

# 8

FULL-LENGTH

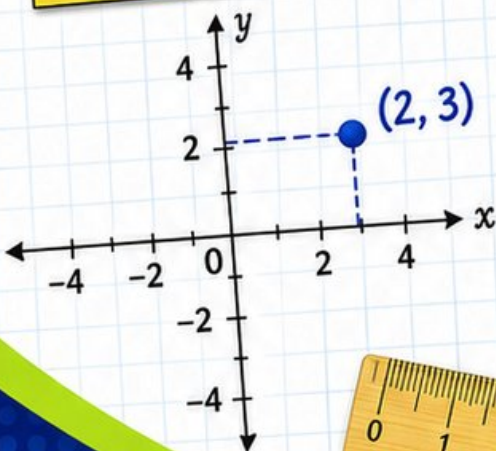
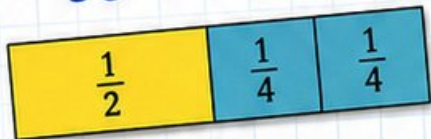
# Alabama ACAP

## GRADE 5

# MATH PRACTICE TESTS

Mixed Practice Questions with Answer Key  
for Students, Parents, and Teachers

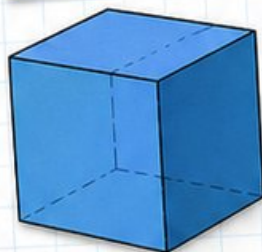
$$36 \div 4 = 9$$



$$2.4 \times 7 = 16.8$$

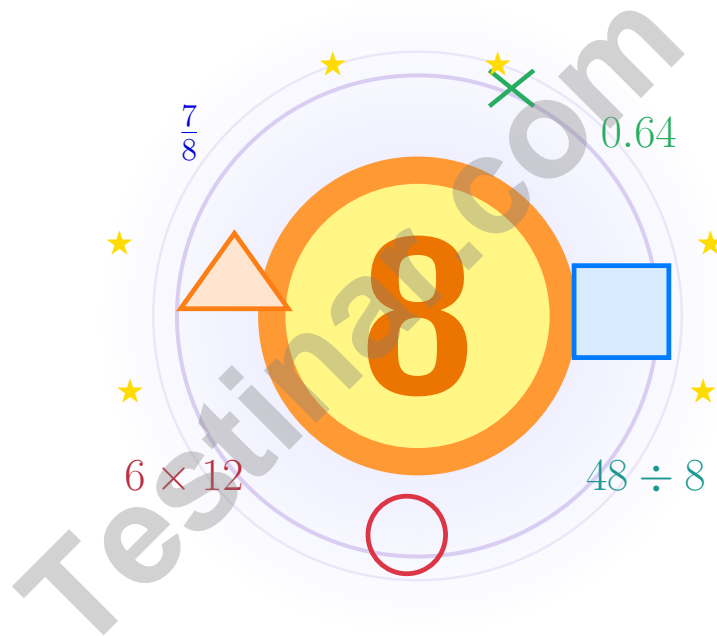
$$7 \times (12 - 5) = 49$$

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100



# 8 Alabama ACAP Grade 5 Math Practice Tests

*Clear review, strong habits, and step-by-step confidence for Grade 5*



Eight full tests, a focused quick review, and student-friendly support from the first page to the final check.

**Jay Daie and Reza Nazari**



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# Welcome!

This book is here to help you practice with purpose

## Dear Grade 5 Mathematician

This practice book gives you eight chances to slow down, think clearly, and build real math strength. Some questions will feel easy. Some will stretch you. That is exactly what good practice is supposed to do.

Try not to measure success by one score alone. A better sign of growth is when your work gets clearer, your checking gets stronger, and hard questions stop feeling so scary.

### Focus

Read closely and make a plan.

### Work

Show steps that are easy to follow.

### Reflect

Learn something from every correction.

**A strong habit from page one:** write neatly, estimate when it helps, use units carefully, and do not let one hard problem spoil the rest of the page.

