



# 6

# Arkansas ATLAS



# GRADE 5 MATH

## PRACTICE TESTS

Complete Standards-Based Practice  
— for Grade 5 Math Success —



$$5^2 = 25$$



**6 FULL-LENGTH PRACTICE TESTS**  
Realistic style questions



**STANDARDS-BASED PRACTICE**  
Covers all Grade 5 Math standards

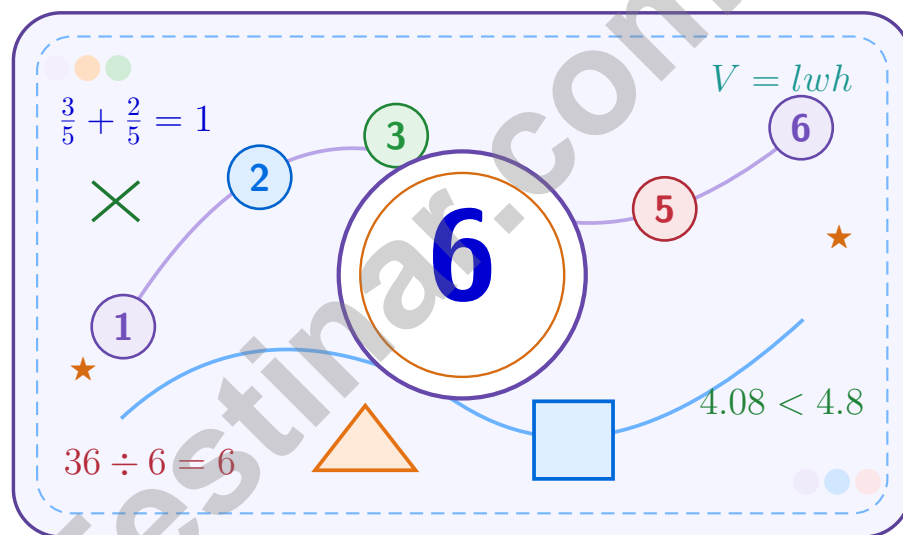


**BUILD CONFIDENCE. IMPROVE SCORES.**  
Target weak areas and achieve success

★ STRONG PRACTICE. BRIGHT FUTURE. ★

# 6 Arkansas ATLAS Grade 5 Math Practice Tests

*A six-step confidence climb with clear review, smart strategy, and practice that gets stronger every round*



Six full tests, a focused skill booster, and student-friendly support from start to finish for Grade 5 mathematicians who want to climb higher.

Jay Daie and Reza Nazari



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# Welcome to the Confidence Climb

This book is here to help you practice with purpose and rise step by step

## To the Grade 5 Mathematician

This practice book is a place to think, try, fix, and grow. You do not have to be perfect on the first question or the first test. What matters most is careful effort, clear work, and learning from each round of practice.

Use these six tests like stepping-stones. Take one test at a time, check your answers honestly, and notice which skills need more attention. Small improvements add up fast.

### Try

Give each problem your best thinking.

### Check

Study mistakes and learn what happened.

### Rise

Bring that lesson into the next round.

**A strong habit for every page:** read carefully, estimate when it helps, show your steps, and keep going even when a question feels tricky. That is how steady math confidence is built.

# How to Use This Book

A simple practice routine that turns six tests into steady growth

## Step 1: Warm Up

**Start with the quick review.**  
Spend a few minutes refreshing the ideas before you start a test.

## Step 2: Take the Test

**Take one full practice test.**  
Work in a quiet space and let accuracy matter more than speed.

## Step 3: Study the Pattern

**Check your work honestly.**  
Circle missed questions and notice patterns in the mistakes.

## Step 4: Learn, Then Retry

**Read the explanation and try again.**  
Learning happens after the test too. Fixing mistakes is one of the smartest parts of practice.

