

4

COMPLETE

Alabama ACAP

Grade

MATH

5

PRACTICE TESTS

Standards-Based Test Prep with
Mixed Review, Word Problems,
and **Full Answer Key**



- ✓ **4 COMPLETE PRACTICE TESTS**
Built to reflect the test format and rigor



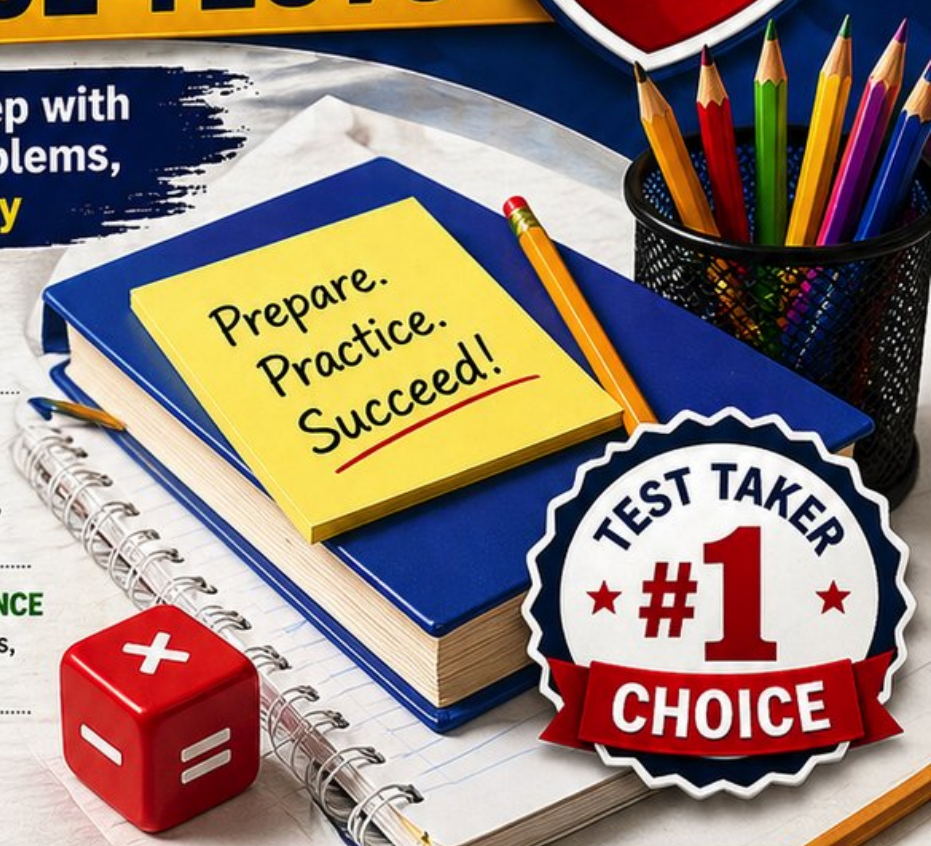
- ✓ **COVERS ALL ESSENTIAL TOPICS**
Numbers & Operations, Fractions, Decimals, Geometry, Measurement, Data & Probability, and more



- ✓ **STRENGTHEN SKILLS & CONFIDENCE**
Mixed review, challenging questions, and strategic practice



- ✓ **FULL ANSWER KEY INCLUDED**
Detailed explanations for every question



**BUILD STRONG
MATH SKILLS
& TEST READINESS**



**IMPROVE ACCURACY,
SPEED, AND
PROBLEM SOLVING**



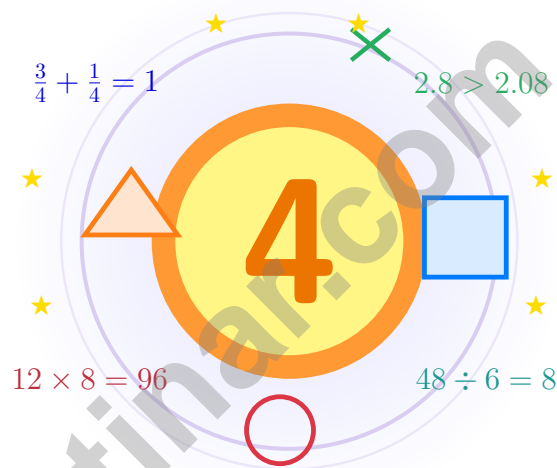
**PERFECT FOR
CLASSROOM,
HOME, OR
SELF-STUDY**