# How to Use This Book

A simple routine that helps practice actually work

## Step 1

**Warm up with the quick review.**  
Spend a few minutes waking up key ideas before the test starts.

## Step 2

**Take one full practice test.**  
Choose a quiet spot and give your best careful effort.

## Step 3

**Check honestly.**  
Circle missed problems and notice which topics keep coming back.

## Step 4

**Fix and grow.**  
Read the explanation, repair the work, and carry that lesson into the next test.

## A Good 8-Week Rhythm

<b>Week 1</b>	Take Test 1 and notice your starting strengths.
<b>Week 2</b>	Take Test 2 and focus on reading questions carefully.
<b>Week 3</b>	Take Test 3 and sharpen fraction and decimal work.
<b>Week 4</b>	Take Test 4 and improve checking habits.
<b>Week 5</b>	Take Test 5 and pay close attention to units and labels.
<b>Week 6</b>	Take Test 6 and stay patient on longer word problems.
<b>Week 7</b>	Take Test 7 and compare your progress with the first half.
<b>Week 8</b>	Take Test 8 and finish with calm, steady, confident work.



Scan me

# Test Overview

## What these practice tests help students do

These eight practice tests are built to help Grade 5 students grow comfortable with the kinds of math thinking used on the Alabama ACAP. The goal is not just to pick an answer. The goal is to read carefully, choose a smart strategy, solve step by step, and explain your work when needed.

### Selected-Response Questions

You solve the problem and choose the best answer. Strong habits still matter: estimate first, cross out weak choices, and make sure the result fits the question.

### Constructed-Response Questions

You show your thinking, write your steps, or explain how you solved the problem. Clear work helps you think better and makes it easier to catch mistakes.

### Grade 5 Skills You Will Practice Often

- place value, comparing numbers, and rounding
- multi-digit addition, subtraction, multiplication, and division
- fractions, mixed numbers, and decimals
- perimeter, area, volume, and measurement conversions
- tables, line plots, patterns, and coordinate points
- geometry and multi-step word problems

**What strong work looks like:** correct math, clear steps, the right unit or label, and a final answer that makes sense in the problem.



# Table of Contents

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## Grade 5 Mathematics Reference Materials

### PERIMETER AND AREA

Perimeter of Rectangle  $P = 2l + 2w$  or  $P = 2(l + w)$

Area of Rectangle  $A = l \times w$

Area of Triangle  $A = \frac{1}{2} \times b \times h$

Volume of Rectangular Prism  $V = l \times w \times h$

### LENGTH

#### Customary

1 foot (ft) = 12 inches (in.)

1 yard (yd) = 3 feet (ft)

1 yard (yd) = 36 inches (in.)

#### Metric

1 meter (m) = 100 centimeters (cm)

1 centimeter (cm) = 10 millimeters (mm)

1 kilometer (km) = 1,000 meters (m)

### CAPACITY

#### Customary

1 cup (c) = 8 fluid ounces (fl oz)

1 pint (pt) = 2 cups (c)

1 quart (qt) = 2 pints (pt)

1 gallon (gal) = 4 quarts (qt)

#### Metric

1 liter (L) = 1,000 milliliters (mL)

### WEIGHT AND MASS

#### Customary

1 pound (lb) = 16 ounces (oz)

#### Metric

1 kilogram (kg) = 1,000 grams (g)

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### TIME

1 minute (min) = 60 seconds (sec)    1 week = 7 days

1 hour (hr) = 60 minutes (min)    1 year = 12 months

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1) A student buys fabric for a project. She needs 2.5 yards per garment and makes 8 garments. How much fabric does she use?

- A. 18 yards                       C. 20 yards  
 B. 19 yards                       D. 22 yards

2) Evaluate the expression carefully:  $10 + 2 \times (8 - 3) \div 5$

- A. 12                                       C. 20  
 B. 14                                       D. 30

3) A student claims  $25 \times 100 = 2500$ . Is the product correct?

- A. Yes; the product is correct for this whole-number problem       C. No; zeros go on the left, not the right  
 B. No; the product should be 250                       D. No; the product should be 25,000

4) Pattern Q and Pattern R are shown in the table. What is the relationship?

<b>Pattern Q</b>	2	3	4	5
<b>Pattern R</b>	5	8	11	14

- A. Add 3 to each Q value  
 B. Multiply each Q value by 3, then subtract 1  
 C. Double each Q value, then add 1  
 D. Add 2 to each Q value
- 5) Mistake hunt: A student computed  $3.4 \times 1000$  and wrote 3.4. What error did the student make?

