ Practice Test 6	_____	88
★ Practice Test 7	_____	102
Practice Test Answer Keys	_____	117
Practice Test Answers and Explanations	_____	122

- 1) A rectangular garden is 12 feet long and 8 feet wide. A scale drawing of the garden uses a scale of 1 ft : 2 ft. What are the dimensions of the drawing?
- ☐ A. 6 ft $\times$ 4 ft ☐ C. 10 ft $\times$ 8 ft
☐ B. 8 ft $\times$ 6 ft ☐ D. 12 ft $\times$ 8 ft
- 2) What is $\frac{2}{3} \times \frac{5}{6}$?
- ☐ A. $\frac{7}{9}$ ☐ C. $\frac{10}{9}$
☐ B. $\frac{10}{18}$ ☐ D. $\frac{30}{2}$
- 3) A salesman earned \$480 in commission by selling merchandise at a 6% commission rate. What was the total dollar amount of merchandise sold?
- ☐ A. \$7,200 ☐ C. \$8,800
☐ B. \$9,600 ☐ D. \$8,000
- 4) A bank account starts with \$750 and earns 9% annual compound interest. After how many complete years does the balance exceed \$1,000?
- ☐ A. 2 years ☐ C. 4 years
☐ B. 3 years ☐ D. 5 years
- 5) A triangle has two sides of length 5 cm and 7 cm, with an included angle of 45° . How many distinct triangles can be constructed with these measurements?
- ☐ A. 0 ☐ C. 2
☐ B. 1 ☐ D. Infinitely many



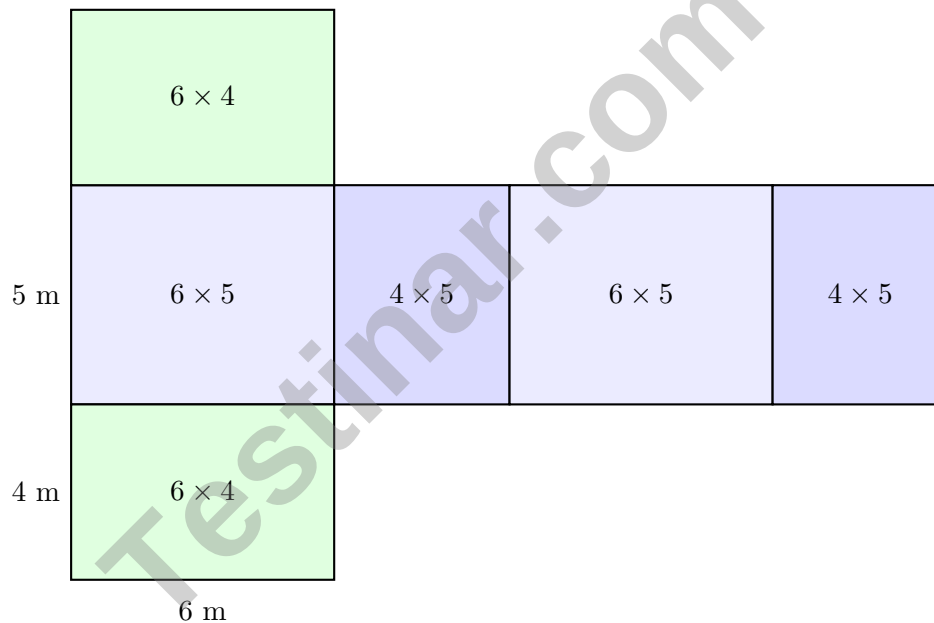
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6) Marcus walks 12 meters east. To return to his starting point, he must walk 12 meters west. Which number represents his westward walk?

- ☐ A. -12 (opposite direction) ☐ C. 0 (no displacement)
☐ B. 12 (same direction as eastward walk) ☐ D. -24 (double the distance in opposite direction)

7) Simplify: $10m - 3m + 7m$

- ☐ A. $14m$ ☐ C. $13m$
☐ B. $7m$ ☐ D. $4m$



8)

A net shows the unfolded faces of a rectangular prism. Based on the labeled dimensions, what is the surface area?

- ☐ A. 148 m^2 ☐ C. 200 m^2
☐ B. 160 m^2 ☐ D. 240 m^2



- 9) Using a chip model, if we have 5 positive chips and 3 negative chips, and they cancel as much as possible, how many chips remain and what sign?
- ☐ A. 2 positive chips ☐ C. 8 positive chips
☐ B. 2 negative chips ☐ D. 8 negative chips
- 10) At noon, the temperature is 3°C . By midnight, the temperature falls to -12°C . How many degrees did the temperature drop?



