

10

South Carolina SC READY

GRADE
7
MATH

PRACTICE TESTS

Standards Aligned Problem
Solving For Comprehensive
Assessment Programs



10 PRINTED TESTS

Realistic practice to build
confidence and mastery



2 ONLINE TESTS

Extra practice for
continued success



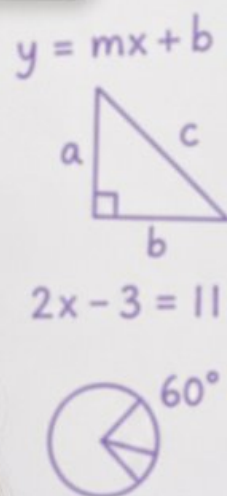
DETAILED ANSWER EXPLANATIONS

Learn with step-by-step
solutions



FOCUSED & EFFECTIVE

Target key math skills
with purposeful practice



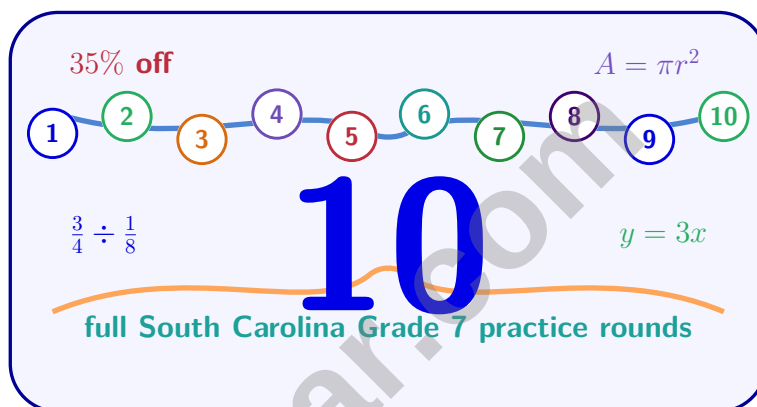
10 PRINTED TESTS
+2 ONLINE TESTS

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

PRACTICE ★ REVIEW ★ SUCCEED

10 South Carolina SC READY Grade 7 Math Practice Tests

South Carolina Grade 7 SC READY Practice for confident preparation through proportional models, rational numbers, equations, geometry, and data



Ten 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.

Jay Daie and Reza Nazari



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Welcome, South Carolina Grade 7 Problem Solver!

Ten focused rounds for sharper South Carolina SC READY math thinking

This book gives you ten 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

A ten-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?

Ten South Carolina SC READY tests, 400 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 7–9	Statistics, probability, mixed review, stamina, and choosing efficient strategies.
Test 10	A final South Carolina round to show growth across the whole book.
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

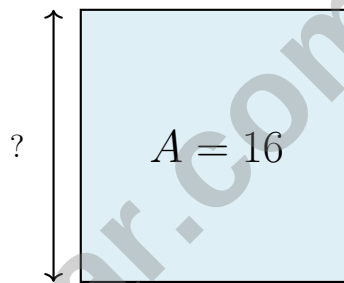
★ Practice Test 1	_____	11
★ Practice Test 2	_____	25
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- 1) A family's budget is split as follows: 35% housing, 12% food, 8% utilities, 10% transportation, 15% savings, 20% discretionary. If their income is \$5,000 per month, how much is allocated to housing and savings combined?

- ☐ A. \$1,250 ☐ C. \$2,000
☐ B. \$1,500 ☐ D. \$2,500

- 2) Which solution strategy is correct for $4x + 6 = 30$?

- ☐ A. Subtract 6, then divide by 4 ☐ C. Multiply by 4, then add 6
☐ B. Divide by 4, then subtract 6 ☐ D. Add 6, then divide by 4



3)

What is the side length of the square?

- ☐ A. 2 ☐ C. 4
☐ B. 3 ☐ D. 5

- 4) Which equals $(2i + 4) + (6i - 1)$?

