

6

Alabama ACAP

GRADE

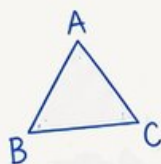
6

MATH

PRACTICE TESTS

Standards-Aligned
Steady Southern
Problem Solving for
Comprehensive
Assessment Program

$$2x + 3 = 11$$



$$7^2 = 49$$

BUILD SKILLS.
GAIN CONFIDENCE.
SUCCEED!



6 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



6 PRINTED TESTS + 2 ONLINE TESTS

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



PRACTICE

Sharpen skills with targeted practice tests



REVIEW

Understand concepts and strengthen skills



SUCCEED

Build confidence and achieve your best

6 Alabama ACAP Grade 6 Math Practice Tests

Standards-Aligned Steady Southern Problem Solving for Alabama Comprehensive Assessment Program



Six complete 40-question Grade 6 practice rounds for ACAP, with ratios, rational numbers, expressions, equations, geometry, statistics, answer keys, and clear explanations for every item.

Jay Daie and Reza Nazari



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Welcome, Alabama Math Explorer!

Six steady rounds on a Gulf Coast-to-hills math trail

This book gives you six full Grade 6 practice tests for ACAP. Each round uses river bridges, pine woods, and Gulf Coast routes as a fresh mental backdrop while you read closely, choose a smart strategy, show your work, and check whether your answer makes sense.

Your Alabama Practice Promise

Read the question like a map, then prove each step. I will slow down for the question, circle what matters, solve one step at a time, and use mistakes as clues for getting stronger.

Read

Plan

Check

How to Use This Book

A six-session routine for steady Southern problem solving

1. **Preview the skills.** Read the quick review pages before the first test.
2. **Take one test at a time.** Work in a quiet place and answer all 40 questions.
3. **Mark your confidence.** Put a small star beside problems you solved with a strong plan.
4. **Check, then retry.** For missed questions, try the problem again before reading the explanation.
5. **Track your next move.** Use the growth log to name one habit and one skill for the next test.

Alabama review rhythm: Test one day, correct carefully the next day, then return for the next round when your corrections feel clear.



What Is Inside?

Six ACAP tests, 240 questions, and a full review path

Part	What You Will Practice
Tests 1–2	Warm-up rounds for ratios, rational numbers, operations, and careful reading.
Tests 3–5	Skill-building rounds with expressions, equations, geometry, data, and problem models.
Test 6	Final stamina round for mixed review, neat work, and flexible strategy choices.
Answer Pages	Compact keys and explanations that show why each answer works.

The tests are mixed on purpose. Steady southern problem solving means recognizing the skill even when the next question changes topic.



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For more practice
& answers

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- 1) An error was made: a student computed $8 \times (-6)$ and got 48. What is the correct answer?
- A. 48 (correct) C. 2 (student should divide)
- B. -48 (positive times negative is negative) D. 14 (student should add)

- 2) A school has s students. It also has $s + 25$ staff members. If the school has 600 students, how many staff members does it have?

- 3) A water tank fills at a rate of 8 gallons per minute. If m is the number of minutes and g is the total gallons filled, write an equation.
- A. $m = 8g$ C. $g = m + 8$
- B. $m = g + 8$ D. $g = 8m$
- 4) A dot plot shows the number of books read by 10 students: 2, 3, 3, 4, 4, 4, 5, 5, 6, 6. What is the median number of books?
- A. 4 C. 5
- B. 6 D. 4.5



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5) Which pair of numbers has a GCF of 5?

A. 15 and 25

C. 12 and 20

B. 10 and 20

D. 14 and 35

6) Which statement correctly compares the two integers -6 and -3 ?

A. $-6 > -3$

C. $-6 < -3$

B. $-6 = -3$

D. -6 and -3 are opposites

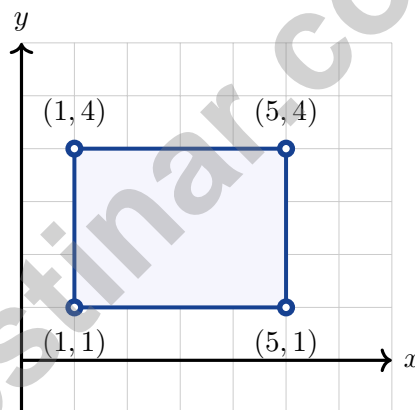
7) What is the reflection of the point $(2, 6)$ across the x -axis?