- A. Moved decimal 2 places instead of 3       C. Did not move the decimal point  
 B. Moved decimal left instead of right       D. No error; answer is correct



6) Find:  $5,600 \div 10^2$ .

*Record your answer in the space provided.*

7) Look at the pattern: 100, 90, 80, 70, ... What is the 10th term?

*Record your answer in the space provided.*

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- 1) Diagram: Multiplying tens by hundreds.  $30 \times 200$  can be shown as  $3 \times 2$  with three place-value zeros. What is  $30 \times 200$ ?

$3 \times 2$	tens
--------------	------

hundreds	$= 6,000$
----------	-----------

- A. 600
- B. 6,000
- C. 60,000
- D. 600,000

- 2) Round 9.075 to the nearest tenth.

*Record your answer in the space provided.*

- 3) A box uses 18 unit cubes arranged in a  $3 \times 3 \times 2$  prism. What is the volume?

*Record your answer in the space provided.*



## Grade 5 Mathematics Reference Materials

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- 1) Which formula correctly gives the volume of a rectangular prism?
- A.  $V = l + w + h$                        C.  $V = B + h$   
 B.  $V = l \times w \times h$                        D.  $V = l \times w + h$
- 2) A recipe calls for  $2 \times (3 + 1)$  cups of flour. What is the interpretation?
- A. Double the sum of 3 and 1 cups  
 B. 2 cups plus 3 cups plus 1 cup  
 C. 2 times 3, plus 1 cup  
 D. Half the sum of 3 and 1 cups
- 3) A box has 10 pounds of sand. Each small bag holds one half pound. Which division equation matches the situation?
- A.  $\frac{1}{2} \div 10 = n$                        C.  $10 \times \frac{1}{2} = n$   
 B.  $10 \div \frac{1}{2} = n$                        D.  $10 + \frac{1}{2} = n$
- 4) A sandwich shop earned \$189.00 from turkey sandwiches and \$206.50 from ham sandwiches in one day. What was the total revenue?

*Record your answer in the space provided.*

- 5) In a science experiment graph, the x-axis shows time in weeks and the y-axis shows plant height in centimeters. The point (4, 12) on the graph means:
- A. After 4 weeks, the plant is 12 cm tall     C. After 12 weeks, the plant is 4 cm tall  
 B. A 4 cm plant grows for 12 weeks         D. It takes 4 cm to reach 12 weeks



## Grade 5 Mathematics Reference Materials

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1) Which expression equals 0.042?

A.  $42 \div 10$

C.  $42 \div 100$

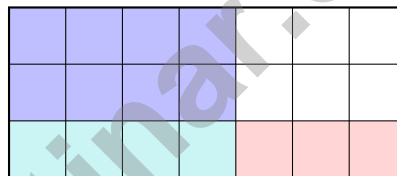
B.  $4.2 \div 10$

D.  $4.2 \div 100$

2) Find the sum:  $1\frac{3}{8} + 2\frac{1}{4}$ .

*Record your answer in the space provided.*

3) The area model shows one fraction shaded vertically and another fraction shaded horizontally. Which multiplication expression matches the overlap?



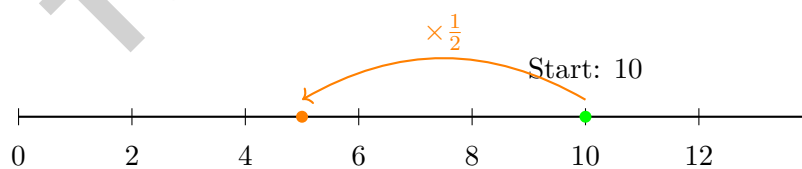
A.  $\frac{2}{3} \times \frac{1}{7}$

C.  $\frac{1}{3} \times \frac{3}{7}$

B.  $\frac{1}{3} \times \frac{4}{7}$

D.  $\frac{2}{3} \times \frac{3}{7}$

4)



If you multiply 10 by  $\frac{1}{2}$ , where does the product land on the number line?

