

7 Alabama ACAP

Grade 6 MATH PRACTICE TESTS



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

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



7 Full-Length
Printed Tests



Standards-Aligned
Math Practice



Detailed Answer Keys
and Explanations



Build Confidence.
Achieve Success.



PREPARE
PRACTICE
SUCCEED



PRACTICE
WITH PURPOSE



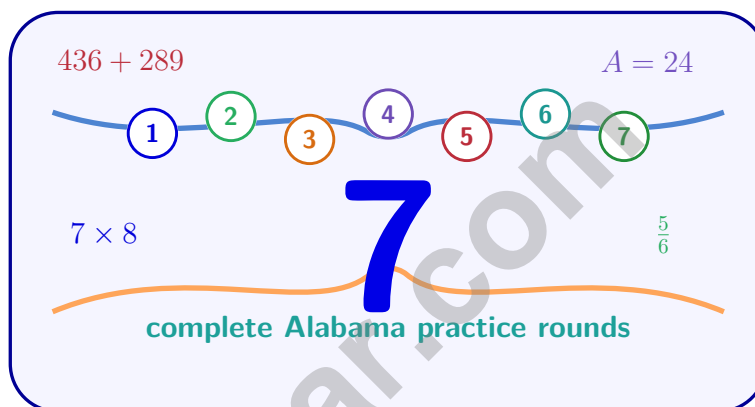
STRENGTHEN
MATH SKILLS



REVIEW, IMPROVE,
AND SUCCEED

7 Alabama ACAP Grade 6 Math Practice Tests

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



Seven 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.

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Welcome, Alabama Math Explorer!

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

This book gives you seven 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 seven-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?

Seven ACAP tests, 280 questions, and a full review path

Part	What You Will Practice
Tests 1–3	Warm-up rounds for ratios, rational numbers, operations, and careful reading.
Tests 4–6	Skill-building rounds with expressions, equations, geometry, data, and problem models.
Test 7	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.



Scan me!
For more practice
& answers

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1) A rectangular prism has a base area of 18 cm^2 and height 4 cm. What is the volume?

A. 22 cm^3

C. 54 cm^3

B. 36 cm^3

D. 72 cm^3

2) A company's profit for three months was \$8,000, $-\$2,500$, and \$5,000. What is the total profit for the three months?

3) A lottery picks one number from 1 to 100. What is the probability of picking a number that is a multiple of 10?

A. $\frac{1}{100}$

C. $\frac{1}{5}$

B. $\frac{1}{10}$

D. $\frac{1}{2}$

4) Raw data: 71, 78, 75, 82, 79, 81, 76, 83. If organized in a stem-and-leaf plot, what is the value of the 4th data point when listed in order?

A. 76

C. 79

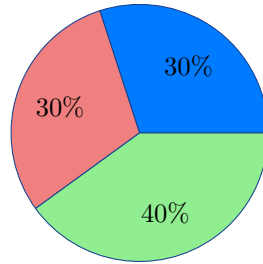
B. 78

D. 81

5) Evaluate $(2 \times 3)^2$.



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6)

A circle graph shows survey results from 250 people. Which section represents the most people?

- A. The 40% section with 100 people. C. The 30% section with 50 people.
 B. The 30% section with 75 people. D. Both 30% sections equally.

7) A circle graph (pie chart) shows the distribution of 360 students by lunch preference: pizza 120 students, tacos 90 students, salad 60 students, other 90 students. What angle in degrees should the pizza section span?

- A. 180 degrees C. 60 degrees
 B. 90 degrees D. 120 degrees

8)

Item	Quantity
Apples	15
Bananas	25

What ratio correctly compares bananas to the total fruit in simplest form?

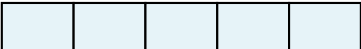
- A. 5 : 3 C. 15 : 25
 B. 25 : 40 D. 5 : 8



- 9) Sam says the ratio of boys to girls in a class is 3 : 5, and there are 40 students total. He calculates there are 25 boys and 15 girls. What is Sam's error?

Ratio 3 : 5 (Boys:Girls)

Boys:  3 parts $\times 5 = 15$ students

Girls:  5 parts $\times 5 = 25$ students

Sam flipped the groups: he used 25 for boys and 15 for girls.