A. $(-2, 6)$

C. $(-2, -6)$

B. $(2, -6)$

D. $(6, 2)$



8)

A rectangle has vertices at $(1, 1)$, $(5, 1)$, $(5, 4)$, and $(1, 4)$. What is the area?

A. 9 square units

C. 15 square units

B. 18 square units

D. 12 square units



9) A store’s inventory was 500 items. They sold 120 items and received 80 new items. How many items are in inventory now?

- A. 300 items
- B. 380 items
- C. 460 items
- D. 700 items

$$3^2 + 4 \times 2$$

Step 1: ~~9 + 4 × 2~~

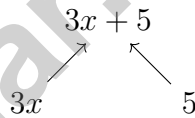
Step 2: = 9 + 8

Step 3: = 17

10)

What is the first step in evaluating $3^2 + 4 \times 2$?

- A. Add 3 and 4.
- B. Evaluate the exponent: $3^2 = 9$.
- C. Multiply 4×2 .
- D. Multiply 3×2 .



Sum

11)

This tree represents which phrase?

- A. The product of 3, x , and 5
- B. Three times the sum of x and 5
- C. The sum of $3x$ and 5
- D. Five more than three

12) Which term has a coefficient of $\frac{2}{3}$?

- A. $\frac{2}{3}$
- B. $\frac{2}{3}r$
- C. $2r + 3$
- D. $r + \frac{2}{3}$



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1)

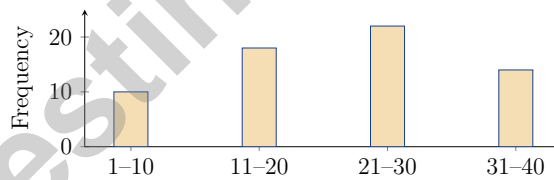
What is the distance between (1, 1) and (8, 1)?

- A. 6 units
- B. 7 units
- C. 8 units
- D. 9 units

2) Find the mean of 20, 30, 40, 50.

- A. 30
- B. 35
- C. 40
- D. 45

3) A histogram is most useful for displaying data when you need to:



- A. Compare two specific values
- B. Show individual data points
- C. Display the distribution of continuous data grouped into bins
- D. Track changes over time



4) A dataset has five-number summary: $\min = 0$, $Q_1 = 8$, $\text{median} = 12$, $Q_3 = 18$, $\max = 30$. A student says “The IQR is 18.” Is the student correct?

- A. Yes, IQR is always the maximum minus the minimum.
- B. No, IQR is the median, which is 12.
- C. Yes, IQR is the third quartile value.
- D. No, $\text{IQR} = 10$, not 18.

5) A number from 1 to 20 is selected at random. What is the probability that the number is even?

- A. $\frac{1}{20}$
- B. $\frac{10}{20}$
- C. $\frac{9}{20}$
- D. $\frac{1}{2}$

6) A fitness app records heart rates (bpm). The stem-and-leaf plot shows:

Stem	Leaf
6	8
7	2, 4, 6, 8
8	1, 3, 5, 7, 9
9	0, 2

Which range contains the most recorded heart rates?

- A. 80 – 89 bpm
- B. 70 – 79 bpm
- C. 60 – 69 bpm
- D. 90 – 99 bpm

7) A chemistry lab recorded 520 observations. The circle graph shows $\frac{5}{26}$ were anomalies. How many observations were anomalies?

- A. 80
- B. 90
- C. 100
- D. 110



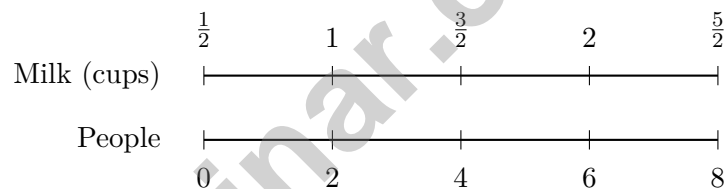
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1) A circular garden has a radius of 7 feet. Using $\pi \approx \frac{22}{7}$, what is the approximate area?

- A. 44 ft^2
 C. 154 ft^2
 B. 88 ft^2
 D. 308 ft^2

2) The wait times are 8, 12, 15, 18, 22, 25, 19, 14. How many modes are there?

3) A recipe serves 2 people and uses $\frac{1}{2}$ cup of milk. How much milk is needed to serve 8 people?