## A Six-Week Climb Map

Week	Mission Focus
<b>Week 1</b>	Take Test 1 and review any place-value or operation slips.
<b>Week 2</b>	Take Test 2 and focus on showing neat, easy-to-read work.
<b>Week 3</b>	Take Test 3 and give extra time to fractions or decimals if needed.
<b>Week 4</b>	Take Test 4 and slow down on word problems and units.
<b>Week 5</b>	Take Test 5 and compare your score and habits with earlier rounds.
<b>Week 6</b>	Take Test 6 and finish with calm, careful, confident work that uses everything you practiced before.



Scan me

# Test Overview

## What this practice book helps students do

These practice tests are designed to help Grade 5 students get comfortable with the kind of thinking used on the Arkansas ATLAS. The goal is bigger than only getting answers right. Students are practicing how to read closely, choose a strategy, solve carefully, and explain their work when needed.

### Selected-Response Questions

Students solve the problem and choose the best answer. Estimating first and crossing out weak choices can save time and points.

### Constructed-Response Questions

Students show their thinking, steps, models, or explanations. Even when unsure, writing what they know can help organize the problem.

### Grade 5 Skills You Will Practice Often

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

**What strong work looks like:** the answer is correct, the steps are clear, the labels or units are included, and the final result makes sense.



# Table of Contents

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Grade 5 Mathematics

1

Questions: 40 Duration: No time limit

Calculator Policy: Calculators are not allowed



## 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)

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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

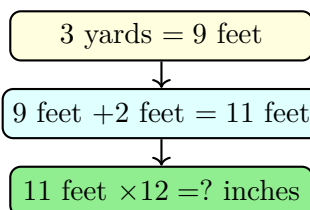
1 day = 24 hours (hr)    1 year = 52 weeks



1) Pattern X: 4, 7, 10, 13, 16. Pattern Y: 12, 21, 30, 39, 48. Use the T-chart to find the rule.

X	Y
4	12
7	21
10	30
13	39

- A. Multiply each X value by 3
- B. Add 8 to each X value
- C. Double each X value, then add 4
- D. Double each X value, then add 2
- 2) What is  $2.1 \div 10$ ?
- A. 0.021
- B. 21
- C. 210
- D. 0.21
- 3) A model shows 3 wholes divided into sixths. Which equation finds the number of sixths?
- A.  $\frac{1}{6} \div 3 = n$
- B.  $3 + \frac{1}{6} = n$
- C.  $3 \times \frac{1}{6} = n$
- D.  $3 \div \frac{1}{6} = n$
- 4) How many inches are in 3 yards and 2 feet?



- A. 60 inches
- B. 90 inches
- C. 132 inches
- D. 180 inches



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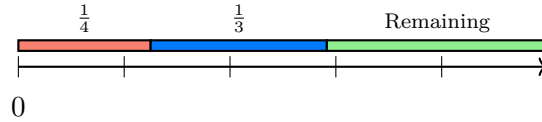
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1) Compare:  $12.5 \div 100$  and  $125 \div 1000$ . Which is true?

- A.  $12.5 \div 100 > 125 \div 1000$ 
 C.  $12.5 \div 100 = 125 \div 1000$   
 B.  $12.5 \div 100 < 125 \div 1000$ 
 D. Cannot compare

2) A warehouse ships  $\frac{1}{4}$  of inventory one day,  $\frac{1}{3}$  the next day. Remaining?



- A.  $\frac{5}{12}$ 
 C.  $\frac{5}{7}$   
 B.  $\frac{7}{12}$ 
 D.  $\frac{11}{12}$

3) Without calculating, which is greatest?



- A. 20
  C.  $3 \times 20$   
 B.  $2 \times 20$ 
 D.  $20 \div 2$

4) A board is 12 feet long. It is cut into pieces that are each one third of a foot. Which division equation matches the situation?