- A. He flipped the ratio C. He forgot to find the unit rate
 B. He divided instead of multiplied D. His calculation is correct
- 10) A plant grows 3 cm per week. If w is the number of weeks and h is the height in centimeters, write the equation.
- A. $h = 3w + 3$ C. $w = 3h$
 B. $h = 3w$ D. $h = w + 3$
- 11) A parallelogram has an area of 84 cm^2 and a height of 7 cm. What is the length of the base?
- A. 6 cm C. 14 cm
 B. 12 cm D. 21 cm
- 12) A rectangle has vertices at (1, 1), (7, 1), (7, 4), and (1, 4). What is its perimeter?
- A. 9 units C. 18 units
 B. 15 units D. 24 units



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6) A florist is arranging flowers into bouquets. She has 18 red roses and 24 white roses. If she uses all the flowers and each bouquet has the same number of red and white roses, what is the maximum number of bouquets she can make?

- A. 6 bouquets C. 18 bouquets
 B. 8 bouquets D. 42 bouquets

7) A clothing store stocks shirts and pants in a 3 : 2 ratio. If the store has 24 shirts, how many pants does it have?

8) Which expression is NOT equivalent to $28 + 42$?

- A. $7(4 + 6)$ C. $2(14 + 21)$
 B. $14(2 + 3)$ D. $7(4 + 8)$

9) Which pair of numbers are opposites on a number line (equal distance from 0 but opposite sides)?

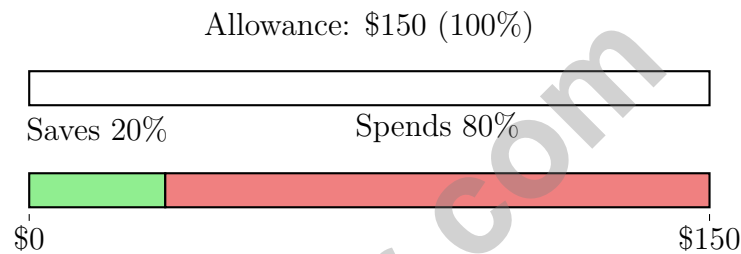
- A. -3 and 3 C. -1 and 0
 B. -2 and 4 D. 2 and 2.5

10) A factory packages 480 items in 8 boxes. What is the unit rate in items per box?



- 4) A student needs to save more than \$100. What is the least whole-dollar amount that works?

- 5) Xavier saves 20% of his monthly allowance. His monthly allowance is \$150. The diagram below represents this.



How much does Xavier save?

- A. \$30 C. \$20
 B. \$25 D. \$40
- 6) A runner's splits for three legs: 12.4 s, 11.8 s, and 13.2 s. What is the total time?
- A. 35.4 s C. 36.4 s
 B. 37.4 s D. 38.0 s
- 7) A rectangle has vertices at (2, 1), (8, 1), (8, 3), and (2, 3). What is the perimeter?
- A. 14 units C. 18 units
 B. 20 units D. 16 units