**ALIGNED TO ALABAMA
ACADEMIC CONTENT
STANDARDS (ACAP)**

4 Alabama ACAP Grade 5 Math Practice Tests

A four-test math mission with strategy boosts, bright review, and growing confidence



Four full tests, a lively quick review, stronger table guides, and student-friendly support that make Grade 5 practice feel focused, fresh, and doable.

Jay Daie and Reza Nazari



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Welcome to the Math Mission

This book turns practice into progress, one smart step at a time

To the Grade 5 Explorer

This book gives you four chances to read closely, solve carefully, and level up your math thinking. Some questions will feel quick. Others will ask for patience, scratch work, and a second try. Both kinds help you grow.

You do not need to feel perfect before you begin. Stay curious, use strategies, and learn from every correction. That is how confident mathematicians are built.

Spot Clues

Notice what the problem shows, says, and asks.

Build a Plan

Choose a strategy and work through it step by step.

Bounce Back

Let mistakes show you exactly what to practice next.

A strong mission habit: keep your work neat, estimate when it helps, label units carefully, and never let one hard question decide your mood for the whole page.

How to Use This Book

A four-step routine that turns practice into real improvement

Step 1: Power Up

Start with the quick review.

Wake up important ideas before the test begins so your brain is ready to use them.

Step 2: Take the Test

Work through one full practice test.

Choose a calm spot and aim for careful choices before quick ones.

Step 3: Decode Mistakes

Check your work honestly.

Circle missed questions and notice which skills, habits, or directions need another look.

Step 4: Bring the Lesson Forward

Repair, reflect, and retry.

Fix the work, read the explanation, and carry that lesson into the next test.



Scan me

A Four-Week Mission Map

| Week | Mission Focus |
|--------|---|
| Week 1 | Take Test 1 and learn where you already feel strong. Your first score is a starting point, not a final label. |
| Week 2 | Take Test 2 and give extra attention to word problems, visual models, and showing your steps clearly. |
| Week 3 | Take Test 3 and sharpen your checking habits, especially with multiplication, division, fractions, and decimals. |
| Week 4 | Take Test 4 and bring together everything you practiced: calm pacing, organized work, and confident final checks. |



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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

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Metric

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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

1 day = 24 hours (hr) 1 year = 52 weeks



1) Which expression represents “subtract 8 from 3 times 12”?

A. $8 - 3 \times 12$

C. $3 \times (12 - 8)$

B. $(8 \times 3) - 12$

D. $3 \times 12 - 8$

2) A teacher has $\frac{1}{5}$ of a chocolate bar. She divides it equally among 3 students. How much chocolate does each student get?

A. $\frac{1}{15}$ of the bar

C. $\frac{1}{2}$ of the bar

B. $\frac{3}{5}$ of the bar

D. $\frac{1}{8}$ of the bar

3) Table: identify the decimal form of the missing row.

| Word Form | Decimal | Fraction |
|-------------------------|---------|-------------------|
| One and four tenths | 1.4 | $\frac{14}{10}$ |
| Five and six hundredths | ? | $\frac{506}{100}$ |

A. 5.006

C. 5.6

B. 5.06

D. 50.6

4) A teacher has $\frac{5}{6}$ hour to teach. $\frac{1}{3}$ of the time is spent on math. How much time is spent on math?

