

$\frac{2}{3}$

0,25



%

FULL-LENGTH

$\frac{2}{4}$

$7 \times 8 =$



7×8

$56 \div 7$

$(a+b)^2$

3

Arizona

★★★★★
Aligned to State Standards

AASA

MATH

Grade

5

PRACTICE TESTS

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



3 Full-Length Practice Tests
Aligned to State Standards



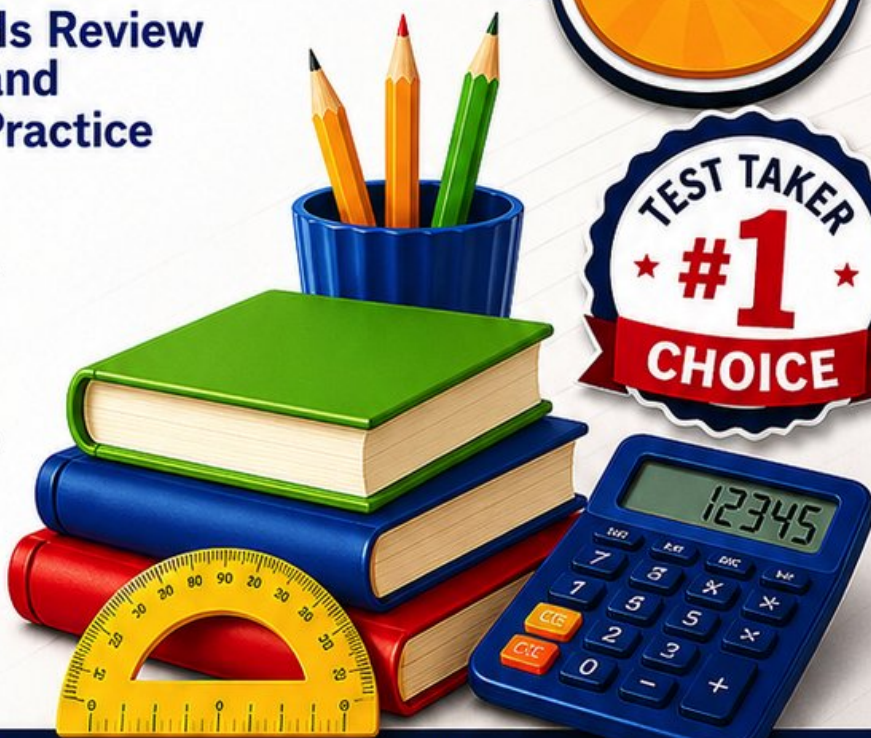
Covers All Grade 5 Math Topics
Numbers & Operations, Fractions,
Decimals, Geometry, Measurement,
Data & Problem Solving



Build Confidence
Strengthen Skills • Improve Accuracy
• Boost Test Readiness



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



**WRITTEN FOR
GRADE 5 STUDENTS**



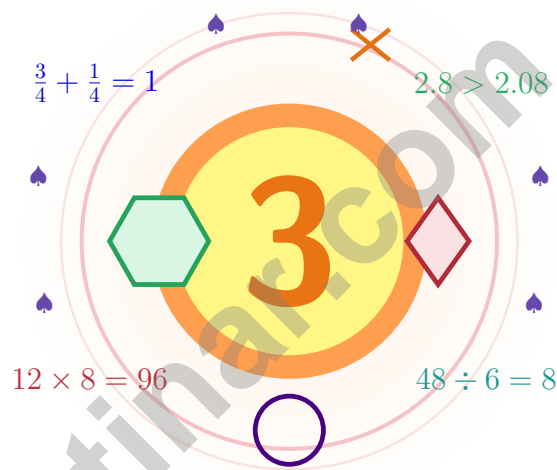
**PERFECT FOR
TEST PREP & REVIEW**



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

3 Arizona AASA Grade 5 Math Practice Tests

Practice with desert patience and canyon-deep focus



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

Jay Daie and Reza Nazari



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Hello, Arizona Problem Solver

Practice with desert patience and canyon-deep focus

Dear Arizona Math Thinker

Like the Grand Canyon, math problems can look huge at first. Up close, they reveal clear, solvable steps.

Some questions will feel easy. Others will ask you to pause, sketch, estimate, or try again. That is practice doing its job. Every honest attempt makes your math stronger.

Read

Read every word twice
and underline what is
being asked.

Solve

Choose the cleanest
method and show your
steps.