- 11) If the area of a rectangle is $18x + 27$ square units and the width is 9 units, what is the length?
- ☐ A. $2x + 3$ ☐ C. $18x$
☐ B. $2x + 27$ ☐ D. $18x + 27$
- 12) To simulate drawing a card from a standard deck and finding whether it is a heart (probability $\frac{1}{4}$), which spinner design is best?
- ☐ A. Spinner with 2 equal sections (one shaded, one not) ☐ C. Spinner with 6 equal sections (two shaded, four not)
☐ B. Spinner with 4 equal sections (one shaded, three not) ☐ D. Spinner with 13 equal sections (one shaded, twelve not)



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- 1) At a bakery, you have $(20x + 15)$ cookies. You sell $(8x + 6)$ cookies to a class. How many cookies remain?

Have: $(20x + 15)$

Sell: $(8x + 6)$

Left: ?

- ☐ A. $12x + 9$ ☐ C. $12x + 21$
☐ B. $28x + 21$ ☐ D. $12x + 15$
- 2) Two histograms compare the quiz scores of morning and afternoon classes. The morning class shows bars centered around 85–90, while the afternoon class shows bars centered around 75–80. What does this suggest?
- ☐ A. Morning students scored higher on average ☐ C. Both classes performed equally well
☐ B. Afternoon students are smarter ☐ D. Quiz difficulty was higher for morning students
- 3) A banner is shaped like a rectangle (18 inches $\times$ 10 inches) with a semicircle ($r = 5$ inches) attached to the top. What is the total area? (Use $\pi \approx 3.14$.)
- ☐ A. 139.25 in^2 ☐ C. 205.5 in^2
☐ B. 180 in^2 ☐ D. 219.25 in^2
- 4) A rectangular prism has a length of 20 cm. The width is half the length. The height is 10 cm. What is the volume?
- ☐ A. $1,200 \text{ cm}^3$ ☐ C. $4,000 \text{ cm}^3$
☐ B. $2,000 \text{ cm}^3$ ☐ D. $2,400 \text{ cm}^3$



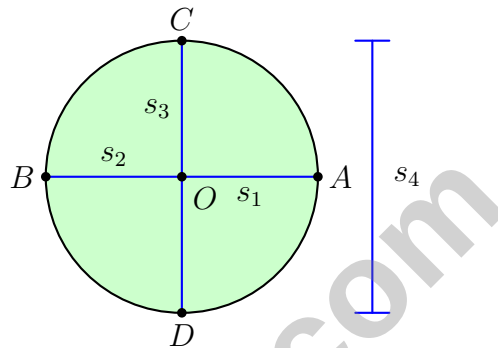
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5) Two sides of a triangle are 6 cm and 14 cm. If the third side is a whole number, how many possible triangles can be drawn?

- ☐ A. 9
☐ B. 11

- ☐ C. 13
☐ D. Infinitely many

6) In the circle below, identify which labeled segment is NOT a radius.



- ☐ A. s_1
☐ B. s_2

- ☐ C. s_3
☐ D. s_4

7) Simplify: $4m^2 + 7m + 2m^2 - 3m$

- ☐ A. $6m^2 + 4m$
☐ B. $6m^3 + 4m$

- ☐ C. $11m^2 + 4m$
☐ D. $6m^2 - m$



1) When constructing a stem-and-leaf plot, why are the leaves typically arranged in order?

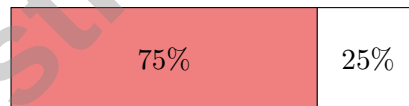
- ☐ A. To make the plot visually appealing ☐ C. Because it is required by mathematical law
- ☐ B. To make it easier to identify median, quartiles, and other statistics ☐ D. To save space in the plot

2) A basketball player made 18 out of 24 free throws. Use a proportion to find the percent made, then identify which step comes next.

- ☐ A. Multiply 18×24 and divide by 100 ☐ D. Set up $\frac{18}{24} = \frac{p}{100}$ and solve using
- ☐ B. Set up $\frac{24}{18} = \frac{100}{p}$ and cross-multiply $p = \frac{18 \times 100}{24}$
- ☐ C. Calculate $18 + 24 = 42$ and divide by 2

3) Maya earns \$200 a week. If she puts 12% of her earnings into a savings account each week, how much does she save weekly?

