

5

Alabama ACAP

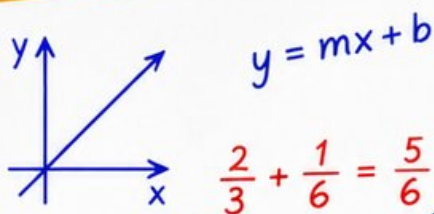
GRADE

7

MATH

PRACTICE TESTS

Standards Aligned
Problem Solving
For Comprehensive
Assessment Programs



5 PRINTED
TESTS



2 ONLINE
TESTS

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



Build
Confidence



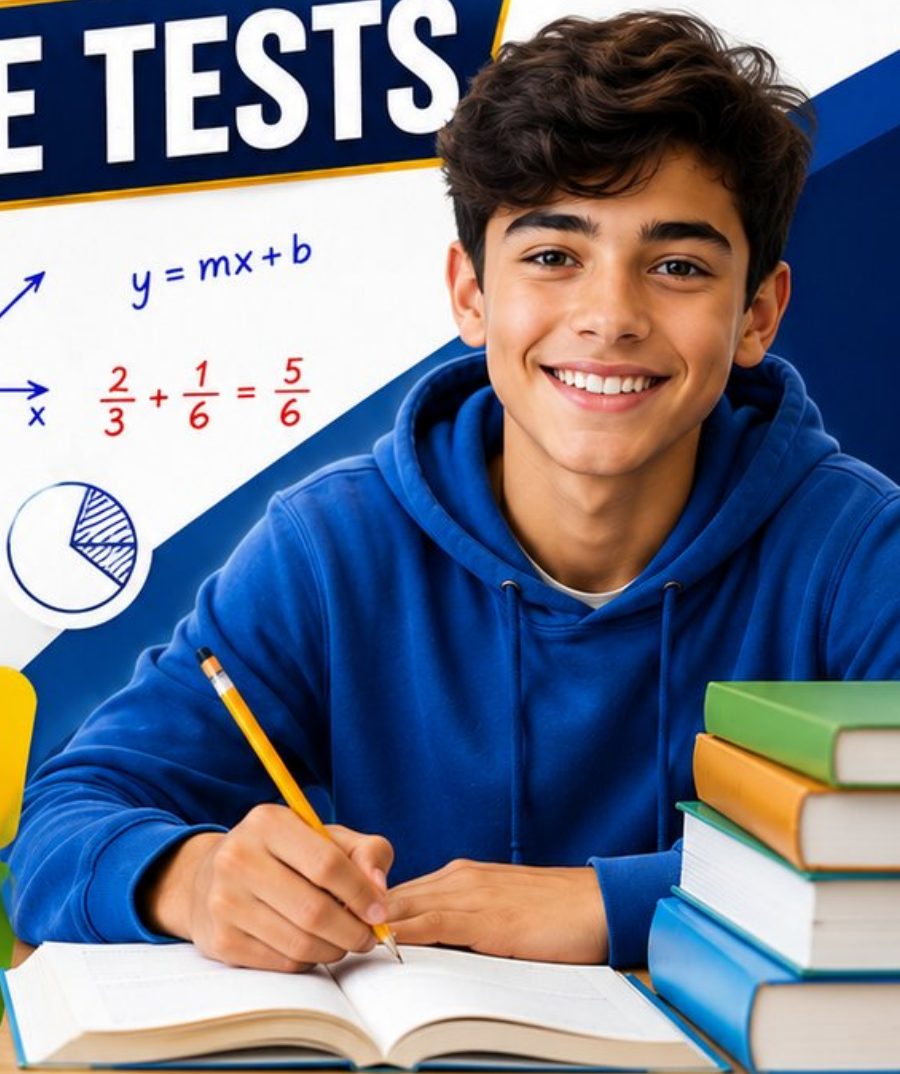
Strengthen
Math Skills



Detailed Answers
& Explanations



Improve Test
Performance



5 Alabama ACAP Grade 7 Math Practice Tests

Standards-Aligned Practice with Review, Answer Keys, and Explanations



Five complete 40-question Grade 7 ACAP 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, Alabama Grade 7 Problem Solver!

Five focused rounds for sharper ACAP math thinking

This book gives you five full Grade 7 ACAP 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 Alabama 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 five-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.

Alabama 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?

Five ACAP tests, 200 questions, and a focused review path

Part	What You Will Practice
Tests 1–2	Proportional relationships, unit rates, percents, rational-number operations, and careful reading.
Tests 3–5	Expressions, equations, inequalities, scale drawings, geometry, data, probability, 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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& answers

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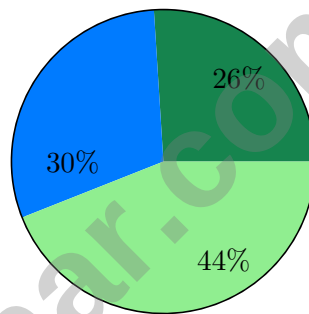
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1) If a scale drawing has a scale of 2 : 5, which of the following is true?