- A. $\frac{1}{2}$ cup
 C. 2 cups
 B. 1 cup
 D. 4 cups

4) A student says the rate of 200 miles in 4 hours is 50 miles per hour, but another student says it is 200 miles per hour. Which student is correct and why?

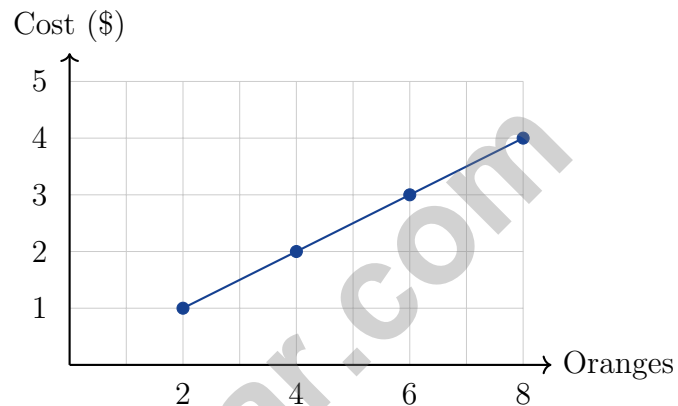
- A. The first student is correct; divide $200 \div 4 = 50$ miles per hour
 B. The first student is correct; multiply $200 \times 4 = 800$
 C. The second student is correct; the distance is 200 miles
 D. Both students are equally correct



5) A bulk store sells potatoes. A small bag of 5 lbs costs \$3.50. A large bag of 15 lbs costs \$9.75. How much per pound do you save by buying the large bag?

- A. \$0.05 per pound C. \$0.15 per pound
 B. \$0.10 per pound D. \$0.20 per pound

6) A store sells oranges at a constant rate. The graph below shows the relationship between the number of oranges and the total cost in dollars.



What is the unit rate (cost per orange)?

- A. \$0.25 per orange C. \$1.00 per orange
 B. \$2.00 per orange D. \$0.50 per orange



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Alabama ACAP Practice Test Answer Keys

How to use this Alabama ACAP answer section with a Grade 6 student:

1. check the answer first, then write one quick reason the choice is correct
2. mark questions to try again, especially the skills that feel connected to steady Southern problem solving
3. rework the problem before reading the full explanation, using this reminder: Use each problem as a trail marker: read carefully, plan clearly, and check before moving on.

A calm Alabama correction routine turns every missed item into useful practice. Test one day, correct carefully the next day, then begin the next round when your notes feel clear.



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Alabama Practice Test Answers and Explanations

Review the six printed ACAP tests with patient, steady, and ready for the next challenge habits.

