

7 South Carolina SC READY Grade 7 Math Practice Tests



7 PRINTED TESTS + 2 ONLINE TESTS



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



8 South Carolina SC READY Grade 7 Math Practice Tests

A fresh pass through South Carolina Grade 7 percent models, rational operations, expressions, geometry, data, and probability



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

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Welcome, South Carolina Grade 7 Problem Solver!

Eight focused rounds for sharper SC READY math thinking

This book gives you seven full Grade 7 SC READY 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 South Carolina 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.

South Carolina 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 SC READY 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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1)

Activity	Point change
Quiz	+5
Homework	+2
Late work	-1

A student gets all quizzes correct (3 quizzes), completes all homework (6 assignments), and submits 2 late assignments. What is the total point change?

☐ A. +25☐ C. +29☐ B. +27☐ D. +15

2) A bank account has a debt of \$4 per item owed. If 5 items are removed from debt, the account change is represented as $(-4) \times (-5)$. What is the result?

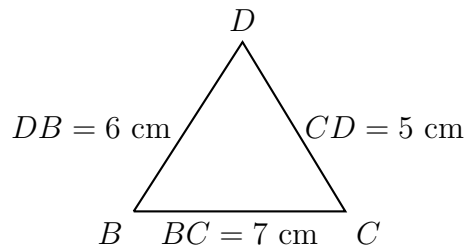
☐ A. -20 dollars☐ C. 20 dollars☐ B. -9 dollars☐ D. 9 dollars

3) A hairdresser earns \$15 per client visit plus a \$2.50 tip on average. If she sees 12 clients in a day, what are her total expected earnings?

☐ A. \$180☐ C. \$210☐ B. \$195☐ D. \$225

4) A certificate of deposit starts with \$750 at 6% annual compound interest. Which expression represents the balance after t years?

☐ A. $750 + 0.06t$ ☐ C. $750 + (0.06)^t$ ☐ B. $750(0.06t)$ ☐ D. $750(1.06)^t$ 



5)

Triangle BCD has sides 7 cm, 5 cm, and 6 cm. Verify the Triangle Inequality holds:

- ☐ A. Yes: $7 + 6 > 5$, $7 + 5 > 6$, $6 + 5 > 7$ ☐ C. No: one inequality fails
☐ B. Yes: $7 + 6 > 5$, $7 + 5 > 6$ only ☐ D. Cannot be checked

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

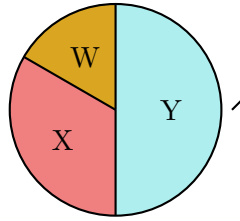
- ☐ A. -12 (opposite direction) ☐ C. 0 (no displacement)
☐ B. 12 (same direction as eastward walk) ☐ D. -24 (double the distance in opposite direction)

7) Simplify: $\frac{2}{3}m + \frac{1}{6}m$

- ☐ A. $\frac{3}{9}m$ ☐ C. $\frac{1}{2}m$
☐ B. $\frac{5}{6}m$ ☐ D. $\frac{3}{6}m$



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8)

The spinner above has 3 sections. Section W is $\frac{1}{6}$ of the circle, section X is $\frac{1}{3}$ of the circle, and section Y is the remaining part. If the spinner is spun 60 times, approximately how many times would you expect to land on section Y?

- ☐ A. 10 times ☐ C. 30 times
☐ B. 20 times ☐ D. 40 times

9) Miguel owed his friend \$18 (debt = -18). His friend forgave \$10 of the debt. How much does Miguel still owe? (Model his remaining debt.)

- ☐ A. $-\$28$ ☐ C. $\$8$
☐ B. $\$28$ ☐ D. $-\$8$

10) Factor: $-4x - 12$

- ☐ A. $-4(x + 3)$ ☐ C. $-4(x - 3)$
☐ B. $4(x + 3)$ ☐ D. $-(4x + 12)$

11) Which value of x is a solution to $x + 6 > 10$?

