

5

Alabama ACAP

GRADE 6 MATH PRACTICE TESTS

Standards Aligned Problem Solving
For Comprehensive Assessment Programs



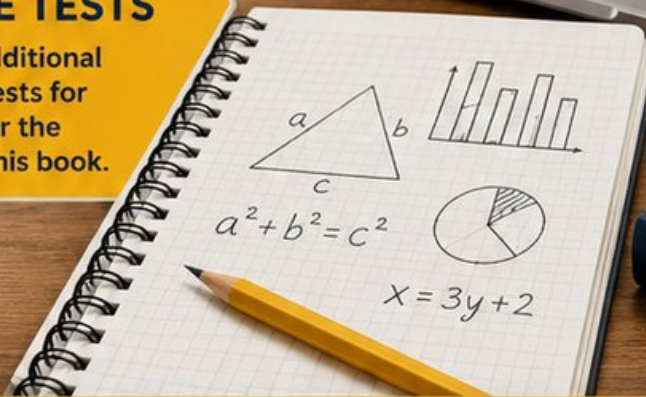
5 PRINTED TESTS

- ✓ Full-Length Practice Tests
- ✓ Realistic Questions
- ✓ Answer Key & Explanations



+ 2 ONLINE TESTS

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



PREPARE • PRACTICE • SUCCEED



5 Alabama ACAP Grade 6 Math Practice Tests

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



Five 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



Copyright ©

Testinar Inc



Published by Testinar Inc

Testinar.com

All rights reserved. No part of this publication may be reproduced, distributed, or transmitted in any form or by any means, including photocopying, recording, or other electronic or mechanical methods, without the prior written permission of the author, except in the case of brief quotations embodied in critical reviews and certain other noncommercial uses permitted by copyright law, including Section 107 or 108 of the 1976 United States Copyright Act.

This publication is independently produced and has no official connection to any state, district, or national testing program.

Test names and organizational names used herein are the property of their respective trademark holders.



Copyright ©

Welcome, Alabama Math Explorer!

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

This book gives you five 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 five-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?

Five ACAP tests, 200 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 3–4	Skill-building rounds with expressions, equations, geometry, data, and problem models.
Test 5	Final stamina round for mixed review, neat work, and flexible strategy choices.
Answer Pages	Compact keys and explanations that show why each answer works.

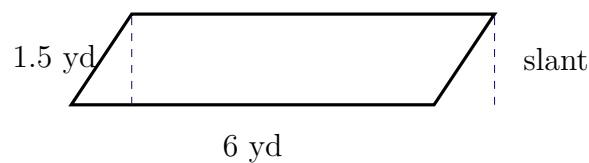
The tests are mixed on purpose. Steady southern problem solving means recognizing the skill even when the next question changes topic.



Scan me!
For more practice
& answers

Table of Contents

★ Practice Test 1	_____	13
★ Practice Test 2	_____	29
★ Practice Test 3	_____	45
★ Practice Test 4	_____	60
★ Practice Test 5	_____	77
Practice Test Answer Keys	_____	94
Practice Test Answers and Explanations	_____	98



1)

A parallelogram has a base of 6 yd and height of 1.5 yd. What is its area?

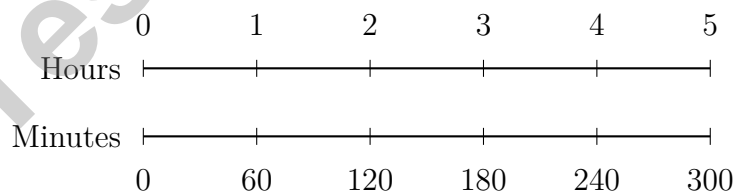
- A. 4.5 yd² C. 9 yd²
 B. 7.5 yd² D. 15 yd²

2) A toy dinosaur model is 10 cm tall. The scale is 1 cm = 0.8 m. How tall is the actual dinosaur?

- A. 4 m C. 8 m
 B. 6 m D. 10 m

3) A dot plot shows the number of pets owned by 10 families: 0, 1, 1, 2, 2, 2, 3, 3, 4, 5. Which measure of center is MOST resistant to the outlier value of 5 pets?

- A. Mean C. Mode
 B. Median D. Range



4)

Based on the double number line, what is the rate in minutes per hour?

- A. 30 minutes per hour C. 90 minutes per hour
 B. 60 minutes per hour D. 150 minutes per hour



Scan me!
For more practice
& answers

5) A store has four items weighing: 0.75 kg, 1.2 kg, 0.8 kg, and 0.6 kg. What is the total weight?

