

$\frac{2}{3}$

0,25



%

**FULL-LENGTH**

**Arkansas**

★★★★★  
Aligned to State Standards

**ATLAS**

**MATH**

Grade

**5**

$\frac{2}{4}$

$7 \times 8 =$



$7 \times 8$

$56 \div 7$

$(a+b)^2$

**PRACTICE TESTS**

**Complete State Standards Review  
with Answer Key and  
Essential Math Skills Practice**



**3 Full-Length Practice Tests**  
Aligned to State Standards



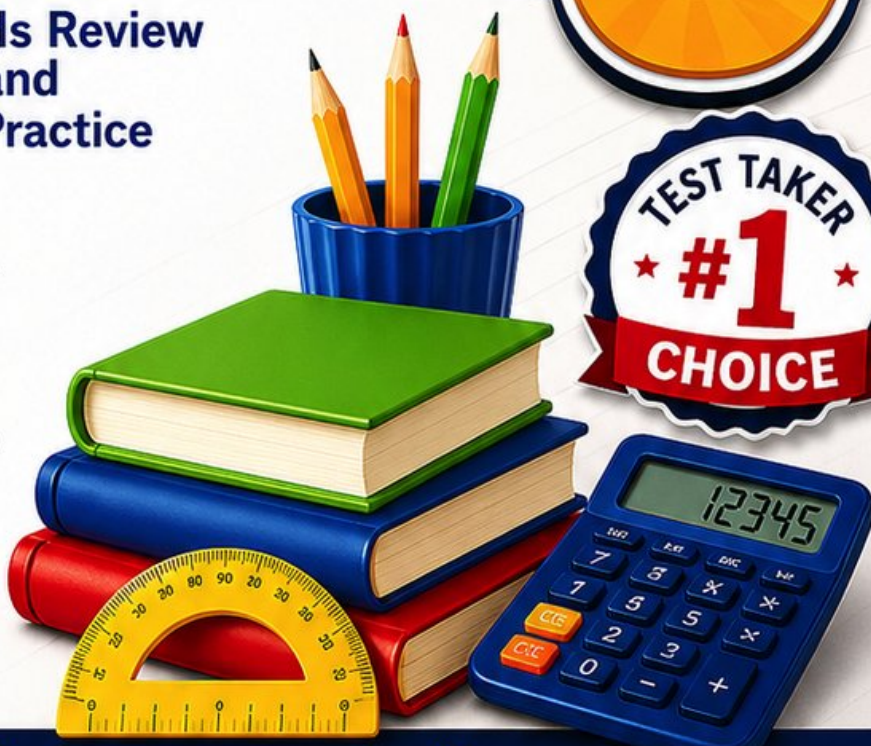
**Covers All Grade 5 Math Topics**  
Numbers & Operations, Fractions,  
Decimals, Geometry, Measurement,  
Data & Problem Solving



**Build Confidence**  
Strengthen Skills • Improve Accuracy  
• Boost Test Readiness



**Detailed Answer Key**  
Step-by-Step Explanations  
for All Questions



**WRITTEN FOR  
GRADE 5 STUDENTS**



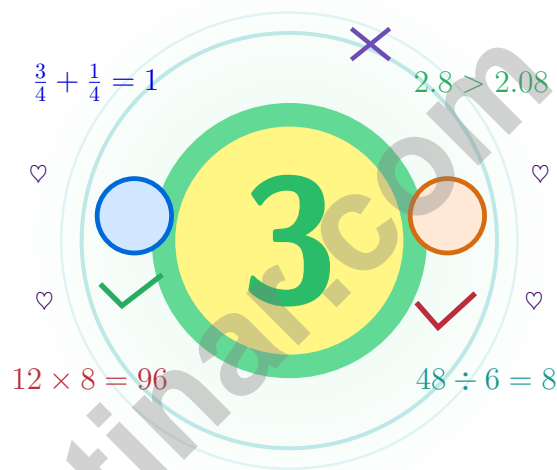
**PERFECT FOR  
TEST PREP & REVIEW**



**CLASSROOM, HOME,  
OR SELF-STUDY USE**

# 3 Arkansas ATLAS Grade 5 Math Practice Tests

*Practice that flows like an Ozark stream*



Three full tests, a friendly quick review, smart strategy pages, and student-tested support that help Grade 5 mathematicians from The Natural State walk in ready to think.

**Jay Daie and Reza Nazari**



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# Arkansas, Step Inside Your Math Workshop

Practice that flows like an Ozark stream

## For Every Curious Brain in Arkansas

Math is a lot like the Buffalo River – it bends, narrows, opens up, and rewards anyone who watches the current and follows the path.

Some questions will feel easy from the very first read. Others will ask you to pause, sketch, estimate, or try again. That is not a problem. That is practice doing exactly what it should do. Every honest attempt grows your math brain a little stronger.