- ☐ A. $x = 3$ ☐ C. $x = 5$
☐ B. $x = 4$ ☐ D. $x = 2$

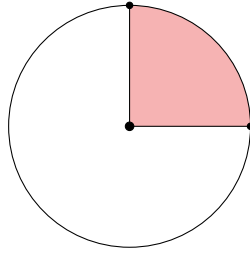


- 1) A recipe calls for 2 cups of flour. If you make 150% of the recipe, how much flour do you need?
- ☐ A. 2.5 cups ☐ C. 3.5 cups
☐ B. 4 cups ☐ D. 3 cups
- 2) What is $\sqrt{64}$?
- ☐ A. 6 ☐ C. 9
☐ B. 8 ☐ D. 7
- 3) Factor out the GCF: $10y + 15$.
- ☐ A. $5(2y + 3)$ ☐ C. $10(y + 5)$
☐ B. $5(10y + 15)$ ☐ D. $2(5y + 7.5)$
- 4) A composite figure is made of a right isosceles triangle (legs 8 cm each) attached to a square ($8 \text{ cm} \times 8 \text{ cm}$). What is the total area?
- ☐ A. 64 cm^2 ☐ C. 100 cm^2
☐ B. 96 cm^2 ☐ D. 128 cm^2
- 5) A rectangular prism with a volume of 360 m^3 has a base area of 40 m^2 . Find the height.
- ☐ A. 4 m ☐ C. 9 m
☐ B. 7 m ☐ D. 14400 m



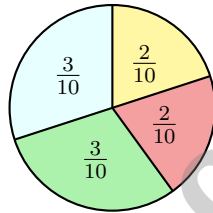
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6) In the diagram, approximately what fraction of the circle is shaded?



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

- ☐ C. $\frac{1}{4}$
☐ D. $\frac{1}{8}$



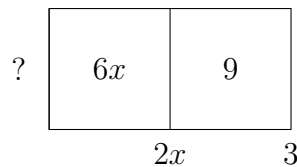
7)

A spinner with four unequal sections is spun 350 times. Section A has probability $\frac{3}{10}$ and Section B has probability $\frac{2}{10}$. How many times would you expect to see either Section A or Section B?

- ☐ A. 70 times
☐ B. 105 times

- ☐ C. 140 times
☐ D. 175 times

8) Which shows the correct area-model factorization for $6x + 9$?



- ☐ A. Height is 3; GCF is 3
☐ B. Height is 2; GCF is 2

- ☐ C. Height is 6; GCF is 6
☐ D. Height is 9; GCF is 9



1) An arc is a portion of:

- ☐ A. The radius ☐ C. The circumference
☐ B. The diameter ☐ D. The sector

2) A movie ticket costs \$9 and popcorn costs \$4 per order. If you spend \$25 total, how many orders of popcorn did you buy?

3) A recipe calls for 2 cups of flour for every 3 cups of sugar. If f is flour and s is sugar, which equation shows this proportional relationship?

- ☐ A. $f = \frac{3}{2}s$ ☐ C. $f = 2s + 3$
☐ B. $f = s + 1$ ☐ D. $f = \frac{2}{3}s$

4) A jacket costs \$120. It is on sale for 15% off. What is the sale price?

- ☐ A. \$18 ☐ C. \$105
☐ B. \$108 ☐ D. \$102

5) A store offers a loyalty card that gives 5% off all purchases. If you buy items totaling \$80, how much will you save with the card?

- ☐ A. \$2 ☐ C. \$4
☐ B. \$3 ☐ D. \$5



6) An electronics store has a clearance sale offering 35% off all items. If a laptop is originally \$1 200, what is the sale price?