A. At 5

C. At 20

B. At 10

D. At 0



## Practice Test Answer Keys

### How to use this section:

1. check your answer
2. circle missed questions
3. rework them before reading the explanation

**Good correction habits build strong scores.**

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## Practice Test Answers and Explanations

### Practice Test 1 Answers and Explanations

- Choice C is correct.** (5.8)  $2.5 \times 8 = 20$ . Multiply:  $25 \times 8 = 200$ , then place decimal one place from right:  $20.0 = 20$  yards.
- Choice A is correct.** (5.1) Parentheses first:  $8 - 3 = 5$ . Then multiply and divide from left to right:  $2 \times 5 = 10$  and  $10 \div 5 = 2$ . Finally,  $10 + 2 = 12$ .
- Choice A is correct.** (5.1) The product is correct:  $25 \times 100 = 2500$ . A more precise way to say the rule is that multiplying by 100 shifts the digits two places left in the place-value chart.
- Choice B is correct.** (5.7) Check the table:  $3 \times 2 - 1 = 5$ ,  $3 \times 3 - 1 = 8$ , and  $3 \times 5 - 1 = 14$ .
- Choice C is correct.** (5.3) The student should multiply by 1000, moving the decimal 3 places right to get 3400. Writing 3.4 again means the decimal point did not move.
- The correct answer is 56.** (5.3)  $10^2 = 100$ . Dividing by 100 removes two zeros (or moves decimal two places left):  $5,600 \rightarrow 56$ .
- The correct answer is 10.** (5.3) Each term decreases by 10. Term 10:  $100 - 9 \times 10 = 100 - 90 = 10$ .
- Choice D is correct.** (5.2) Points on the same horizontal grid line have the same second coordinate, but their first coordinates can be different. Points A, B, C are all 5 units above the x-axis and have first coordinates 2, 5, and 8.
- Choice C is correct.** (5.3) In 15.375, the decimal digits are: 3 (tenths), 7 (hundredths), 5 (thousandths). The digit in the hundredths place is 7.
- The correct answer is 6.** (5.14) The known length and height make groups of  $6 \times 4 = 24$  cubic centimeters. Since  $144 \div 24 = 6$ , the width is 6 cm.
- Choice D is correct.** (5.14) Each team's share is  $240 \div 3 = 80$ . After spending \$15, each team has  $80 - 15 = \$65$  left. The correct expression is  $(240 \div 3) - 15$ .
- Choice A is correct.** (5.5) Grid shows: Grid 1 (0.3) fills 3 columns. Grid 2 (0.5) fills 5 columns. Grid 3 (0.21) fills 2 columns plus small part. Order:  $0.21 < 0.3 < 0.5$ .
- Choice D is correct.** (5.18) Volume =  $8 \times 6 \times 4 = 192$  cubic inches.
- Choice D is correct.** (5.18) Find each part first: Prism A is  $7 \times 4 \times 4 = 112$  cubic inches, and Prism B is  $6 \times 4 \times 4 = 96$  cubic inches. Because the parts do not overlap, add them:  $112 + 96 = 208$  cubic inches.
- Choice D is correct.** (5.23) Every rectangle has 4 right angles ( $90^\circ$  each). Not all rectangles have equal sides (only squares do).
- Choice B is correct.** (5.12) There are 5 groups of  $\frac{2}{7}$ , so multiply  $5 \times 2$  in the numerator:  $5 \times \frac{2}{7} = \frac{10}{7} = 1\frac{3}{7}$ .
- Choice B is correct.** (5.9)  $1\frac{1}{12} \approx 1$  and  $\frac{7}{8} \approx 1$ . So  $1\frac{1}{12} + \frac{7}{8} \approx 1 + 1 = 2$ . All others sum to less than 1.
- Choice A is correct.** (5.22) The top and bottom sides are parallel, but the left and right sides are not parallel. So the figure has exactly one pair of parallel sides.
- Choice B is correct.** (5.10)  $1 = \frac{6}{6}$ .  $\frac{6}{6} - \frac{2}{6} = \frac{4}{6} = \frac{2}{3}$ .
- Choices A, C are correct.** (5.1) Start with the grouped addition:  $8 + 4 = 12$ . Then  $12 \div 2 = 6$ , and  $6 + 1 = 7$ , so A and C are true. Choice B skips the grouping, and choice D gives the wrong final value.
- Choice D is correct.** (5.12)  $\frac{1}{2} \div 4 = \frac{1}{2} \times \frac{1}{4} = \frac{1}{8}$  cup.
- Choice D is correct.** (5.4)  $\frac{7}{10} = 0.7$  (tenths) and  $\frac{1}{100} = 0.01$  (hundredths), so  $4 + 0.7 + 0.01 = 4.71$ .
- Choice C is correct.** (5.4) There are three ribbons at  $\frac{1}{2}$  yard. Their total length is  $\frac{1}{2} + \frac{1}{2} + \frac{1}{2} = 1\frac{1}{2}$  yards.
- The correct answer is 700.** (5.3)  $10^2 = 100$ , so  $7 \times 10^2 = 7 \times 100 = 700$ .
- Choice C is correct.** (5.3) A right isosceles triangle has one 90-degree angle and two equal sides (the legs).
- Choice A is correct.** (5.21) There are 12 equal cells. The double-shaded overlap covers 4 cells, so the product is  $\frac{4}{12} = \frac{1}{3}$ .
- Choice B is correct.** (5.9) The denominator 10 is multiplied by 3 to make 30. Multiply the numerator by 3:  $\frac{7}{10} = \frac{21}{30}$ .
- Choice D is correct.** (5.15)  $2 \div \frac{1}{3} = 2 \times 3 = 6$ . There are 6 one-third pizzas in 2 whole pizzas.
- Choice D is correct.** (5.3) Each term is one-tenth of the term before it:  $500 \rightarrow 50 \rightarrow 5 \rightarrow 0.5$ . The rule is divide by 10 each time.