A. $\frac{5}{18}$ hour

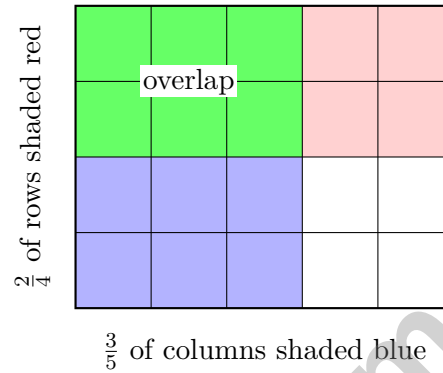
C. $\frac{1}{2}$ hour

B. $\frac{2}{9}$ hour

D. $\frac{4}{6}$ hour



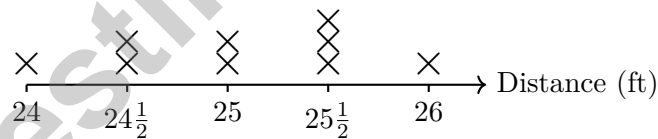
- 5) Use the area model to find $\frac{3}{5} \times \frac{2}{4}$. The grid is split into 5 columns and 4 rows. The first factor marks 3 of the 5 columns, and the second factor marks 2 of the 4 rows. The overlap is the part counted for the product.



What is the product?

- A. $\frac{3}{10}$
 C. $\frac{6}{9}$
 B. $\frac{5}{9}$
 D. $\frac{7}{20}$

- 6) The line plot shows distances (in feet) that students threw a ball:



What is the difference between the total distance of all throws at $25\frac{1}{2}$ feet and the total distance of all throws at $24\frac{1}{2}$ feet?

- A. 2 feet
 C. $27\frac{1}{2}$ feet
 B. 27 feet
 D. $76\frac{1}{2}$ feet



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- 1) A baker uses $\frac{1}{2}$ of a 5-pound bag of sugar. Then she uses $\frac{3}{4}$ of that amount for a cake. How many pounds of sugar did she use in the cake?
- A. $\frac{3}{8}$ pound
- B. $\frac{3}{4}$ pound
- C. $1\frac{7}{8}$ pounds
- D. 2 pounds
- 2) Evaluate: $9 \times 4 - 16 \div 4$
- A. 5
- B. 25
- C. 30
- D. 32
- 3) A small display box measures 12 centimeters long, 7 centimeters wide, and 5 centimeters tall. What is its volume?
- A. 420 cubic centimeters
- B. 84 cubic centimeters
- C. 60 cubic centimeters
- D. 35 cubic centimeters
- 4) A student's garden has $\frac{3}{10}$ planted with carrots and $\frac{4}{10}$ with tomatoes. What is left unplanted?
- A. $\frac{1}{10}$
- B. $\frac{7}{10}$
- C. $\frac{6}{10}$
- D. $\frac{3}{10}$
- 5) The expanded form of a number is $8 + 0.5 + 0.03 + 0.001$. What is the number in standard form?
- A. 8531
- B. 8.531
- C. 85.31
- D. 0.531



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1) Compare without computing: $(45 - 15) + 8$ \square $(45 - 15) - 8$

A. $>$

B. $<$

C. $=$

D. Cannot tell

2) Convert: 4 feet = ? inches.

Record your answer in the space provided.

3) A school stores books in one large bin that weighs 125 kg and sports equipment in another bin that weighs 87.5 kg. What is the total weight in grams?

Use: 1 kg = 1,000 grams

A. 212,500 grams

B. 21,250 grams

C. 212,050 grams

D. 274,750 grams

4) A composite solid is made from two non-overlapping prisms. One prism measures 8 cm by 3 cm by 4 cm, and the other measures 5 cm by 3 cm by 4 cm. Which expression finds the total volume?

A. $8 + 3 + 4 + 5 + 3 + 4$

B. $(8 \times 5) + (3 \times 4)$

C. $8 \times 5 \times 4$

D. $(8 \times 3 \times 4) + (5 \times 3 \times 4)$



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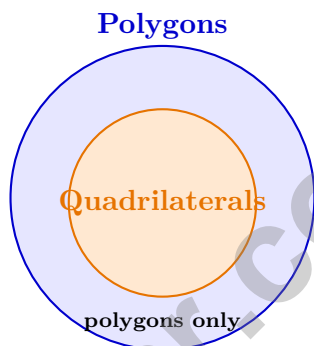
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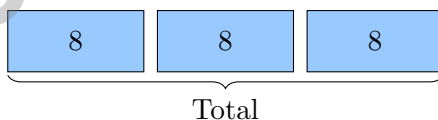
- 1) A composite play structure is made from two non-overlapping rectangular prisms. Prism A is 5 meters long, 4 meters wide, and 3 meters tall. Prism B is 6 meters long, 2 meters wide, and 5 meters tall. What is the total volume?