Reflect

Look back to find what
worked and what to fix.

An Arizona promise to yourself: I will look closely, work carefully, and treat each problem like a layer of red rock – one steady look reveals what is really there.

Your Game Plan

A simple game plan that turns practice into real progress

Step 1: Warm Up

Start with the quick review pages.
Wake up the big Grade 5 ideas before the test starts so your brain is already warmed up.

Step 2: Run

Take one full test in a calm, quiet place.
Find a calm corner, settle in, and aim for careful, honest choices before quick ones.

Step 3: Review

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

Step 4: Repeat

Rework the missed questions before the next test.
Read the explanation, fix the work, and carry that lesson forward into the next test.

Your 3-Week Arizona Plan

Week 1	Open with Test 1 and treat it like a snapshot, not a final grade.
Week 2	Use Test 2 to attack the skills that surprised you in Test 1.
Week 3	Bring Test 3 home with calm pacing and careful checking.



Scan me

What These Tests Build

What these practice tests help Grade 5 students build

These three practice tests give Grade 5 students in Arizona a friendly trail map for the Arizona AASA. The goal is bigger than getting answers right: students practice reading carefully, choosing a strategy, solving step by step, and explaining their reasoning clearly.

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 AASA: 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

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

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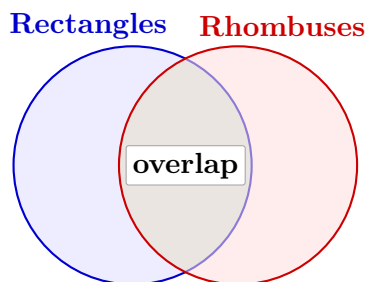
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1 hour (hr) = 60 minutes (min) 1 year = 12 months

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



- 1) A Venn diagram has one circle for rectangles and one circle for rhombuses. The overlap represents figures that are both rectangles and rhombuses.



Which type of figure belongs in the overlap?

- A. Triangle
- B. Rectangle that is not a square
- C. Rhombus that is not a square
- D. Square
- 2) A pizza is cut into 10 equal slices. Each slice is $\frac{1}{10}$ of the pizza. Marcus eats 7 slices. Which multiplication expression shows the fraction of the pizza Marcus eats?
- A. $7 \times \frac{1}{10} = \frac{7}{10}$
- B. $10 \times \frac{1}{7} = \frac{10}{7}$
- C. $7 + \frac{1}{10} = 7\frac{1}{10}$
- D. $10 - \frac{7}{10} = 9\frac{3}{10}$
- 3) Which list shows the four partial products for $2\frac{2}{3} \times 1\frac{1}{2}$?
- A. 2×1 , $2 \times \frac{1}{2}$, $\frac{2}{3} \times 1$, $\frac{2}{3} \times \frac{1}{2}$
- B. $2 + 1$, $2 \times \frac{1}{2}$, $\frac{2}{3}$, product
- C. 2×1 , $2 + \frac{1}{2}$, $\frac{2}{3}$, $1\frac{1}{2}$
- D. 3×2 , $3 \times \frac{1}{2}$, $\frac{2}{3}$, $\frac{1}{4}$
- 4) Four fractions are listed: $\frac{1}{2}$, $\frac{2}{3}$, $\frac{3}{4}$, $\frac{5}{6}$. What is the least common denominator if they are rewritten together?
- A. 48
- B. 24
- C. 36
- D. 12



5) Which expression does NOT equal $\frac{1}{20}$?

A. $\frac{1}{4} \div 5$

C. $\frac{1}{10} \div 2$

B. $\frac{1}{5} \div 4$

D. $\frac{1}{2} \div 5$

6) One fifth of a cake is shared equally by 2 children. Which division equation finds each share?

A. $2 + \frac{1}{5} = n$

C. $\frac{1}{5} \times 2 = n$

B. $2 \div \frac{1}{5} = n$

D. $\frac{1}{5} \div 2 = n$

7) Pattern Alpha: 2, 4, 6, 8, 10. Pattern Beta: 1, 2, 3, 4, 5. Which ordered pair does NOT fit the rule “Beta is half of Alpha”?

Ordered Pair	Check
(2, 1)	$1 = 2/2 \checkmark$
(4, 2)	$2 = 4/2 \checkmark$
(6, 4)	$4 = 6/2?$
(8, 4)	$4 = 8/2?$

A. (2, 1)

C. (6, 4)

B. (4, 2)

D. (8, 4)

8) The diagram shows the comparison. Which statement is correct?