- ☐ A. $8i + 3$ ☐ C. $4i + 3$
☐ B. $8i - 3$ ☐ D. $8i + 5$



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5) A box plot shows the distribution of test scores for two classes: Class A: median 78, IQR 12 Class B: median 82, IQR 8 Which statement is true?

- ☐ A. Class A has a higher median ☐ C. Class A performed better overall
☐ B. Class B has less variability ☐ D. Class B has more outliers

6) A number cube is labeled with the numbers 1, 2, 2, 3, 3, 3. When rolled, what is the probability of rolling a 3?

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

7) Which of the following represents the complete sample space for flipping a coin and choosing a number from {1, 2, 3}?

{H1, H2, H3, T1, T2, T3}

- ☐ A. 3 outcomes ☐ C. 5 outcomes
☐ B. 4 outcomes ☐ D. 6 outcomes

8) Two number cubes are rolled. What is the probability of rolling doubles (both dice show the same number)?

- ☐ A. $\frac{1}{6}$ ☐ C. $\frac{1}{12}$
☐ B. $\frac{7}{36}$ ☐ D. $\frac{5}{36}$

9) A researcher flipped three coins 160 times and recorded how many came up heads each time:

Heads Count	0	1	2	3
Frequency	22	56	62	20

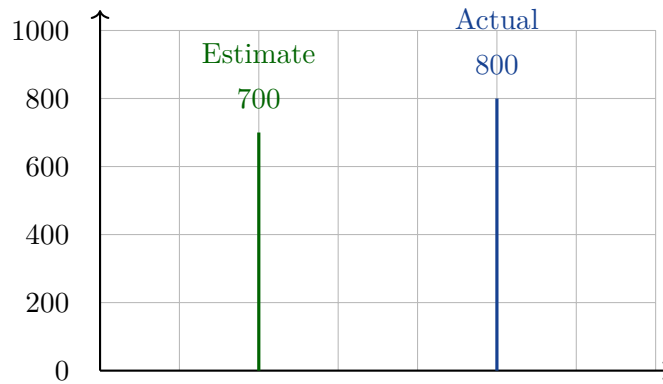
What is the experimental probability of getting exactly 2 heads?

- ☐ A. $\frac{2}{3}$ ☐ C. 0.31
☐ B. $\frac{62}{160}$ ☐ D. 0.39



10)

Estimate vs. Actual: Sports Attendance



What is the percent error for the attendance estimate?

☐ A. 14.3%

☐ C. 100%

☐ B. 8.75%

☐ D. 12.5%
11) Expand: $(4a + 6) \cdot \frac{1}{2}$
☐ A. $2a + 6$
☐ C. $4a + 3$
☐ B. $2a + 3$
☐ D. $a + 6$

12) If simple interest is earned, which of the following formulas would give the total amount?

☐ A. $A = P \times r \times t$
☐ C. $A = P + r + t$
☐ B. $A = \frac{P \times r}{t}$
☐ D. $A = P(1 + rt)$


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1) Expand: $5(3y - 2)$

☐ A. $15y - 2$

☐ B. $8y - 7$

☐ C. $15y - 10$

☐ D. $3y - 10$

2) A track is shaped like a rectangle with two semicircles on the shorter ends. The rectangle is 10 m long and 6 m wide. The semicircles have a diameter of 6 m. (Use $\pi \approx 3.14$.) What is the total area?

☐ A. 60 m^2

☐ B. 74.13 m^2

☐ C. 88.26 m^2

☐ D. 94.26 m^2

3) A data set has values: 12, 15, 15, 18, 21, 23, 24, 28. Which is the correct stem-and-leaf plot?

☐ A. Stem 1: 2, 5, 5, 8; Stem 2: 1, 3, 4, 8

☐ B. Stem 1: 1, 2, 5, 5; Stem 2: 1, 3, 4, 8

☐ C. Stem 1: 2, 5, 5, 8; Stem 2: 3, 4, 8, 1

☐ D. Stem 1: 1, 2, 3, 4; Stem 2: 1, 5, 5, 8

4) A triangular prism has a triangular base with area 15 cm^2 and a height of 10 cm. What is its volume?