Practice Test 1 Answers and Explanations

- Choice B is correct.** (6.5) Positive times negative is negative, so $8 \times (-6) = -48$. The student ignored the negative sign.
- The correct answer is 625.** (6.13) If $s = 600$, then $\text{staff} = s + 25 = 600 + 25 = 625$.
- Choice D is correct.** (6.21) Gallons filled equals the rate of 8 gallons per minute times the number of minutes: $g = 8m$.
- Choice D is correct.** (6.23) With 10 data points, the median is the average of the 5th and 6th values when ordered: $(4 + 5) \div 2 = 4.5$.
- Choice A is correct.** (6.8) Factors of 15: 1, 3, 5, 15. Factors of 25: 1, 5, 25. Common factors: 1, 5. GCF is 5. For option B, GCF is 10; for C, GCF is 4; for D, GCF is 7.
- Choice C is correct.** (6.9) On a number line, -6 is to the left of -3 , so -6 is less than -3 . The farther left a number is, the smaller it is.
- Choice B is correct.** (6.25) Reflection across the x -axis changes the sign of the y -coordinate while the x -coordinate remains the same. The point $(2, 6)$ becomes $(2, -6)$.
- Choice D is correct.** (6.25) Length: $|5 - 1| = 4$ units. Width: $|4 - 1| = 3$ units. Area: $4 \times 3 = 12$ square units.
- Choice C is correct.** (6.21) $500 - 120 + 80 = 460$ items in inventory.
- Choice B is correct.** (6.14) Following PEMDAS, exponents come before multiplication and addition. The diagram shows Step 1 is evaluating $3^2 = 9$.
- Choice C is correct.** (6.16) The tree shows $3x$ and 5 combining via addition into $3x + 5$, representing the sum of $3x$ and 5 . (Distractor B would be $3(x + 5) = 3x + 15$, which is different.)
- Choice B is correct.** (6.21) The term $\frac{2}{3}r$ has coefficient $\frac{2}{3}$. The other options either have no variable or have a different structure.
- Choice D is correct.** (6.15) Substitute and compute: $4(5) - 3(2) = 20 - 6 = 14$.
- Choice C is correct.** (6.18) Add 7 to both sides: $x = 13 + 7 = 20$.
- Choice A is correct.** (6.8) "Less than \$50" means strictly below 50: $d < 50$.
- Choice C is correct.** (6.13) "Under 16" means strictly less than 16, not including 16. The inequality is $a < 16$.
- Choice B is correct.** (6.26) Width: $9 - 2 = 7$ units = 700 meters. Height: $7 - 2 = 5$ units = 500 meters. Area = $700 \times 500 = 350,000$ square meters.
- The correct answer is 10.** (6.26) Using $A = \frac{1}{2}bh$: $80 = \frac{1}{2} \times 16 \times h \Rightarrow h = 10$ cm.
- The correct answer is 9.** (6.26) Area = $5 \times 1.8 = 9$ square yards.
- Choice C is correct.** (6.27) Lateral SA = $2(12)(4) + 2(8)(4) = 96 + 64 = 160$ cm².
- Choice A is correct.** (6.25) Translate right 4 by adding 4 to the x -coordinate, and translate down 3 by subtracting 3 from the y -coordinate: $(-4 + 4, 6 - 3) = (0, 3)$.
- The correct answer is Both A and D have a quotient of 156.** (6.5) A: $4,680 \div 30 = 156$ ✓. B: $4,500 \div 30 = 150$. C: $4,500 \div 25 = 180$. D: $2,808 \div 18 = 156$ ✓. E: $6,000 \div 40 = 150$. Verify: $30 \times 156 = 4,680$ and $18 \times 156 = 2,808$.
- Choice C is correct.** (6.26) Radius $r = \frac{10}{2} = 5$ in. Area = $\pi r^2 \approx 3.14 \times 5^2 = 3.14 \times 25 = 78.5$ in².
- Choice A is correct.** (6.23) Plot A forms a triangle shape with a peak in the middle (at 3), with equal tails on both sides. Plot B has outliers on the right, making it skewed right.
- Choice C is correct.** (6.23) The median of 2, 4, 6, 8, 10 is 6 (the middle value).
- Choice C is correct.** (6.24) The mode (16 days, frequency 4), individual frequencies, and the median can be read directly from the dot plot. Total attendance (the sum of attendance \times frequency) requires calculation and might vary based on interpretation; it cannot be determined without additional calculation.



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Hi, Math Champion!

◇ Look what you did! 6 full practice tests. That's hundreds of math problems. You started as a learner. You are now a math athlete. ◇

★ **Champions know:** hard work pays off. You did the hard work. Your math skills are strong because you practiced. ★

Champion's Stats

- **Focus:** HIGH! You stay on task.
- **Speed:** STRONG! You move at the right pace.
- **Accuracy:** SHARP! You catch your own mistakes.
- **Mindset:** CHAMPION! You believe in yourself.

Champion tip: on test day, walk in proud. You trained for this. You are ready!

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

Jay Daie

Your Math Coach

PRACTICE TODAY. SUCCEED TOMORROW!

This Grade 6 Math Practice Tests book is designed to help students strengthen their math skills, master important concepts, and build the confidence they need to excel on comprehensive assessments.

With 6 full-length printed tests and 2 online tests, students get the review, practice, and realistic test experience they need to improve accuracy, develop problem-solving abilities, and reach their full potential.

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

6
PRINTED
TESTS

+
2
ONLINE
TESTS

PERFECT FOR:

- ✓ Classroom Practice
- ✓ Homework & Review
- ✓ Independent Learning
- ✓ Test Preparation
- ✓ Skill Reinforcement
- ✓ Building Confidence

★ BUILD SKILLS.
GAIN CONFIDENCE.
SUCCEED!

WHAT STUDENTS WILL 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 aligned with standards through meaningful practice.



Test Confidence

Become familiar with test formats and improve accuracy and speed.



Achieve Success

Build confidence and perform your best on test day.

TOPICS COVERED

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



2 ONLINE TESTS

Extra online practice to reinforce learning and build confidence.

MORE PRACTICE. GREATER RESULTS.

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



6 FULL-LENGTH
PRINTED TESTS



2 ONLINE
PRACTICE TESTS



DETAILED ANSWER
EXPLANATIONS