- ☐ A. The drawing is smaller than the actual object.
- ☐ B. The drawing is larger than the actual object.
- ☐ C. The drawing and the object are the same size.
- ☐ D. Cannot be determined without more information.

2) Simplify: $-2 - (-8)$

- ☐ A. -10
- ☐ B. 10
- ☐ C. -6
- ☐ D. 6



3)

The circle graph shows time spent on daily activities. Coral is work (26%), sky blue is sleep (30%), and light green is personal time (44%). If a person has 24 hours in a day, how many hours are spent on personal time?

- ☐ A. 6.24 hours
- ☐ B. 7.2 hours
- ☐ C. 10.56 hours
- ☐ D. 12 hours

4) A garden is 15 feet long and 10 feet wide. A scale drawing uses 1 inch = 5 feet. What are the dimensions on the drawing?

- ☐ A. 1.5 inches $\times$ 1 inch
- ☐ B. 5 inches $\times$ 4 inches
- ☐ C. 3 inches $\times$ 2 inches
- ☐ D. 15 inches $\times$ 10 inches



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5)

Discount (%)	Amount (\$)	Total Price (\$)
10	5	45
20	10	40
25	?	30

Using the ratio table, what is the discount amount for a 25% discount?

- ☐ A. \$8 ☐ C. \$12
☐ B. \$15 ☐ D. \$10
- 6) A coffee shop buys coffee beans for \$8 per pound and marks them up by \$4 per pound. What is the percent markup?
- ☐ A. 75% ☐ C. 25%
☐ B. 100% ☐ D. 50%
- 7) Compute $-6 + (-4)$.
- ☐ A. -10 ☐ C. 2
☐ B. -2 ☐ D. 10
- 8) A student saves \$50 per month toward a goal of buying a laptop that costs \$800. How many months will it take to save enough money?
- ☐ A. 12 months ☐ C. 16 months
☐ B. 14 months ☐ D. 18 months
- 9) A debt of \$150 is split equally among 5 people. How much does each person owe?
- ☐ A. -\$750 ☐ C. \$30
☐ B. -\$30 ☐ D. \$750



10) A worker earns \$60 for working $2\frac{1}{2}$ hours. What is the hourly wage?

☐ A. \$150 per hour

☐ C. \$25 per hour

☐ B. \$20 per hour

☐ D. \$24 per hour

11) A student incorrectly says a graph shows a proportional relationship. The student made an error. What was it?

The graph shows a line from (0, 2) to (4, 10).

☐ A. The line is too steep

☐ D. The line does not pass through the

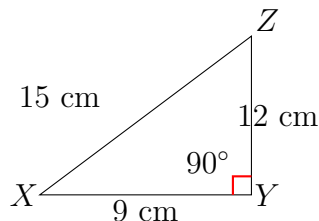
☐ B. The points are not whole numbers origin

☐ C. The line has negative slope

12) A weather forecast predicts a 35% chance of snow. Write this probability as a decimal.



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1)

A triangle has sides 9 cm, 12 cm, and 15 cm. Is this a right triangle?

☐ A. Yes

☐ C. Cannot be determined

☐ B. No

☐ D. Only if one angle is 90°

2) Evaluate $\frac{a+b+c}{3}$ when $a = 6$, $b = 9$, and $c = 12$.

3) Alex says, “The probability of rolling a 7 on a standard die is 0.1 (unlikely).” What is wrong with Alex’s statement?

☐ A. Rolling a 7 is impossible, not unlikely; the probability is 0

☐ C. Alex should have said the probability is 0.5

☐ B. Probability cannot be expressed as a decimal

☐ D. There is nothing wrong; 0.1 is correct

4)

Age Group	Social Media Users	Sample Size
Ages 12–17	85	100
Ages 18–24	102	120
Ages 25+	44	100

Which age group has the LOWEST proportion of social media users?

☐ A. Ages 12–17

☐ C. Ages 25+

☐ B. Ages 18–24

☐ D. Cannot determine from the data


- 5) A phone plan charges \$0.10 per minute. If m is the number of minutes and c is the cost in dollars, which equation models this?

☐ A. $c = 10m$

☐ C. $m = 0.10c$

☐ B. $c = m + 0.10$

☐ D. $c = 0.10m$

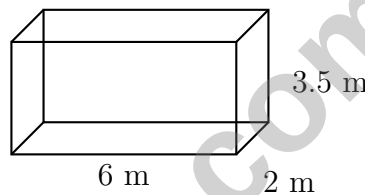
- 6) A teen has \$30 to spend on a new phone and games. If the phone costs \$12, write an inequality for how much g (in dollars) they can spend on games.