☐ A. \$420

☐ C. \$835

☐ B. \$1 035

☐ D. \$780

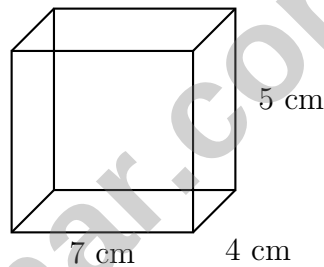
7) A compound event simulation uses a spinner with 5 equal sections. The spinner is spun twice, and “success” is defined as “both spins land on the same section.” How many successful outcomes are there in the sample space?

☐ A. 5

☐ C. 15

☐ B. 10

☐ D. 25



8)

The diagram shows a rectangular prism with dimensions $7\text{ cm} \times 5\text{ cm} \times 4\text{ cm}$. What is the surface area?

☐ A. 166 cm^2

☐ C. 256 cm^2

☐ B. 140 cm^2

☐ D. 384 cm^2

9) A cone with base radius 10 cm is sliced by a plane parallel to the base at a distance of 8 cm from the apex. If the cone’s height is 12 cm, what is the radius of the circular cross-section?

☐ A. $\frac{20}{3}\text{ cm}$

☐ C. 8 cm

☐ B. $\frac{16}{3}\text{ cm}$

☐ D. 6 cm



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South Carolina College and Career Ready Assessments 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 South Carolina College and Career Ready Assessments practice test.



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Practice Test Answers and Explanations