A. 3.95 kg

C. 3.35 kg

B. 2.75 kg

D. 4.15 kg

6) Which fraction is equivalent to -0.75 ?

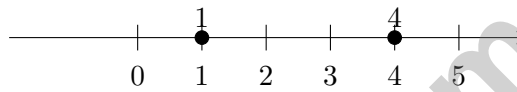
A. $-\frac{1}{4}$

C. $-\frac{2}{3}$

B. $-\frac{1}{2}$

D. $-\frac{3}{4}$

7)



If $A = 1$ and $B = 4$, order $-A$, $-B$, and 0.

A. $-B < -A < 0$

C. $0 < -A < -B$

B. $-A < -B < 0$

D. $-B = -A$

8) A dataset has 8 values with a mean of 45. If 7 of the values are $\{38, 40, 42, 44, 46, 48, 50\}$, what is the eighth value?

9) Simplify the ratio $25 : 35$ to its lowest terms.

A. $10 : 14$

C. $25 : 35$

B. $7 : 5$

D. $5 : 7$



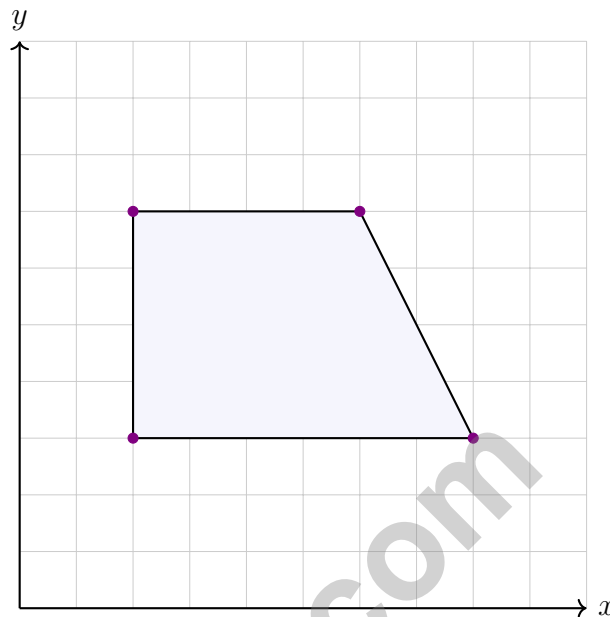
- 10) Which two statements both describe the same ratio?
- Statement X: The ratio is 5 : 15.
 - Statement Y: For every 1 apple there are 3 oranges.
- A. Only Statement X is correct. D. The statements describe different ratios.
- B. Only Statement Y is correct.
- C. Both statements describe the same ratio.
- 11) Two cyclists are training. Cyclist A travels 84 miles in 6 hours. Cyclist B travels 75 miles in 5 hours. Who is traveling faster?
- A. Cyclist A at 14 mph
 - B. Cyclist A at 12 mph
 - C. Cyclist B at 15 mph
 - D. Cyclist B at 14 mph
- 12) A scale drawing uses a ratio table. The ratio is 1 inch : 50 miles. If a distance on the map is 4 inches, how many miles is the actual distance?

Map (inches)	Actual (miles)
1	50
2	100
4	?

- A. 150 miles
- B. 200 miles
- C. 250 miles
- D. 400 miles



Scan me!
For more practice
& answers



1)

What is the length of the left side of this trapezoid?

- A. 3 units C. 5 units
 B. 6 units D. 4 units

2) Which is the BEST rewrite of the non-statistical question to make it statistical?

Original: "Who is the tallest person?"

- A. Who is the tallest sixth grader in the world? C. Is the tallest person male or female?
 B. How tall is the tallest person in inches? D. What is the typical height of sixth graders in my school?



Scan me!
For more practice
& answers

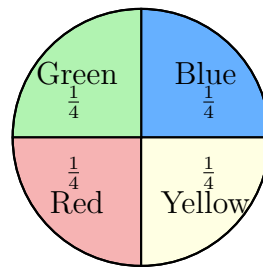
3) Grade distribution histogram: 60–69 (5 students), 70–79 (8 students), 80–89 (10 students), 90–100 (7 students). In which interval is the median grade?

A. 60~69

C. 80~89

B. 70~79

D. 90~100



4)

The spinner above is divided into sections with the labeled probabilities. What is the probability of spinning blue or red?

A. $\frac{1}{4}$

B. $\frac{3}{8}$

C. $\frac{3}{4}$

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

5) The stem-and-leaf plot below shows the heights (in cm) of students in a class.