- A. 60 cubic meters C. 130 cubic meters
 B. 140 cubic meters D. 120 cubic meters

- 2) A Venn diagram has a large circle for polygons and a smaller circle inside it for quadrilaterals. Where should a pentagon be placed?



- A. Inside quadrilaterals D. In the intersection of polygons and quadrilaterals
 B. Outside polygons C. Inside polygons only
- 3) The tape diagram shows an expression. Which matches it?



- A. $8 + 3$ C. $8 - 3$
 B. 3×8 D. $8 \div 3$



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

- 1) **Choice D is correct.** (5.12) First write “3 times 12” as 3×12 . Then subtract 8 from that product: $3 \times 12 - 8$.
- 2) **Choice A is correct.** (5.12) $\frac{1}{5} \div 3 = \frac{1}{5} \times \frac{1}{3} = \frac{1}{15}$.
- 3) **Choice B is correct.** (5.4) “Five and six hundredths” is written as 5.06 in decimal form (5 wholes, 0 tenths, 6 hundredths).
- 4) **Choice A is correct.** (5.14) $\frac{1}{3} \times \frac{5}{6} = \frac{5}{18}$ hour.
- 5) **Choice A is correct.** (5.18) The model marks 3 of the 5 columns and 2 of the 4 rows. Their overlap covers $3 \times 2 = 6$ of the 20 total squares, so $\frac{3}{5} \times \frac{2}{4} = \frac{6}{20} = \frac{3}{10}$.
- 6) **Choice C is correct.** (5.14) There are three throws at $25\frac{1}{2}$ feet, for a total of $76\frac{1}{2}$ feet. There are two throws at $24\frac{1}{2}$ feet, for a total of 49 feet. The difference is $76\frac{1}{2} - 49 = 27\frac{1}{2}$ feet.
- 7) **Choice B is correct.** (5.9) $5\frac{3}{4} \approx 6$. So $12 - 5\frac{3}{4} \approx 12 - 6 = 6$.
- 8) **Choice C is correct.** (5.20) To find the farthest right point, look for the largest x-coordinate. Point J at (9, 8) has x-coordinate 9, which is the largest.
- 9) **Choice D is correct.** (5.6) Multiply: $132 \times 24 = 132 \times (20 + 4) = 2,640 + 528 = 3,168$.
- 10) **Choice A is correct.** (5.14) The known length and height make groups of $12 \times 5 = 60$ cubic centimeters. Divide the volume by 60: $360 \div 60 = 6$ cm.
- 11) **Choice A is correct.** (5.18) $V = l \times w \times h = 12 \times 8 \times 5 = 480 \text{ cm}^3$.
- 12) **Choice A is correct.** (5.18) The first prism is $6 \times 4 \times 4 = 96$ cubic meters. The second is $6 \times 4 \times 3 = 72$ cubic meters. Together they make 168 cubic meters.
- 13) **The correct answer is 4 cm.** (5.14) The base area is $9 \times 5 = 45$ square centimeters. Divide 180 by 45 to get a height of 4 centimeters.
- 14) **Choice D is correct.** (5.21) A right triangle with all three sides of different lengths is a right scalene triangle.
- 15) **Choice A is correct.** (5.7) Pattern H is twice Pattern G: $3 \times 2 = 6$, $6 \times 2 = 12$, $9 \times 2 = 18$, $12 \times 2 = 24$, $15 \times 2 = 30$.
- 16) **Choice B is correct.** (5.8) $0.7 \times 0.8 = 0.56$. When multiplying two decimals both less than 1, the product is smaller than either factor.
- 17) **Choice A is correct.** (5.14) Each whole contains 4 pieces of size $\frac{1}{4}$. With 3 wholes, there are $3 \times 4 = 12$ pieces.
- 18) **Choice B is correct.** (5.20) The x-coordinate is the number of apples (8), and the y-coordinate is the cost in dollars (4). So 8 apples cost \$4.
- 19) **Choice B is correct.** (5.7) $1,620 \div 27 = 60$ books per box. Check: $27 \times 60 = 1,620$.
- 20) **Choice C is correct.** (5.3) 10^3 means 1,000. Multiplying 0.01 by 1,000 moves the decimal three places right, giving 10.
- 21) **Choice B is correct.** (5.3) The nonzero parts make $6 \times 7 = 42$, which has no trailing zero. The three factor zeros give 42,000, so there are 3 zeros.
- 22) **Choices A, B are correct.** (5.9) $2\frac{1}{3} - 1\frac{1}{2} = \frac{5}{6}$ cup left, so A is true. Since $\frac{5}{6}$ is less than 1, B is also true. C miscalculates; D is false.
- 23) **The correct answer is (4, 20).** (5.20) The 4th term of Pattern A is 4, and the 4th term of Pattern B is 20. So the ordered pair is (4, 20).
- 24) **Choice C is correct.** (5.17) 8:30 AM to 1:15 PM: from 8:30 to 12:30 is 4 hours, 12:30 to 1:15 is 45 minutes. Total: 4 hours 45 minutes.
- 25) **The correct answer is 5.26.** (5.3) Dividing by 10 moves the decimal point one place left: $52.6 \rightarrow 5.26$.
- 26) **Choice B is correct.** (5.20) Starting at (2, 1), add the width: $2 + 5 = 7$ for the x-coordinate. Add the height: $1 + 3 = 4$ for the y-coordinate. The top-right vertex is at (7, 4).
- 27) **The correct answer is 47 cm.** (5.15) Add the heights shown by the marks: $6 + 3(6\frac{1}{2}) + 2(7) + 7\frac{1}{2} = 47$ centimeters.
- 28) **Choice B is correct.** (5.10) LCD = 12. $\frac{3}{4} = \frac{9}{12}$; $\frac{1}{6} = \frac{2}{12}$; $\frac{9}{12} - \frac{2}{12} = \frac{7}{12}$.
- 29) **Choice A is correct.** (5.9) Divide both numerator and denominator by 4: $\frac{8}{100} = \frac{2}{25}$.