### See

See the question fully before you start the math.

### Plan

Pick a strategy that fits the numbers in front of you.

### Build

Build the answer step by step, no shortcuts.

**An Arkansas promise to yourself:** I will follow the problem the way a paddler follows a river: read the water, choose a line, and keep moving.

# Three Tests, Three Lessons

A simple game plan that turns practice into real progress

## Step 1: Set

**Set the table – pencil ready, distractions gone.**

Wake up the big Grade 5 ideas before the test starts so your brain is already warmed up.

## Step 2: Solve

**Take one whole test in one quiet sitting.**

Find a calm corner, settle in, and aim for careful, honest choices before quick ones.

## Step 3: Look Back

**Walk through your answers without rushing.**

Circle missed questions, sort out what went sideways, and notice which skills are calling for more attention.

## Step 4: Climb

**Pick one or two skills to sharpen before next time.**

Read the explanation, fix the work, and carry that lesson forward into the next test.

## Three Weeks, Three Tests, Three Wins

<b>Week 1</b>	Test 1 sets your baseline. Notice what feels easy and what wobbles.
<b>Week 2</b>	Test 2 is for repair. Slow down on the topics that tripped you up.
<b>Week 3</b>	Test 3 is for proof. Show how steady your thinking has become.



Scan me

# Three Tests, Up Close

## What these practice tests help Grade 5 students build

These three practice tests prepare Grade 5 students in Arkansas for the Arkansas ATLAS the way a porch-swing afternoon prepares a story – slowly, surely, and with plenty of detail. The goal is bigger than getting answers right. Students are practicing how to read with care, choose a strategy, solve step by step, and explain their reasoning clearly – the same way mathematicians do every single day.

### Selected-Response Questions

Students solve the problem and choose the best answer. Estimating first, ruling out weak choices, and checking for reasonableness can save both time and points.

### Constructed-Response Questions

Students show their steps, explain a method, or back up an answer with clear math. Clean reasoning matters because it shows how the answer was actually found.

### Grade 5 Ideas That Show Up Again and Again

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

**What strong work looks like on the ATLAS:** the math is correct, the steps are readable, the labels and units match the problem, and the final answer truly answers the question being asked.



# 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)

1 gram (g) = 1,000 milligrams (mg)

### 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) Complete the statement: If you multiply 10 by a fraction less than 1, the product will be \_\_\_\_\_ 10.

A. equal to

B. greater than

C. less than

D. cannot compare to

2) Round 0.749 to the nearest tenth.

*Record your answer in the space provided.*

3) Add:  $\frac{4}{9} + \frac{1}{3}$

A.  $\frac{5}{12}$

B.  $\frac{7}{9}$

C.  $\frac{5}{9}$

D.  $\frac{4}{9}$

4) Solve:  $\_\_\_ \times 1000 = 54000$

A. 5400

B. 540

C. 540000

D. 54

5) Pattern in multiplication:  $7 \times 10 = 70$ ;  $7 \times 100 = 700$ ;  $7 \times 1,000 = 7,000$ . What is  $7 \times 100,000$ ?

A. 70,000

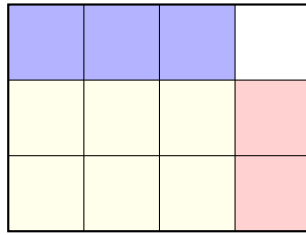
B. 700,000

C. 7,000,000

D. 70,000,000



6) Simplify: What is  $\frac{3}{4} \times \frac{2}{3}$  in lowest terms?



- A.  $\frac{6}{10}$   
 B.  $\frac{1}{2}$

- C.  $\frac{3}{7}$   
 D.  $\frac{2}{3}$

7) Write a fraction equivalent to  $\frac{2}{5}$  with a denominator of 20.

*Record your answer in the space provided.*

8) A juice bottle holds 2 liters. How many milliliters does it hold?

- A. 200 mL  
 B. 2,000 mL

- C. 20,000 mL  
 D. 200,000 mL

9) What is  $112 \times 7$ ?

- A. 780  
 B. 792

- C. 788  
 D. 784



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1) A triangle with all sides different is called:

- A. Equilateral                       C. Scalene  
 B. Isosceles                         D. Right

2) A school has 6 buses. Each bus holds 32 students. 8 students are absent. Evaluate  $6 \times 32 - 8$  to find the number of students at school today.

- A. 184                                   C. 200  
 B. 192                                   D. 176

3) The value of  $(6 + 9) \div 3$  is what fraction of the value of  $(6 + 9)$ ?

*Record your answer in the space provided.*

4) A bottle holds 0.9 liter of water. A box has 6 bottles. Is the total more or less than 6 liters, and what is the total?