### Lab Notes for a Future Scientist

#### Dear Curious Scientist,

◇ 8 tests. Many experiments. Tons of data. You've been running a research project on yourself, and the results are clear: you are better at math today than you were when you started. That's what science calls progress, and you earned it. ◇

★ **What scientists know:** a failed experiment is still useful data. Every problem you missed taught you something. You used that data to adjust, retry, and improve. That's how science works. That's how you've been working. ★

#### Lab Results

- **Hypothesis:** CONFIRMED. Effort + practice = real growth.
- **Method:** STRONG. You try strategies, observe what works, and adjust.
- **Data Collection:** CAREFUL. You read carefully and copy numbers exactly.
- **Conclusion:** CONFIDENT. You're test-ready.

**Scientist's tip:** curious minds make great test-takers. On test day, be curious about each question. Ask, "What is this asking?" Ask, "What's the smartest way?" Then experiment, observe, and answer. You will do great.

If you want to share a proud moment or ask a question, please email me at [jay@testinar.com](mailto:jay@testinar.com). I'd love to hear from you!

**Jay Daie**

Your Math Scientist (Keep Questioning)

$45 \div 5 = ?$

# PRACTICE TODAY.

$\frac{3}{5} + \frac{1}{10} = ?$



## ACHIEVE TOMORROW!



$3^2 + 4^2 = 25$

This book includes **8** full-length **Grade 5** math practice tests to help students master essential skills, build confidence, and achieve success. Each test is carefully designed to reflect real math standards and cover a variety of question types with detailed answer explanations.

$7x - 4 = 17$

$1\frac{1}{2} + 2\frac{1}{3} = ?$

## 8 FULL-LENGTH MATH PRACTICE TESTS



### REALISTIC PRACTICE

Tests mirror Grade 5 math standards and real assessment formats.



### ANSWER KEY INCLUDED

Detailed answer explanations help students understand and learn.



### BUILD CONFIDENCE & SKILLS

Strengthens problem-solving abilities and reinforces key math concepts.



### IMPROVE & TRACK PROGRESS

Identify strengths and focus on areas that need improvement.



### ACHIEVE SUCCESS

Boosts test readiness and helps students achieve their best results.

### COVERS ALL KEY GRADE 5 MATH TOPICS

- ✓ Whole Numbers & Operations
- ✓ Fractions & Decimals
- ✓ Algebraic Thinking
- ✓ Geometry
- ✓ Measurement & Data
- ✓ Number Patterns
- ✓ Word Problems
- ✓ Ratio & Proportion
- ✓ Perimeter, Area & Volume
- ✓ Graphing & Data Analysis

...and More!



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Practice with purpose. Succeed with confidence!