Captain's Log—Voyage Complete

First Mate, Well Done!

◇ You sailed through 4 practice tests with steady hands and a sharp eye. The waters got rough sometimes, but you kept your course. That's what good sailors do. Now the harbor (test day) is in sight, and you are ready to dock with confidence. ◇

★ **Captain's wisdom:** a good sailor doesn't fight the wind—they read it and adjust. On a test, the same thing is true. When a problem feels tricky, don't panic. Read it again. Try a new strategy. Adjust the sails of your thinking. ★

Captain's Skills Inventory

- **Steady Steering:** EXCELLENT! You stay on course even when problems get tough.
- **Wind Reading:** STRONG! You can spot what a problem is really asking.
- **Crew Spirit:** HIGH! You believe in your own ability.
- **Harbor Approach:** READY! You know how to finish a test calmly.

Final captain's note: the best voyages combine planning with courage. You have both. Trust the chart you built through these 4 tests. Trust your hands on the wheel. Then sail confidently into test day.

If you'd like to share your experience or have questions, please email me at reza@testinar.com. I'd love to hear from you!

Reza Nazari & Jay Daie

Your Math Captain (Smooth Sailing Ahead)

4 COMPLETE TESTS. CONFIDENCE. SUCCESS.



Give your child the practice and confidence they need to excel in **Grade 5 Math**. This book includes **4 full-length** practice tests designed to build skills, improve test readiness, and help students reach their full potential.

WHAT'S INSIDE:



4 COMPLETE PRACTICE TESTS

Full-length tests that reflect real test format and rigor.



COVERS ALL GRADE 5 TOPICS

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Build problem-solving skills with mixed review questions and real-world word problems.



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Step-by-step explanations for every question to help students learn and improve.



BUILD CONFIDENCE & IMPROVE SCORES

Practice consistently, reduce test anxiety, and achieve your best score!



PRACTICE SMART. LEARN MORE. ACHIEVE YOUR BEST.



Strengthen
Math Skills



Improve
Accuracy
& Speed



Master
Essential
Concepts



Boost
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on Test Day



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