- ☐ A. \$12 ☐ C. \$24
- ☐ B. \$20 ☐ D. \$30



4) Original: \$80 New: ?

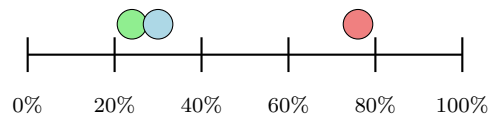
A bar graph shows that an item has been reduced. The shaded (coral) region represents 75% of the original price of \$80. What is the percent decrease?

- ☐ A. 75% ☐ C. 20%
- ☐ B. 30% ☐ D. 25%



5) Simplify $(y^3)^2 \cdot y^1$. What is the exponent on y ?

Estimated Probabilities



6)

Three simulation estimates are plotted on the number line: 0.24 (green), 0.38 (blue), and 0.76 (red). If the true theoretical probability is 0.25, which estimate has the smallest error?

☐ A. Green at 0.24

☐ C. Red at 0.76

☐ B. Blue at 0.38

☐ D. All three have equal error

7) Solve: $x + 7 < 12$

☐ A. $x < 5$

☐ C. $x \leq 5$

☐ B. $x > 5$

☐ D. $x < 19$



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Georgia Milestones Assessment System 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 Georgia Milestones Assessment System practice test.



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Practice Test Answers and Explanations