- A. Less than 6 liters; 5.4 liters                       C. Less than 6 liters; 54 liters  
 B. More than 6 liters; 5.4 liters                       D. Equal to 6 liters; 6 liters

5) A recipe uses  $\frac{1}{4}$  cup of flour. The flour is shared equally between 2 mini loaves. How much flour goes into each mini loaf?

- A.  $\frac{1}{4}$  cup                                   C.  $\frac{3}{4}$  cup  
 B.  $\frac{1}{2}$  cup                                   D.  $\frac{1}{8}$  cup



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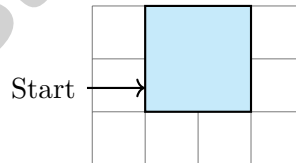
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- 1) Rule: the output is 3 times the input. For input 4, what is the ordered pair?
- A. (4, 8)  C. (4, 12)
- B. (4, 16)  D. (4, 4)
- 2) A recipe calls for  $(6 \div 2) \times 4$  cups of sugar. Which best describes this?
- A. Divide 6 by 2, then multiply the result by 4
- B. Divide 6 by 2, then multiply by the sum 4
- C. Multiply 6 and 4, then divide by 2
- D. Divide 6 into 4 groups of 2
- 3) In the number 87.456, what is the value of the digit in the tenths place?
- A. 4  C. 0.004
- B. 0.04  D. 0.4
- 4) A model shows 4 wholes cut into halves. Which equation gives the number of half pieces?
- A.  $\frac{1}{2} \div 4 = n$   C.  $4 + \frac{1}{2} = n$
- B.  $4 \times \frac{1}{2} = n$   D.  $4 \div \frac{1}{2} = n$
- 5) A polygon is formed by connecting points on a grid. How many right angles does it have?



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



## 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 C is correct.** **(5.NPV.6)** Any positive number multiplied by a factor less than 1 always produces a smaller result.
- 2) **The correct answer is 0.7.** **(5.NPV.4)** Hundredths digit is 4, less than 5, so the tenths digit stays at 7: 0.7.
- 3) **Choice B is correct.** **(5.CAR.5)**  $\text{LCM}(9,3) = 9$ .  $\frac{1}{3} = \frac{3}{9}$ ,  $\frac{4}{9} + \frac{3}{9} = \frac{7}{9}$ .
- 4) **Choice D is correct.** **(5.NPV.2)** To find the missing factor:  $54000 \div 1000 = 54$ .
- 5) **Choice B is correct.** **(5.CAR.14)** Multiplying by 100,000 gives 7 followed by five zeros, so the product is 700,000.
- 6) **Choice B is correct.** **(5.GM.2)**  $\frac{3}{4} \times \frac{2}{3} = \frac{6}{12} = \frac{1}{2}$ .
- 7) **The correct answer is  $\frac{8}{20}$ .** **(5.CAR.5)** Multiply numerator and denominator by 4:  $\frac{2 \times 4}{5 \times 4} = \frac{8}{20}$ .
- 8) **Choice B is correct.** **(5.GM.6)** 1 liter = 1,000 milliliters. Multiply:  $2 \times 1000 = 2000$  mL.
- 9) **Choice D is correct.** **(5.CAR.1)** Multiply:  $112 \times 7 = (100 \times 7) + (10 \times 7) + (2 \times 7) = 700 + 70 + 14 = 784$ .
- 10) **Choice C is correct.** **(5.CAR.11)** Dividing by  $\frac{1}{3}$  asks how many one-third pieces are in 5 wholes. Each whole has 3 thirds, so  $5 \div \frac{1}{3} = 5 \times 3 = 15$ .
- 11) **Choice C is correct.** **(5.CAR.9)**  $\frac{2}{3} \times 60 = \frac{2 \times 60}{3} = \frac{120}{3} = 40$  pages.
- 12) **Choice D is correct.** **(5.GM.1)** Two sides have the same marking (1 tick mark each), so two sides are equal, making it isosceles.
- 13) **Choice D is correct.** **(5.CAR.10)**  $\frac{7}{8} \approx 1$  and  $\frac{3}{9} = \frac{1}{3} \approx \frac{1}{2}$ . So  $\frac{7}{8} - \frac{3}{9} \approx 1 - \frac{1}{2} = \frac{1}{2}$ .
- 14) **Choice C is correct.** **(5.CAR.12)** Find the whole divisor before dividing. First  $(4 + 2) = 6$ , then  $6 \times 2 = 12$ , and finally  $72 \div 12 = 6$ .
- 15) **Choice B is correct.** **(5.GM.1)** The hierarchy flows one way: Rectangle  $\rightarrow$  Parallelogram. Not all parallelograms are rectangles (e.g., a tilted parallelogram without right angles).
- 16) **Choice D is correct.** **(5.CAR.3)** Add:  $\$1.45 + \$2.28 = \$3.73$ ; then  $\$3.73 + \$0.87 = \$4.60$ .
- 17) **Choice C is correct.** **(5.NPV.6)** A is false because  $1\frac{1}{2} \times 2 = 3$ . B is false because  $1\frac{1}{3} \times 3 = 4$ . C is true because  $3\frac{1}{3} \times 2 = 6\frac{2}{3}$ , which is greater than  $6\frac{1}{2}$ . D is false because  $2\frac{1}{4} \times 2 = 4\frac{1}{2}$ .
- 18) **The correct answer is 12.009.** **(5.NPV.3)** Twelve wholes, then 9 thousandths means a 9 in the thousandths place: 12.009.
- 19) **Choice A is correct.** **(5.NPV.6)**  $20 \times \frac{1}{5} = 4$  meters. Multiplying by  $\frac{1}{5}$  scales the length down to one-fifth its original size.
- 20) **Choice D is correct.** **(5.NPV.5)** 0.8 is farther right on the number line than 0.4, so 0.8 is farther from 0.
- 21) **Choice C is correct.** **(5.GM.1)** A square has four right angles and four equal sides, so it is both a rectangle and a rhombus.
- 22) **Choices A, B are correct.** **(5.CAR.3)** A gives  $1.00 - 0.55 = 0.45$ , and B gives  $2.70 - 2.25 = 0.45$ . C gives 0.35, and D gives 0.55.
- 23) **Choice A is correct.** **(5.GM.4)**  $V = 10 \times 4 \times 7 = 280 \text{ ft}^3$ .
- 24) **The correct answer is  $\frac{1}{4}$ .** **(5.CAR.5)**  $\frac{2}{3} = \frac{8}{12}$ . Difference:  $\frac{3}{12} = \frac{1}{4}$ .
- 25) **Choice B is correct.** **(5.CAR.2)**  $936 \div 13 = 72$  packs. Check:  $13 \times 72 = 936$ .
- 26) **Choice D is correct.** **(5.GM.5)** Find each part first: Prism A is  $7 \times 4 \times 6 = 168$  cubic meters, and Prism B is  $6 \times 2 \times 2 = 24$  cubic meters. Because the parts do not overlap, add them:  $168 + 24 = 192$  cubic meters.
- 27) **Choice B is correct.** **(5.DA.2)** Count the X marks above 2 minutes. There are 2 X marks, so 2 students spent 2 minutes on math homework.
- 28) **Choice A is correct.** **(5.GM.8)** Both students studied for 3 hours (x-coordinate), but scored differently (75 and 80 on y-axis). Their points are (3, 75) and (3, 80).
- 29) **The correct answer is  $\frac{1}{16}$ .** **(5.CAR.11)** Half of one eighth is one sixteenth, so each piece is  $\frac{1}{16}$  of the whole.
- 30) **Choice C is correct.** **(5.NPV.2)**  $0.003 \times 10^4 = 0.003 \times 10000 = 30$ . Moving decimal 4 places right gives 30.