☐ A. 25 cm^3

☐ B. 75 cm^3

☐ C. 150 cm^3

☐ D. 300 cm^3

Combining Terms: $5a + 2b - 3a + 4b$

Like terms with a :

$$5a \text{ and } -3a \rightarrow (5 - 3)a = 2a$$

Like terms with b :

$$2b \text{ and } 4b \rightarrow (2 + 4)b = 6b$$

Answer: $2a + 6b$

5)

Using the strategy shown above, simplify $8x + 3y - 5x - 2y$.

☐ A. $13x + y$

☐ B. $3x + y$

☐ C. $3x + 5y$

☐ D. $11xy$



- 6) What is the GCF of $10a$ and $15ab$?
- ☐ A. $5a$ ☐ C. $15a$
☐ B. $10a$ ☐ D. $5ab$
- 7) A family's monthly budget is divided as follows: housing 35%, food 20%, transportation 15%, entertainment 10%, and other 20%. If the monthly income is \$3000, how much is allocated to food?
- ☐ A. \$300 ☐ C. \$600
☐ B. \$450 ☐ D. \$750
- 8) Solve: $4x < 20$
- ☐ A. $x > 5$ ☐ C. $x \geq 5$
☐ B. $x < 5$ ☐ D. $x < 80$
- 9) A company randomly samples 200 customers from its database of 50,000 customers to estimate customer satisfaction. What is the population in this scenario?
- ☐ A. The 200 customers surveyed ☐ C. All potential customers of the company
☐ B. The 50,000 customers in the database ☐ D. The survey responses
- 10) A pizza delivery service charges a proportional rate. The cost of 4 pizzas is \$52. What is the cost of 7 pizzas?
- ☐ A. \$13 ☐ C. \$91
☐ B. \$26 ☐ D. \$364



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1) A spinner has 10 equal sections. Find $P(\text{not landing on section 1})$.

☐ A. $\frac{1}{10}$

☐ B. $\frac{1}{9}$

☐ C. $\frac{9}{10}$

☐ D. $\frac{1}{2}$

2) A school fund-raiser sold 800 items. The circle graph shows 27% were cookies. How many cookies were sold?

☐ A. 27

☐ B. 108

☐ C. 216

☐ D. 400

3) A swimmer completes laps in $\frac{3}{4}$ minute during the first 9 minutes. Then her pace slows and she takes $\frac{7}{8}$ minute per lap for the next 7 minutes. How many total laps does she complete?

☐ A. 20 laps

☐ B. 20.5 laps

☐ C. 20.8 laps

☐ D. 19.5 laps

4) When 6.75 is multiplied by a power of 10 to become 0.000675, what is the exponent?

☐ A. 10^{-2}

☐ B. 10^{-3}

☐ C. 10^{-4}

☐ D. 10^{-5}

5) Combine: $(-7m - 3) + (11m + 9)$

☐ A. $4m + 6$

☐ B. $4m - 6$

☐ C. $-18m + 6$

☐ D. $18m + 6$

6) If $2^n = 32$, what is the value of n ?

☐ A. 4

☐ B. 5

☐ C. 6

☐ D. 8



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- 7) Jenna joins a gym with a membership fee of \$50 and monthly charges of \$25. Let m represent the number of months. Which equation shows the total cost T including the membership fee?

☐ A. $T = 50m + 25$

☐ C. $T = 50 + 25m$

☐ B. $T = 25(m + 50)$

☐ D. $T = (50 + 25)m$

- 8) Which pair of equations is equivalent (have the same solution)?