☐ A. $g \leq 18$

☐ C. $g + 30 = 12$

☐ B. $12 + g \leq 30$

☐ D. $g > 18$



7)

A rectangular prism has dimensions $6\text{ m} \times 3.5\text{ m} \times 2\text{ m}$. Calculate the surface area.

☐ A. 49 m^2

☐ C. 80 m^2

☐ B. 73 m^2

☐ D. 147 m^2

- 8) 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) What is $1.5 + 2.3$?

☐ A. 3.2

☐ C. 3.8

☐ B. 3.7

☐ D. 4.0

2) A painter charges \$20 per room. For 3 rooms with a \$6 group discount per room, what is the total painting cost?

☐ A. \$42

☐ C. \$54

☐ B. \$48

☐ D. \$60

3) A blueprint of a house has a scale where $\frac{1}{2}$ inch represents 4 feet. If a hallway in the blueprint is 1 inch long, how many feet long is the actual hallway?

☐ A. 2 feet

☐ C. 8 feet

☐ B. 4 feet

☐ D. 16 feet

4) A manufacturing plant produces widgets at a constant rate. In 8 hours, 240 widgets are produced. How many widgets are produced per hour?

☐ A. 20 widgets per hour

☐ C. 240 widgets per hour

☐ B. 1920 widgets per hour

☐ D. 30 widgets per hour

5) Convert $\frac{5}{8}$ to a decimal and then to a percent.

☐ A. 58%

☐ C. 75%

☐ B. 85%

☐ D. 62.5%

6) Identify the student error: $\frac{3}{7} \div \frac{2}{5} = \frac{3}{7} \times \frac{2}{5} = \frac{6}{35}$.

☐ A. No error; the answer is correct

☐ C. Error: forgot to flip the sign

☐ B. Error: should multiply by the reciprocal $\frac{5}{2}$, not $\frac{2}{5}$

☐ D. Error: should add, not divide



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- 7) Which shows the correct long division for $\frac{3}{5}$?
- ☐ A. $3 \div 5 = 0.6$ ☐ C. $3 \div 5 = 0.35$
☐ B. $5 \div 3 = 1.67$ ☐ D. $3 \div 5 = 0.53$
- 8) An investor's portfolio gains \$125 on Monday, loses \$75 on Tuesday, and gains \$200 on Wednesday. What is the total change?
- ☐ A. \$250 ☐ C. \$175
☐ B. \$200 ☐ D. \$300
- 9) Simplify: $(6n + 4) - (3n - 2)$
- ☐ A. $3n + 6$ ☐ C. $9n + 2$
☐ B. $3n + 2$ ☐ D. $3n - 6$
- 10) A taxi charges \$3 per mile plus a \$2 fee. If a trip costs \$17, how many miles was the trip? Check your answer is reasonable.
- ☐ A. 3 miles ☐ C. 6 miles
☐ B. 5 miles ☐ D. 8 miles
- 11) A rectangle on a map has length 7 cm and width 4 cm. The map scale is 1 cm : 2 km. When the map is enlarged so that the new scale becomes 1 cm : 1 km, what are the new dimensions?
- ☐ A. 7 cm by 4 cm ☐ C. 3.5 cm by 2 cm
☐ B. 14 cm by 8 cm ☐ D. 3 cm by 2 cm