Stem	Leaf
14	0, 2, 5
15	1, 4, 8, 9
16	3, 6, 7
17	2, 5

What is the minimum height?

A. 140 cm

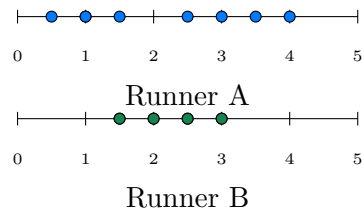
C. 145 cm

B. 142 cm

D. 150 cm



- 1) Two runners' sprint times (seconds) over 8 races. Which runner has more consistent sprint times?



- A. Runner A
 C. Both are equally consistent
 B. Runner B
 D. Cannot determine from dot plots
- 2) A box plot shows the distribution of test scores. The line inside the box marks the:
- A. Mean
 C. Mode
 B. Range
 D. Median
- 3) A student counts the number of jumping jacks completed by classmates and creates a frequency table. If the frequency of 25 jumping jacks is 3 and the frequency of 30 jumping jacks is 6, how many more students completed 30 jacks than 25 jacks?

Jumping Jacks	Frequency
20	2
25	3
30	6
35	4

- A. 2 more students
 C. 4 more students
 B. 9 more students
 D. 3 more students



Scan me!
For more practice
& answers

4) A data analyst looks at two side-by-side box plots. Plot A has $Q_1 = 10$, median = 20, $Q_3 = 30$. Plot B has $Q_1 = 15$, median = 20, $Q_3 = 25$. Which conclusion is INCORRECT?

- A. Both datasets have the same median.
- B. Dataset A has a larger IQR than Dataset B.
- C. Dataset B's lower whisker is longer than Dataset A's.
- D. Both datasets have the same spread.

5) A standard six-sided die is rolled. What is the probability of rolling a number less than or equal to 4?

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

6) Solve for x : $5x = 30$.

7) A stem-and-leaf plot of test scores has stem 7 with leaves 2, 5, 8. Which values are represented?

- A. 27, 57, 87
- B. 72, 75, 78
- C. 70, 71, 72
- D. 7.2, 7.5, 7.8



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.