☐ A. $2x + 6 = 16$ and $2x = 8$

☐ C. $5x + 3 = 28$ and $5x = 25$

☐ B. $3x - 4 = 8$ and $3x = 4$

☐ D. $4x - 2 = 10$ and $4x = 14$

- 9) Solve for x : $5(x + 3) = 2x + 36$

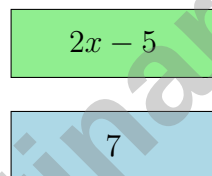
☐ A. $x = 3$

☐ C. $x = 7$

☐ B. $x = 5$

☐ D. $x = 9$

10)



Solve: $2x - 5 = 7$

☐ A. $x = 1$

☐ C. $x = 12$

☐ B. $x = 6$

☐ D. $x = 24$

- 11) A punch recipe has a ratio of juice to water of 2 : 5. If you use 14 cups of juice, how many cups of water are needed?



South Carolina SC READY 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 SC READY practice test.

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Practice Test Answers and Explanations

Practice Test 1 Answers and Explanations

- 1) **Choice D is correct.** (7.RP.3) Housing + Savings = $(35\% + 15\%) \times \$5,000 = 50\% \times 5000 = 0.50 \times 5000 = \$2,500$.
- 2) **Choice A is correct.** (7.EE.3-7.EE.4) Order of operations in reverse: undo the addition/subtraction first (-6), then undo multiplication/division ($\div 4$).
- 3) **Choice C is correct.** (7.NS.1-7.NS.3) If the area is 16, then $s^2 = 16$, so $s = \sqrt{16} = 4$.
- 4) **Choice A is correct.** (7.EE.1-7.EE.2) Add: $(2i + 6i) + (4 - 1) = 8i + 3$.
- 5) **Choice B is correct.** (7.SP.1-7.SP.4) IQR (Interquartile Range) measures spread. Class B's IQR of 8 is smaller than Class A's IQR of 12, indicating less variability in the middle 50% of scores.
- 6) **Choice B is correct.** (7.SP.5-7.SP.8) Three faces show 3. Total faces: 6. $P(\text{rolling } 3) = \frac{3}{6} = \frac{1}{2}$.
- 7) **Choice D is correct.** (7.SP.5-7.SP.8) The sample space lists all 6 pairs: H1, H2, H3, T1, T2, T3.
- 8) **Choice A is correct.** (7.SP.5-7.SP.8) Doubles: (1,1), (2,2), (3,3), (4,4), (5,5), (6,6) = 6 outcomes out of 36. Probability = $\frac{6}{36} = \frac{1}{6}$.
- 9) **Choice B is correct.** (7.SP.6) Getting exactly 2 heads occurred 62 times in 160 trials. Experimental probability = $\frac{62}{160} = 0.3875 \approx 0.39$.
- 10) **Choice D is correct.** (7.RP.3) Percent error = $\frac{|700-800|}{800} \times 100\% = \frac{100}{800} \times 100\% = 12.5\%$.
- 11) **Choice B is correct.** (7.EE.1-7.EE.2) Distribute $\frac{1}{2}$: $(4a) \cdot \frac{1}{2} + (6) \cdot \frac{1}{2} = 2a + 3$.
- 12) **Choice D is correct.** (7.RP.3) The formula $I = Prt$ gives interest only. The total amount equals principal plus interest: $A = P + I = P + Prt = P(1 + rt)$.
- 13) **Choice C is correct.** (7.NS.1-7.NS.3) Distance: $|-4 - 5| = |-9| = 9$. Distance is always positive (non-negative).
- 14) **Choice D is correct.** (7.RP.1-7.RP.3) Multiply each dimension by the scale factor: $3 \times 8 = 24$ feet and $2.5 \times 8 = 20$ feet.
- 15) **Choice C is correct.** (7.RP.3) If $45 = 0.50 \times n$, then $n = \frac{45}{0.50} = 90$.
- 16) **Choice D is correct.** (7.RP.3) After discount: $1200 - 0.15(1200) = \$1020$. Tax: $0.08(1020) = \$81.60$. Final: $1020 + 81.60 = \$1102.40$.
- 17) **Choice A is correct.** (7.NS.1b) Add absolute values: $|-15| + |-8| = 15 + 8 = 23$. Both are negative, so the sum is -23 .
- 18) **Choice A is correct.** (7.EE.1) Combine like terms: $(-2m - 5m) + (3n + n) = -7m + 4n$.