Practice Test 1 Answers and Explanations

- 1) **Choice A is correct.** (7.NS.1-7.NS.3) Quizzes: $3 \times (+5) = +15$. Homework: $6 \times (+2) = +12$. Late work: $2 \times (-1) = -2$. Total: $15 + 12 + (-2) = +25$ points.
- 2) **Choice C is correct.** (7.NS.2) $(-4) \times (-5) = 20$ dollars. Negative debt times negative removal (reduction) yields a positive gain. Negative times negative is positive.
- 3) **Choice C is correct.** (7.RP.3) Per client: $15 + 2.50 = \$17.50$. Total for 12 clients: $17.50 \times 12 = \$210$.
- 4) **Choice D is correct.** (7.RP.3) The compound interest formula is $A = P(1 + r)^t$. Here, $P = 750$ (principal) and $r = 0.06$ (rate as decimal). So $A = 750(1 + 0.06)^t = 750(1.06)^t$.
- 5) **Choice A is correct.** (7.G.1-7.G.5) All three inequalities must hold: $13 > 5$ ✓, $12 > 6$ ✓, $11 > 7$ ✓. The Triangle Inequality is satisfied, so this triangle can exist.
- 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 B is correct.** (7.EE.1) Convert to common denominator: $\frac{2}{3}m = \frac{4}{6}m$. Then $\frac{4}{6}m + \frac{1}{6}m = \frac{5}{6}m$.
- 8) **Choice C is correct.** (7.SP.5-7.SP.8) W: $\frac{1}{6}$, X: $\frac{1}{3} = \frac{2}{6}$, Y: $1 - \frac{1}{6} - \frac{2}{6} = \frac{3}{6} = \frac{1}{2}$. Expected frequency: $\frac{1}{2} \times 60 = 30$.
- 9) **Choice D is correct.** (7.NS.1b) Miguel's debt decreases by \$10, so: $-18 + 10 = -8$. He still owes \$8 (represented as -8 in debt model).
- 10) **Choice A is correct.** (7.EE.1-7.EE.2) Factor out the negative GCF: $-4x - 12 = -4(x + 3)$. Check: $-4(x + 3) = -4x - 12$.
- 11) **Choice C is correct.** (7.EE.4b) Check: $5 + 6 = 11 > 10$ ✓. The other values yield 9, 10, and 8, which do not satisfy the inequality.
- 12) **The correct answer is 70.** (7.RP.1-7.RP.3) The unit rate is $140 \div 2 = 70$ miles per hour. This is the car's constant speed.
- 13) **Choice C is correct.** (7.G.4-7.G.6) $SA = 2(lw + lh + wh) = 2(4 \cdot 3 + 4 \cdot 5 + 3 \cdot 5) = 2(12 + 20 + 15) = 2(47) = 94 \text{ cm}^2$.
- 14) **Choice D is correct.** (7.NS.1-7.NS.3) Common denominator is 6: $-\frac{5}{6} - \frac{2}{6} = -\frac{7}{6} = -1\frac{1}{6}$.
- 15) **Choice A is correct.** (7.NS.1-7.NS.3) Total butter = $12 \times \frac{3}{16} = \frac{36}{16} = \frac{9}{4} = 2\frac{1}{4}$ pounds.
- 16) **Choice D is correct.** (7.EE.1-7.EE.2) Substitute: $4(2)^2 - 3(2) = 4(4) - 6 = 16 - 6 = 10$.
- 17) **Choice A is correct.** (7.EE.1-7.EE.2) Quotient rule: $\frac{a^{15}}{a^{10}} = a^{15-10} = a^5$.
- 18) **The correct answer is A, C.** (7.RP.1-7.RP.3) True: A ($4 \times 6 = 24$ feet) and C ($2 \times 6 = 12$ feet; $2.5 \times 6 = 15$ feet). False: B (area scales by $6^2 = 36$, not 6); D (area: $900 \div 36 = 25$ sq in, not 36); E (areas are reduced by $\frac{1}{36}$ on the plan, not $\frac{1}{6}$).
- 19) **Choice C is correct.** (7.EE.4a) The books cost $3 \times 8 = \$24$ and the bookmark adds \$5, so $t = 3(8) + 5 = 29$.
- 20) **Choice C is correct.** (7.EE.3-7.EE.4) Subtract 5: $\frac{1}{2}x = 4$. Multiply by 2: $x = 8$.
- 21) **Choice C is correct.** (7.G.1-7.G.5) Scale 5 mm : 1 cm = 5 mm : 10 mm = 1 : 2. The scale factor (actual to drawing) is 2.
- 22) **Choice A is correct.** (7.G.1-7.G.5) A plane parallel to the pentagonal base of a pyramid produces a cross-section that is a pentagon similar to the original base, scaled down by the ratio of the distance from apex to the total height.
- 23) **Choice B is correct.** (7.G.1-7.G.5) If the side ratio is 2 : 5, the area ratio is $(2)^2 : (5)^2 = 4 : 25$. So $\frac{16}{\text{larger}} = \frac{4}{25}$, giving larger = $16 \times \frac{25}{4} = 100$ square units.
- 24) **Choice A is correct.** (7.G.4-7.G.6) $C = 2\pi r = 2 \times 3.14 \times 5 = 31.4$ m. The circle with circumference 31.4 m has radius 5 m (A).
- 25) **Choice C is correct.** (7.G.4-7.G.6) $A = \pi r^2 = 3.14 \times 9^2 = 3.14 \times 81 = 254.34 \text{ ft}^2$.
- 26) **Choice D is correct.** (7.SP.1-7.SP.4) Sampling only during evening hours is convenient for the surveyor but misses members who visit at other times, introducing convenience bias.
- 27) **Choice A is correct.** (7.SP.1-7.SP.4) MAD is the average of the absolute deviations from the mean, measuring typical spread around the center. It is not a measure of center (B, C) or range (D).



Hi, Math Communicator!

◇ Grade 7 math is not only about getting a number. It is about explaining relationships and making your reasoning visible. ◇

★ **Remember this:** When you show steps, label diagrams, and write clear answers, you are joining the conversation that math is trying to have. You practiced across 7 full Grade 7 practice tests, and that repeated effort matters. ★

Communication Skills

- **Use Words:** Explain what the answer means.
- **Use Symbols:** Keep equations accurate.
- **Use Diagrams:** Show relationships visually.
- **Use Units:** Connect math to context.

Grade 7 test-day tip: For open-ended questions, answer in a complete thought: value, unit, and reason.

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

Jay Daie

Your Math Communication Coach

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!

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



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