- A.  $\frac{1}{3} \div 12 = n$ 
 C.  $12 \div \frac{1}{3} = n$   
 B.  $12 \times \frac{1}{3} = n$ 
 D.  $12 + \frac{1}{3} = n$



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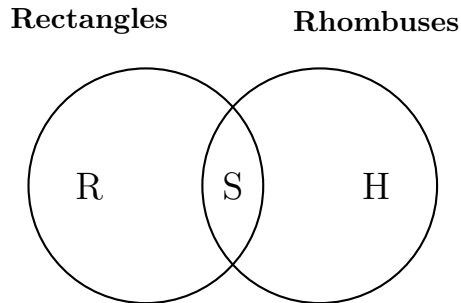
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- 1) In the standard Grade 5 hierarchy, a square is both a rectangle and a rhombus. The Venn diagram has one circle for rectangles and one circle for rhombuses:



What type of quadrilateral should label S represent?

- A. A pentagon                       C. A triangle
- B. A rectangle with unequal side lengths     D. A square
- 2) What is  $3 \times \frac{5}{6}$ ?
- A.  $2\frac{1}{2}$                        C.  $\frac{8}{6}$
- B.  $\frac{5}{18}$                        D.  $\frac{3}{6}$
- 3) A cube is built from unit cubes, with 6 unit cubes along each edge. How many unit cubes are needed to fill the cube?

*Record your answer in the space provided.*



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- 1) Which expression represents “the difference of 25 and the product of 3 and 5”?
- A.  $25 - 3 \times 5$                        C.  $3 \times (25 - 5)$   
 B.  $(25 - 3) \times 5$                        D.  $25 \times 3 - 5$
- 2) A triangle has one angle that measures 120 degrees. What type of triangle is this based on its angles?
- A. Acute triangle                       C. Scalene triangle  
 B. Right triangle                       D. Obtuse triangle
- 3) A sandwich shop sells sandwiches for \$6.50 each and drinks for \$2.25 each. A customer orders 3 sandwiches and 4 drinks. What is the total cost before tax?

Item	Price Each	Quantity
Sandwich	\$6.50	3
Drink	\$2.25	4
<b>Subtotal</b>		?

- A. \$28.00                       C. \$29.00  
 B. \$28.50                       D. \$29.50
- 4) A baker puts  $2 \times 2 \times 2$  cookies on a small tray and  $4 \times 5$  cookies in a display box. How many cookies are there altogether?
- A. 18                       C. 30  
 B. 38                       D. 28
- 5) A craft project uses  $\frac{1}{2}$  of a roll of ribbon. The roll has  $3\frac{1}{3}$  yards of ribbon. How many yards of ribbon are used?
- A.  $3\frac{1}{2}$  yards                       C. 2 yards  
 B.  $2\frac{2}{3}$  yards                       D.  $1\frac{2}{3}$  yards