- 19) **Choice A is correct.** (7.EE.1-7.EE.2) GCF of 7 and 28 is 7. Factor: $7p + 28 = 7(p + 4)$.
- 20) **The correct answer is A,B.** (7.G.4-7.G.6) A is correct: volume $V = B \times h$ for any prism. B is correct: $V = 4^3 = 64 \text{ cm}^3$. C is false: doubling height doubles volume, not triples it. D is false: a triangular prism can have larger volume than a rectangular prism depending on dimensions.
- 21) **Choice B is correct.** (7.SP.1-7.SP.4) 18% of 1100 = $0.18 \times 1100 = 198$ members.
- 22) **Choice B is correct.** (7.EE.4b) Subtract 5: $2x \geq 8$. Divide by 2: $x \geq 4$.
- 23) **The correct answer is 125.6 .** (7.G.4-7.G.6) Circumference = $2\pi r = 2 \times 3.14 \times 5 = 31.4$ m. Distance = $4 \times 31.4 = 125.6$ m.
- 24) **Choice D is correct.** (7.RP.1-7.RP.3) From the point (3, 18), the unit rate is $18 \div 3 = 6$ miles per hour.
- 25) **The correct answer is 188.4 .** (7.G.4-7.G.6) Radius is half the diameter: $r = 3$ cm. Lateral area = $2\pi rh \approx 2 \times 3.14 \times 3 \times 10 = 188.4 \text{ cm}^2$.
- 26) **Choice B is correct.** (7.NS.1-7.NS.3) When denominators are the same, add the numerators: $-\frac{3}{5} + \frac{4}{5} = \frac{1}{5}$.
- 27) **The correct answer is City M .** (7.SP.3) Range is a measure of spread. A smaller range indicates less variability and more predictable conditions, making planning easier. A larger range indicates high variability and unpredictability, even if the typical (median) temperature is the same.
- 28) **Choice B is correct.** (7.NS.1-7.NS.3) $\frac{1}{5} \div \frac{1}{3} = \frac{1}{5} \times \frac{3}{1} = \frac{3}{5}$.
- 29) **Choice C is correct.** (7.NS.2d) Divide $7 \div 20 = 0.35$, not 0.7. The student may have confused the operation or misread the fraction.



Hi, Math Hero!

◇ This full-length book gave you ten complete Grade 7 practice tests, so you had repeated chances to build accuracy, pacing, and confidence. You showed up for Grade 7 practice again and again. That is what real growth looks like: steady effort, honest review, and a willingness to try. ◇

★ **Remember this:** A math hero is not someone who never misses a question. A math hero learns from the miss and comes back stronger. ★

Hero Habits

- **Courage:** You try problems that are not automatic.
- **Honesty:** You review what needs work.
- **Patience:** You let skills grow over time.
- **Pride:** You recognize the effort you gave.

Grade 7 test-day tip: Save one solved problem you are proud of. Looking back at progress helps motivation stay strong.

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

Jay Daie

Your Math Hero Guide

PRACTICE TODAY. SUCCEED TOMORROW!

This book includes 10 full-length Math practice tests and 2 extra 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:

10 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
- ✓ Fractions & Decimals
- ✓ Percents
- ✓ Statistics & Probability
- ✓ Data Analysis
- ✓ Measurement & Conversions
- ✓ And More!



2 EXTRA 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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SOLVE
CONFIDENTLY



SUCCEED
BRIGHTLY

PRACTICE ★ REVIEW ★ SUCCEED