Alabama Practice Test Answers and Explanations

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

Practice Test 1 Answers and Explanations

- 1) **Choice C is correct.** (6.26) Area = $6 \times 1.5 = 9$ yd².
- 2) **Choice C is correct.** (6.1) Multiply the model height by the scale: $10 \text{ cm} \times 0.8 \text{ m/cm} = 8 \text{ m}$.
- 3) **Choice B is correct.** (6.24) The median (middle value when ordered) is 2.5, largely unaffected by the outlier 5. The mean becomes 2.3 (affected), mode is 2, and range is 5 (which reflects the outlier).
- 4) **Choice B is correct.** (6.2) From the double number line, 1 hour equals 60 minutes. This is the standard conversion rate.
- 5) **Choice A is correct.** (6.6) Add: $0.75 + 1.2 + 0.8 + 0.6 = 3.95$ kg.
- 6) **Choice D is correct.** (6.10) The decimal $0.75 = \frac{75}{100} = \frac{3}{4}$, so $-0.75 = -\frac{3}{4}$.
- 7) **Choice A is correct.** (6.13) $-B = -4$ and $-A = -1$. Since $-4 < -1 < 0$, the order is $-B < -A < 0$.
- 8) **The correct answer is 52.** (6.23) Mean = sum / count. $45 = \text{sum}/8 \Rightarrow \text{sum} = 360$. Sum of 7 known values = $38 + 40 + 42 + 44 + 46 + 48 + 50 = 308$. Eighth value = $360 - 308 = 52$.
- 9) **Choice D is correct.** (6.21) Both 25 and 35 are divisible by 5. Dividing both parts by 5 gives $\frac{25}{5} : \frac{35}{5} = 5 : 7$.
- 10) **Choice C is correct.** (6.1) Simplify $5 : 15$ by dividing both parts by 5 to get $1 : 3$. That matches the phrase “for every 1 apple there are 3 oranges,” so both statements describe the same ratio.
- 11) **Choice C is correct.** (6.14) Cyclist A: $84 \div 6 = 14$ mph. Cyclist B: $75 \div 5 = 15$ mph. Cyclist B is faster.
- 12) **Choice B is correct.** (6.3) The ratio is $1 : 50$. When map distance is 4 inches (multiply by 4), actual distance is $50 \times 4 = 200$ miles.
- 13) **Choice D is correct.** (6.3) Columns 5–9 (5 wide) \times 10 high = 50 squares; column 0, rows 0–4 (5 squares) = 5. Total = $50 + 5 = 55$ squares = 55%.
- 14) **Choice D is correct.** (6.18) If the discount is 20%, the customer pays 80% of the original price. So $0.80 \times \text{original} = \80 . Original = $\$80 \div 0.80 = \100 .
- 15) **Choice C is correct.** (6.3) Store A: $2 \div 8 = 0.25$ per orange. Store B: $3 \div 12 = 0.25$ per orange. Same unit rate.
- 16) **The correct answer is 15%.** (6.4) Move the decimal two places right: $0.15 = 15\%$.
- 17) **Choice D is correct.** (6.3) Multiply: $3 \times 1000 = 3000$ meters.
- 18) **Choice C is correct.** (6.9) Brand X costs $\$3.00 \div 12 = \0.25 per ounce. Brand Y costs $\$4.50 \div 15 = \0.30 per ounce. Brand X has the lower unit price.
- 19) **Choice C is correct.** (6.1) The relationship is proportional because the ratio visits/days is constant: $100/1 = 200/2 = 300/3 = 100$. A constant increase alone is not enough to prove proportionality, but the constant ratio confirms it here.
- 20) **Choice B is correct.** (6.23) The ratio is $\frac{15}{100} = 0.15 = 15\%$.
- 21) **Choice D is correct.** (6.4) $\frac{5}{12} \div \frac{5}{12} = \frac{5}{12} \times \frac{12}{5} = \frac{60}{60} = 1$. Any nonzero number divided by itself equals 1.
- 22) **The correct answer is The population is all students in the school, and the sample is the students surveyed..** (6.22) Options A and C correctly distinguish between population (all students) and sample (those surveyed). Option B is wrong because the question is statistical. Option D is false because responses can vary. Option E is false because it does not have only one correct answer.
- 23) **Choice A is correct.** (6.5) $6,216 \div 38 = 163$ remainder 22. Verify: $38 \times 163 + 22 = 6,216$.
- 24) **Choice A is correct.** (6.8) Following the tree: $60 = 6 \times 10 = (2 \times 3) \times (2 \times 5) = 2 \times 2 \times 3 \times 5 = 2^2 \times 3 \times 5$.
- 25) **Choice B is correct.** (6.9) Moving left means subtracting. The number is $-2 - 5 = -7$.
- 26) **Choice B is correct.** (6.13) Absolute value $|-25| = 25$ represents the magnitude of the temperature change, not its direction.
- 27) **Choice C is correct.** (6.25) Quadrants I, II, and IV have at least one positive coordinate. Only Quadrant III (where both coordinates are negative) does not.



Author's Note

From a Friend Who Believes in You

Hi, Friend!

◇ I just want to say something important: I am proud of you. You did 5 full practice tests. That takes time, hard work, and heart. ◇

★ **Friendly truth:** a test is just one part of your math journey. You are SO much more than a score. The work you did is the real win! ★

What I Want You to Know

- **You are smart.** Every test you finished proves it.
- **You are brave.** You tried hard problems.
- **You are growing.** Mistakes taught you new things.
- **You are ready.** The skills are inside you.

One more thing: on test day, take a deep breath. Smile. Remember that someone (me!) believes in you. You can do this!

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

Jay Daie

Your Math Friend

PRACTICE MORE. ACHIEVE MORE.

This book provides **5 full-length Math practice tests** designed to help Grade 6 students strengthen their skills, build confidence, and excel on standardized assessments.

Each test is carefully crafted to reflect the latest standards and covers a wide range of math topics with realistic questions and detailed answer explanations.



BUILD CONFIDENCE

Practice builds familiarity and reduces test anxiety.



IMPROVE ACCURACY

Sharpen skills and avoid common mistakes.



ACHIEVE SUCCESS

Consistent practice leads to greater results.

WHAT'S INSIDE?



5 Full-Length Practice Tests

Realistic tests designed to mirror actual exam conditions.



Realistic Questions

A variety of question types to strengthen problem-solving skills.



Answer Keys & Explanations

Detailed solutions to help students learn and improve.



Performance Tracking

Track progress and identify areas that need improvement.



Comprehensive Coverage

All essential topics aligned with Grade 6 math standards.



VISIT [TESTINAR.COM/MATH6](https://www.testinar.com/math6)

FOR MORE PRACTICE TESTS AND LEARNING RESOURCES



PRACTICE
REGULARLY



STAY
FOCUSED



SOLVE
CONFIDENTLY



SUCCEED
BRIGHTLY

PREPARE TODAY. **SUCCEED TOMORROW!**