## 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 A is correct.** **(5.CAR.14)** Pattern Y is always 3 times Pattern X:  $4 \times 3 = 12$ ,  $7 \times 3 = 21$ ,  $10 \times 3 = 30$ ,  $13 \times 3 = 39$ .
- 2) **Choice D is correct.** **(5.NPV.2)** Move the decimal 1 place left:  $2.1 \div 10 = 0.21$ .
- 3) **Choice D is correct.** **(5.CAR.11)** The model counts sixths inside 3 wholes. So the matching equation is  $3 \div \frac{1}{6} = n$ .
- 4) **Choice C is correct.** **(5.GM.6)** First convert yards to feet: 3 yards = 9 feet. Add 2 feet to get 11 feet. Then convert to inches:  $11 \times 12 = 132$  inches.
- 5) **Choice C is correct.** **(5.GM.7)** The ordered pair (4, 3) has first coordinate 4, so it is 4 units right of the origin. Its second coordinate is greater than 0, so it is above the x-axis.
- 6) **Choice D is correct.** **(5.NPV.6)**  $\frac{4}{3} > \frac{3}{3} > \frac{2}{3}$ , so  $10 \times \frac{4}{3}$  is the largest product.
- 7) **Choice C is correct.** **(5.NPV.2)** Multiplying by 1,000 moves the decimal three places right:  $0.65 \rightarrow 6.5 \rightarrow 65 \rightarrow 650$ .
- 8) **Choice A is correct.** **(5.GM.4)** Scale factor:  $24 \div 8 = 3$ . New flour amount:  $2.5 \times 3 = 7.5$  cups.
- 9) **Choice A is correct.** **(5.CAR.5)**  $\frac{6}{12} = \frac{6 \div 6}{12 \div 6} = \frac{1}{2}$  in simplest form.
- 10) **Choice C is correct.** **(5.GM.4)** The base area is  $14 \times 5 = 70$  square inches. Since  $420 \div 70 = 6$ , the height is 6 in.
- 11) **Choice D is correct.** **(5.GM.4)** Use the rectangular-prism volume formula:  $7 \times 3 \times 4 = 84$ . So the volume is 84 cubic meters.
- 12) **Choice B is correct.** **(5.CAR.11)** Since  $3 \div \frac{1}{6} = 3 \times 6 = 18$ , the whole number is 3.
- 13) **Choice B is correct.** **(5.GM.8)** Check: for first coordinates 1, 2, and 3, doubling and adding 1 gives 3, 5, and 7.
- 14) **Choice B is correct.** **(5.CAR.13)** The expression  $8 + 3$  is one amount. The expression  $4 \times (8 + 3)$  is 4 copies of that amount, so it is 4 times as much.
- 15) **The correct answer is  $37\frac{1}{2}$ .** **(5.NPV.6)** One eighth of 100 is  $12\frac{1}{2}$ . Three eighths is  $3 \times 12\frac{1}{2} = 37\frac{1}{2}$ .
- 16) **The correct answer is 12.** **(5.CAR.9)** Find  $\frac{2}{5}$  of 30 by multiplying. One fifth of 30 is 6, and two fifths is  $2 \times 6 = 12$ .
- 17) **Choice B is correct.** **(5.GM.1)** A rhombus is a quadrilateral with all four sides equal in length. It does not have to have four right angles.
- 18) **Choice A is correct.** **(5.GM.3)** Total volume:  $4 \times 3 \times 2 = 24$  cubes. Already placed: 15. Needed:  $24 - 15 = 9$  unit cubes.
- 19) **Choices A, B are correct.** **(5.NPV.6)** Multiply straight across:  $\frac{2}{3} \times \frac{3}{5} = \frac{6}{15} = \frac{2}{5}$ . C comes from adding instead of multiplying, and D is false because multiplying by a fraction less than 1 makes the amount smaller.
- 20) **Choice B is correct.** **(5.GM.4)** Volume:  $8 \times 6 \times 3 = 144$  cubic meters. Volume always uses cubic units, not square units.
- 21) **Choice C is correct.** **(5.GM.5)** Find each part first: Prism A is  $6 \times 2 \times 5 = 60$  cubic feet, and Prism B is  $3 \times 5 \times 3 = 45$  cubic feet. Because the parts do not overlap, add them:  $60 + 45 = 105$  cubic feet.
- 22) **Choice D is correct.** **(5.GM.6)** There are 1,000 meters in 1 kilometer. Since we are changing meters to kilometers, divide:  $3,750 \div 1,000 = 3.75$ . Emma ran 3.75 kilometers.
- 23) **Choice A is correct.** **(5.CAR.2)**  $27 \times 30 = 810$ ;  $819 - 810 = 9$ . So the quotient is 30 with remainder 9.
- 24) **The correct answer is 60,000.** **(5.NPV.2)** Multiplying by a power of 10 shifts the value to a larger place.  $6 \times 10,000 = 60,000$ . This confirms the answer.
- 25) **Choice B is correct.** **(5.NPV.2)**  $2.7 \times 100 = 270$  (move decimal 2 places right). Student Y is correct.
- 26) **Choice A is correct.** **(5.CAR.5)** LCD = 24.  $\frac{7}{8} = \frac{21}{24}$ ;  $\frac{1}{6} = \frac{4}{24}$ .  $\frac{21}{24} - \frac{4}{24} = \frac{17}{24}$ .
- 27) **The correct answer is 23.** **(5.CAR.14)** The terms are 7, 11, 15, 19, 23, so the 5th term is 23. A complete response explains that the pattern adds 4 each step.
- 28) **Choice B is correct.** **(5.CAR.12)** Go from the inside out:  $10 - 7 = 3$ , then  $[2 + 3] = 5$ , and finally  $8 \times 5 = 40$ .
- 29) **Choice A is correct.** **(5.NPV.1)** “Zero and three hundred twenty-one thousandths” means  $0 + \frac{321}{1000}$ , which is 0.321.
- 30) **Choice D is correct.** **(5.CAR.11)** Each whole contains 3 pieces of size  $\frac{1}{3}$ . With 3 wholes, there are  $3 \times 3 = 9$  pieces.
- 31) **Choice C is correct.** **(5.GM.8)** Both points have the same  $y$ -coordinate (7), forming a horizontal line. The distance is  $9 - 2 = 7$  units.