Practice Test 1 Answers and Explanations

- 1) **Choice A is correct.** **(7.G.1-7.G.5)** Drawing dimensions: $12 \div 2 = 6$ ft and $8 \div 2 = 4$ ft.
- 2) **Choice B is correct.** **(7.NS.2)** $\frac{2}{3} \times \frac{5}{6} = \frac{2 \times 5}{3 \times 6} = \frac{10}{18} = \frac{5}{9}$ (simplified). Multiply numerators and denominators, then reduce.
- 3) **Choice D is correct.** **(7.RP.3)** Commission = commission rate $\times$ sales. Since $480 = 0.06 \times \text{sales}$, $\text{sales} = 480 \div 0.06 = \$8,000$.
- 4) **Choice C is correct.** **(7.RP.3)** Year 1: $750(1.09) = 817.50$. Year 2: $817.50(1.09) = 891.08$. Year 3: $891.08(1.09) = 971.27$. Year 4: $971.27(1.09) = 1058.68 > 1000$.
- 5) **Choice B is correct.** **(7.G.1-7.G.5)** Two sides and the included angle uniquely determine a triangle by the SAS (Side-Angle-Side) condition. Exactly one triangle can be constructed.
- 6) **Choice A is correct.** **(7.NS.1-7.NS.3)** If east is positive, then west is negative. Walking 12 meters west is represented by -12 .
- 7) **Choice A is correct.** **(7.EE.1)** Combine: $(10 - 3 + 7)m = 14m$.
- 8) **Choice A is correct.** **(7.G.4-7.G.6)** From the net, dimensions are $6 \text{ m} \times 4 \text{ m} \times 5 \text{ m}$. $SA = 2(6 \cdot 4 + 6 \cdot 5 + 4 \cdot 5) = 2(24 + 30 + 20) = 2(74) = 148 \text{ m}^2$.
- 9) **Choice A is correct.** **(7.NS.1b)** Model: $5 + (-3)$. Three positive and three negative chips cancel, leaving 2 positive chips (representing $+2$).
- 10) **The correct answer is 15.** **(7.NS.1-7.NS.3)** The temperature drop is $3 - (-12) = 3 + 12 = 15$ degrees.
- 11) **Choice A is correct.** **(7.EE.1-7.EE.2)** Factor: $18x + 27 = 9(2x + 3)$. Length = $\frac{9(2x+3)}{9} = 2x + 3$.
- 12) **Choice B is correct.** **(7.SP.5-7.SP.8)** Probability $\frac{1}{4}$ means 1 favorable outcome out of 4 equally likely ones.
- 13) **Choice B is correct.** **(7.NS.1-7.NS.3)** $83,500 = 8.35 \times 10,000 = 8.35 \times 10^4$. Decimal moved 4 places left.
- 14) **Choice C is correct.** **(7.EE.1-7.EE.2)** Substitute: $3(4) - 2(-3) = 12 + 6 = 18$.
- 15) **Choice A is correct.** **(7.EE.3-7.EE.4)** Add 8: $2y = -6$. Divide by 2: $y = -3$. Check: $2(-3) - 8 = -6 - 8 = -14$ ✓. Reasonable: negative answer expected (result is negative).
- 16) **Choice A is correct.** **(7.EE.4b)** “A number” is n ; “is more than” is $>$; “twice itself minus 5” is $2n - 5$. Direct translation: $n > 2n - 5$.
- 17) **Choice D is correct.** **(7.G.1-7.G.5)** If the cube has edge a , the cross-section through edge midpoints is a square with side $\frac{a}{\sqrt{2}} = \frac{a\sqrt{2}}{2}$, so area = $\left(\frac{a\sqrt{2}}{2}\right)^2 = \frac{a^2}{2}$, which is half the face area a^2 .
- 18) **Choice B is correct.** **(7.G.1-7.G.5)** Angles on a straight line sum to 180° : $50 + 80 + m = 180^\circ$, so $m = 50^\circ$.
- 19) **Choice B is correct.** **(7.G.1-7.G.5)** Scale factor $\frac{2}{5}$ means smaller = larger $\times \frac{2}{5} = 100 \times \frac{2}{5} = 40$ cm.
- 20) **Choice B is correct.** **(7.G.4-7.G.6)** $C = 2\pi r = 2 \times \frac{22}{7} \times 9 = \frac{396}{7}$ in.
- 21) **The correct answer is A,B.** **(7.RP.3)** Choice A: 20% of $500 = 0.20 \times 500 = 100$. ✓ Choice B: 50% of $500 = 0.50 \times 500 = 250$. ✓ Choice C: 10% of $500 = 50$, not 40 . ✗ Choice D: 15% of $500 = 75$, not 80 . ✗
- 22) **The correct answer is 1.5.** **(7.RP.1-7.RP.3)** The unit rate is $6 \div 4 = 1.5$.
- 23) **Choice C is correct.** **(7.G.4-7.G.6)** $A = 3.14 \times (2.5)^2 = 3.14 \times 6.25 = 19.625 \text{ m}^2$.
- 24) **Choice C is correct.** **(7.G.4-7.G.6)** $V = \pi r^2 h \approx 3.14 \times 9 \times 6 = 169.56 \text{ in}^3$.
- 25) **Choice C is correct.** **(7.SP.1-7.SP.4)** A sample of 100 students balances accuracy with practicality. Samples of 10 and 25 are too small to reliably represent the whole school; 1000 would give similar accuracy but be costly and time-consuming to conduct.
- 26) **Choice A is correct.** **(7.SP.1-7.SP.4)** Runner A's times range from 6.0 to 6.3 (spread = 0.3). Runner B's range from 5.8 to 7.2 (spread = 1.4). Runner A is more consistent.
- 27) **The correct answer is 150.** **(7.RP.3)** Calculate $\frac{3}{5} \times 250 = \frac{3 \times 250}{5} = \frac{750}{5} = 150$ students.
- 28) **Choice C is correct.** **(7.SP.1-7.SP.4)** Stem 8 has leaves 1, 3, 5, 6, representing scores 81, 83, 85, 86. That is 4 students in the 80s.



Hi, Strategy Solver!

◇ Grade 7 math rewards students who think before they calculate. You practiced choosing strategies, not just hunting for answers. This broad and demanding book gave you seven strong Grade 7 practice tests, so you had repeated chances to build accuracy, pacing, and confidence. ◇

★ **Remember this:** That matters because stronger math students do not use one method for every question. They notice the structure and choose the tool that fits. ★

Strategy Moves

- **Estimate:** Know the neighborhood of the answer.
- **Simplify:** Rewrite numbers in friendlier forms.
- **Model:** Draw what the words describe.
- **Verify:** Put the answer back into the problem.

Grade 7 test-day tip: Pause for ten seconds before hard questions. A short plan can save several minutes.

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

Jay Daie

Your Strategy Guide

Practice Today. Succeed Tomorrow!

This book includes **7** 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:

7 Full-Length Printed Tests

2 Online Practice Tests

 Detailed Answer 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



Stronger Math Skills

Build a solid foundation through targeted practice and review.



Better Problem Solving

Develop logical thinking and effective solution strategies.



Deeper Understanding

Reinforce key concepts with clear explanations and meaningful practice.



Test Confidence

Familiarize with test formats and improve accuracy and speed.



Achieve Success

Build confidence and perform your best on test day.

TOPICS COVERED

- ✓ Ratios & Proportions
- ✓ 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!

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