Alabama ACAP 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 Alabama ACAP 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) A scale of 2 : 5 means the drawing is 2 units for every 5 units of the actual object, so the drawing is smaller.
- 2) **Choice D is correct.** (7.NS.1-7.NS.3) $-2 - (-8) = -2 + 8 = 6$. The opposite of -8 is 8, and $-2 + 8 = 6$.
- 3) **Choice C is correct.** (7.SP.1-7.SP.4) 44% of 24 = $0.44 \times 24 = 10.56$ hours.
- 4) **Choice C is correct.** (7.RP.1-7.RP.3) Divide actual dimensions by scale: $15 \div 5 = 3$ inches; $10 \div 5 = 2$ inches.
- 5) **Choice D is correct.** (7.RP.3) The original price is \$40 (since 75% of it is \$30). 25% of \$40 is $0.25 \times 40 = 10$ dollars.
- 6) **Choice D is correct.** (7.RP.3) Markup percent = $\frac{\text{markup}}{\text{cost}} \times 100 = \frac{4}{8} \times 100 = 50\%$.
- 7) **Choice A is correct.** (7.NS.1b) When adding two negative numbers, add their absolute values and keep the negative sign: $|-6| + |-4| = 10$, so $-6 + (-4) = -10$.
- 8) **Choice C is correct.** (7.RP.3) Months needed = $\$800 \div \$50 = 16$ months.
- 9) **Choice B is correct.** (7.NS.1-7.NS.3) Debt: $-150 \div 5 = -30$ dollars per person.
- 10) **Choice D is correct.** (7.RP.1-7.RP.3) Hourly wage = $\frac{60}{2\frac{1}{2}} = \frac{60}{\frac{5}{2}} = 60 \times \frac{2}{5} = 24$ dollars per hour.
- 11) **Choice D is correct.** (7.RP.1-7.RP.3) Proportional relationships must pass through (0, 0). This line starts at (0, 2), so it is not proportional.
- 12) **The correct answer is 0.35.** (7.SP.5-7.SP.8) $35\% = \frac{35}{100} = 0.35$.
- 13) **Choice D is correct.** (7.RP.1-7.RP.3) The unit-rate marker at (1, 0.25) shows the rate is 0.25.
- 14) **Choice D is correct.** (7.RP.3) Using the proportion $\frac{12}{48} = \frac{p}{100}$, simplify $\frac{12}{48} = \frac{1}{4} = 0.25 = 25\%$.
- 15) **Choice D is correct.** (7.NS.1-7.NS.3) Starting at 1 and moving right 3 units represents adding 3, so $1 + 3 = 4$.
- 16) **Choice B is correct.** (7.NS.1-7.NS.3) $\frac{2}{9} \div \frac{4}{3} = \frac{2}{9} \times \frac{3}{4} = \frac{6}{36} = \frac{1}{6}$.
- 17) **Choice A is correct.** (7.NS.2d) Divide $9 \div 20 = 0.45$. Since $20 = 4 \times 5 = 2^2 \times 5$, this is terminating.
- 18) **Choice B is correct.** (7.NS.1-7.NS.3) Water lost = $\frac{1}{6} \times 240 = 40$ gallons. Remaining: $240 - 40 = 200$ gallons. Gains 30: $200 + 30 = 230$ gallons.
- 19) **The correct answer is \$720.** (7.RP.1-7.RP.3) Use $18 \times 40 = 720$ dollars.
- 20) **The correct answer is \$2500.** (7.RP.3) $500 = P \times 0.05 \times 4 \Rightarrow 500 = 0.2P \Rightarrow P = \2500 .
- 21) **Choice C is correct.** (7.NS.1-7.NS.3) Because $12 \times 12 = 144$, the square root of 144 is 12.
- 22) **The correct answer is A, C.** (7.SP.1-7.SP.4) Sample 1: $\frac{36}{120} = 0.30$; Sample 2: $\frac{27}{90} = 0.30$. Both show 30%, so A is true. Equal proportions allow reliable population estimates (C is true). B and D is false (Sample 1 is larger at 120 vs 90).
- 23) **Choice A is correct.** (7.EE.1-7.EE.2) Distribute: $5(3y) - 5(2) + 4y = 15y - 10 + 4y$. Combine y terms: $15y + 4y - 10 = 19y - 10$.
- 24) **Choice A is correct.** (7.NS.2) $(-7) \times 5 = -35$, not 35. The student multiplied correctly but forgot that negative times positive is negative.
- 25) **Choice A is correct.** (7.SP.3) Stable sales mean consistent output. Bakery A's clustering at 16–17 with range 4 (15–19) shows stability. Bakery B's spread from 10–25 (range 15) shows inconsistent sales.
- 26) **Choice D is correct.** (7.RP.3) Total cost = $500 + (75 \times 20) = 500 + 1500 = \$2,000$.
- 27) **Choice C is correct.** (7.G.4-7.G.6) The L-shape is split into two rectangles: one is 7×5 , the other is 3×3 . Add their areas: $35 + 9 = 44 \text{ m}^2$.
- 28) **Choice D is correct.** (7.RP.1-7.RP.3) Markup: $50\% \times 8 = 4$. Selling price: $8 + 4 = 12$.
- 29) **Choice C is correct.** (7.RP.3) Net income percent: $\frac{1530}{1800} = 0.85 = 85\%$.
- 30) **Choice D is correct.** (7.RP.3) Final balance: $2500 + 481.60 = 2981.60$. So $2500(1 + r)^2 = 2981.60 \Rightarrow (1 + r)^2 = 1.1926 \Rightarrow 1 + r = 1.0920 \Rightarrow r = 9.2\%$.
- 31) **The correct answer is 8.33%.** (7.RP.3) Percent error = $\frac{|55000 - 60000|}{60000} \times 100\% = \frac{5000}{60000} \times 100\% \approx 8.33\%$.



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 5 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 **5** 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:

5 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



Build Confidence

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!

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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