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

Practice Test 1 Answers and Explanations

- Choice D is correct.** (6.28) $V = B \times h = 18 \times 4 = 72 \text{ cm}^3$.
- The correct answer is \$10,500.** (6.21) Add all three months' profits: $8,000 + (-2,500) + 5,000 = 10,500$ dollars.
- Choice B is correct.** (6.4) Multiples of 10 from 1 to 100: 10, 20, 30, ..., 100 (10 numbers). Probability = $\frac{10}{100} = \frac{1}{10}$.
- Choice B is correct.** (6.23) In order: 71, 75, 76, 78, 79, 81, 82, 83. The 4th value is 78.
- The correct answer is 36.** (6.14) First $2 \times 3 = 6$, then $6^2 = 36$.
- Choice A is correct.** (6.4) The 40% section is largest. 40% of 250 is $0.40 \times 250 = 100$ people, which is more than either 30% section ($0.30 \times 250 = 75$ each).
- Choice D is correct.** (6.24) Pizza accounts for $\frac{120}{360} = \frac{1}{3}$ of students. The angle is $\frac{1}{3} \times 360^\circ = 120^\circ$.
- Choice D is correct.** (6.21) First find the total fruit: $15 + 25 = 40$. Bananas to total is $25 : 40$, and dividing both parts by 5 gives $5 : 8$.
- Choice A is correct.** (6.3) Ratio 3 : 5 means 3 parts boys and 5 parts girls, totaling 8 parts. Each part = $40 \div 8 = 5$ students, so there are $3 \times 5 = 15$ boys and $5 \times 5 = 25$ girls. Sam swapped the two values.
- Choice B is correct.** (6.21) Height equals the growth rate of 3 cm per week times the number of weeks: $h = 3w$.
- Choice B is correct.** (6.26) Using $A = b \times h$: $84 = b \times 7$, so $b = 12$ cm.
- Choice C is correct.** (6.25) Length = $7 - 1 = 6$ units; width = $4 - 1 = 3$ units. Perimeter = $2(6 + 3) = 18$ units.
- Choice D is correct.** (6.23) The median is 135. Excluding the median, the lower half is 120, 128, 130, so $Q1 = 128$. The upper half is 140, 142, 151, so $Q3 = 142$. The IQR is $142 - 128 = 14$.
- Choice B is correct.** (6.23) When the mean exceeds the median, high outliers are typically present, skewing the distribution right.
- The correct answer is 6.** (6.16) Substitute $x = 5$: $30 \div 5 = 6$.
- Choice D is correct.** (6.18) Two blocks of 8 grams balance x . So $x = 8 + 8 = 16$. Also written as $x = 2 \times 8 = 16$.
- Choice A is correct.** (6.8) "At most 14 days" means up to and including 14: $d \leq 14$.
- Choice B is correct.** (6.13) An open circle at 6 means 6 is not included. The arrow points left toward smaller values, so the inequality is $x < 6$.
- Choice C is correct.** (6.26) Rectangle area is $10 \times 6 = 60 \text{ cm}^2$. Triangle area is $\frac{1}{2} \times 10 \times 4 = 20 \text{ cm}^2$. The total area is $60 + 20 = 80 \text{ cm}^2$.
- Choice B is correct.** (6.23) Set B has the outlier 24, making it more skewed. The means are not equal, and Set A does not have a larger outlier.
- The correct answer is y -coordinate changes sign, x -coordinate stays the same.** (6.25) When reflecting across the x -axis, the y -coordinate changes to $-y$ (B is correct) and the x -coordinate remains x (D is correct). This means the reflected point is $(p, -q)$. Statement A is false—only the y -coordinate changes sign. Statement C is false because the reflection is vertical. Statement E describes the result but is not separately identifying a true property about the transformation.
- Choice B is correct.** (6.24) A right-skewed distribution has a peak on the left and a tail extending to the right. A symmetric distribution is balanced with equal tails on both sides.
- Choice C is correct.** (6.24) Range = $\text{max} - \text{min} = 40 - 5 = 35$.
- Choice D is correct.** (6.2) From the graph, at 3 hours the distance is 2 miles. The unit rate is $2 \div 3 = \frac{2}{3}$ miles per hour.
- Choice A is correct.** (6.14) Unit rate: $3 \div 12 = 0.25$ cups per cookie.
- Choice B is correct.** (6.11) If lawns mowed is on the x -axis and dollars earned is on the y -axis, the unit rate is $\frac{45}{3} = 15$ dollars per lawn.



From Your Math Family

Hi, Math Family Member,

◇ Welcome to a special note from your math family. You finished 7 full practice tests, and that hard work matters more than any score. We see you. We are proud of you. ◇

★ **Our math family knows:** math is a journey. You have taken many steps already. The test is just one stop. Every skill you built is yours forever. ★

What Your Math Family Sees

- **Hard Work:** You keep showing up.
- **Real Growth:** You can do problems today you couldn't before.
- **Brave Heart:** You face hard problems with brave thinking.
- **Bright Future:** Your math journey is just beginning.

Family tip: on test day, picture us standing behind you, smiling and rooting for you. You are not alone. Your math family is with you!

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

Jay Daie

Your Math Family

MASTER 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 7 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.



PERFECT FOR:

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

★ PRACTICE TODAY.
SUCCEED TOMORROW.

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.



7 FULL-LENGTH
PRINTED TESTS



STANDARDS-
ALIGNED PRACTICE



DETAILED ANSWER
KEYS & EXPLANATIONS