## Greetings, Star Navigator!

★ Stellar achievements unlocked! You've traversed six complete mathematical galaxies, calculating trajectories, solving cosmic puzzles, and navigating through challenging mathematical dimensions like an intergalactic explorer! Each test took you to new mathematical frontiers, and you charted your course with remarkable precision. Your navigation systems are fully calibrated and operational! ★

◇ **Here's what intergalactic navigators understand:** exploring unknown galaxies requires preparation, courage, and advanced navigation skills. They study star maps, practice emergency protocols, and trust their instruments completely. You've developed those same skills through these six test voyages! Your mathematical navigation systems are reliable and ready for any cosmic challenge! ◇

### Spacecraft Systems Status

- **Navigation Computers:** All mathematical coordinates calculated accurately!
- **Life Support Systems:** Problem-solving stamina at maximum capacity!
- **Communication Array:** Clear understanding of all mathematical signals!
- **Mission Status:** Cleared for test day deep space exploration!

**Interstellar travel wisdom:** experienced navigators remain calm during meteor showers because they've trained for turbulence. When test day presents unexpected mathematical asteroids, remember your six training missions through different galaxies. You've already navigated successfully through diverse challenges. Trust your instruments, maintain your course, and reach your destination confidently!

Want to report discoveries from distant mathematical galaxies? Transmit your findings to [reza@testinar.com](mailto:reza@testinar.com). Command Center is receiving!

**Reza Nazari & Jay Daie**

Your Math Coaches for Big Confidence

# 6 FULL-LENGTH TESTS. ENDLESS POTENTIAL.

PRACTICE TODAY. SUCCEED TOMORROW.

Give your child the tools they need to build strong math skills and test-taking confidence! This book includes **6 full-length practice tests** along with standards-based practice, mixed review, word problems, and a complete answer key.

★★★  
PRACTICE  
WITH PURPOSE.  
ACHIEVE WITH  
CONFIDENCE.

## WHAT'S INSIDE:



### 6 FULL-LENGTH PRACTICE TESTS

Realistic tests designed to reflect the actual test format and help build confidence.



### STANDARDS-BASED PRACTICE

Covers all essential Grade 5 math standards with clear explanations and examples.



### MIXED REVIEW

Reinforces key concepts with a variety of question types and review exercises.



### WORD PROBLEMS

Build critical thinking and problem-solving skills with real-world scenarios.



### COMPLETE ANSWER KEY

Step-by-step explanations for every question to support learning and growth.



### IMPROVE. PRACTICE. ACHIEVE.

Consistent practice leads to stronger skills, higher scores, and greater success.



## WHY PRACTICE MAKES A DIFFERENCE



### BUILD CONFIDENCE

Feel prepared and ready for any challenge.



### IMPROVE ACCURACY

Strengthen skills and reduce careless mistakes.



### THINK STRATEGICALLY

Develop problem-solving skills and deepen understanding.



### MANAGE TIME

Practice under timed conditions to build stamina.



### STAY MOTIVATED

Track progress and celebrate every win.



### ACHIEVE SUCCESS

Reach goals and unlock your full potential!



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