## Captain of Your Own Math Plane,

◇ 3 practice tests behind you. That's many flights logged in your math airplane. You've handled clear weather, turbulence, tricky landings, and long routes. You're a real pilot now. ◇

★ **Pilots know:** a good pre-flight check makes for a good flight. Before each test problem, do your check: read the question, look at the numbers, pick a strategy. That short check makes the rest of the flight smooth. ★

### Flight Crew Skills

- **Pre-flight Check:** CONSISTENT! You read questions carefully.
- **Navigation:** STRONG! You pick a clear strategy.
- **Steady Flight:** STEADY! You stay calm through long tests.
- **Landing:** SHARP! You always check your final answer.

**Pilot's tip:** on test day, don't fly the whole flight in your head before takeoff. Just take off. Then handle one problem at a time. Trust your training. You've earned your wings.

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 Pilot (Clear Skies Ahead)

# Build Skills. Boost Confidence. Excel on the Grade 5 Math Test.

Help your child succeed with confidence! This book includes **3 full-length Grade 5 Math practice tests** aligned to state standards. With a focus on essential skills, problem solving, and test readiness, it's the perfect resource for classroom, home, or on-the-go practice.



## WHAT'S INSIDE:



### 3 Full-Length Grade 5 Math Practice Tests

Realistic test format to build familiarity and confidence.



### Covers All Essential Math Topics

Fractions, decimals, geometry, measurement, data, number operations, and more.



### Build Strong Math Skills

Strengthen understanding and problem-solving through varied question types.



### Detailed Answer Key

Step-by-step explanations to help your child learn from mistakes and improve.



### Track Progress & Improve

Use score trackers to identify strengths and focus on areas that need more practice.



## The Smarter Way to Prepare!

Consistent practice builds stronger skills, sharper thinking, and test-day success.

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- ✓ Improve accuracy and speed
- ✓ Reduce test anxiety
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