A. Bottom is triple the top

B. Top is half the bottom

C. They are equal

D. Top is 3 times the bottom



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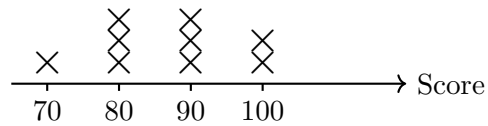
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- 1) The line plot shows test scores earned by students:



How many students scored 80 or higher?

- A. 5 students C. 7 students
 B. 6 students D. 8 students
- 2) Which type of quadrilateral listed below always has four right angles?
- A. Trapezoid C. Rectangle
 B. Rhombus D. Parallelogram
- 3) A gardener plants 12 rows of flowers with 100 flowers in each row. How many flowers does the gardener plant?

Rows	Flowers
12	100
Total	?

- A. 112 C. 1200
 B. 1012 D. 12000
- 4) Board A is $2\frac{1}{3}$ ft long, and Board B is $3\frac{2}{3}$ ft long. What is the total length of the two boards?
- A. $5\frac{1}{3}$ ft C. 6 ft
 B. $5\frac{2}{3}$ ft D. $6\frac{1}{3}$ ft



Grade 5 Mathematics Reference Materials

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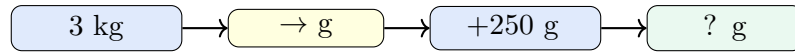
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- 1) A weight of 3 kilograms plus 250 grams equals how many grams in total?



- A. 3,250 g C. 32,500 g
 B. 325 g D. 553 g
- 2) Multiply: $\frac{4}{5} \times \frac{1}{3}$
- A. $\frac{4}{8}$ C. $\frac{4}{15}$
 B. $\frac{5}{8}$ D. $\frac{1}{15}$
- 3) An equilateral triangle and a square both have all sides equal. What attribute shows that the equilateral triangle is not a square?

Record your answer in the space provided.

- 4) Write an expression for: multiply 3 by the sum of 9 and 12.

Record your expression in the space provided.



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.

Testinar.com



Practice Test Answers and Explanations

Practice Test 1 Answers and Explanations

- 1) **Choice D is correct.** **(5.G.B.4)** A square is both a rectangle and a rhombus, so it belongs in the overlap.
- 2) **Choice A is correct.** **(5.NF.B.4)** Eating 7 slices means 7 groups of $\frac{1}{10}$ of a pizza: $7 \times \frac{1}{10} = \frac{7}{10}$.
- 3) **Choice A is correct.** **(5.NF.B.4)** When using the area model for mixed number multiplication, decompose both factors: $2\frac{2}{3} = 2 + \frac{2}{3}$ and $1\frac{1}{2} = 1 + \frac{1}{2}$. Then multiply each part: $(2 + \frac{2}{3})(1 + \frac{1}{2})$ gives four partial products.
- 4) **Choice D is correct.** **(5.NF.A.2)** LCM of 2, 3, 4, and 6 is 12, so the least common denominator is 12.
- 5) **Choice D is correct.** **(5.NF.B.4)** All other expressions equal $\frac{1}{20}$: $\frac{1}{4} \div 5 = \frac{1}{20}$, $\frac{1}{5} \div 4 = \frac{1}{20}$, $\frac{1}{10} \div 2 = \frac{1}{20}$. But $\frac{1}{2} \div 5 = \frac{1}{10}$.
- 6) **Choice D is correct.** **(5.NF.B.7)** The unit fraction is the amount being shared, so divide $\frac{1}{5}$ by 2. The equation is $\frac{1}{5} \div 2 = n$.
- 7) **Choice C is correct.** **(5.OA.B.3)** For (6, 4): $4 \neq 6/2 = 3$. The correct pair should be (6, 3).
- 8) **Choice D is correct.** **(5.OA.A.2)** The top bar represents 3 copies of the bottom expression. That makes the top expression 3 times the bottom expression.
- 9) **Choice C is correct.** **(5.MD.A.1)** Convert 4 feet to inches: $4 \times 12 = 48$ inches. Divide by 12-inch pieces: $48 \div 12 = 4$ pieces.
- 10) **Choice B is correct.** **(5.NF.A.1)** Borrow 1 from 4 to rewrite $4\frac{1}{8}$ as $3\frac{9}{8}$. Then $3\frac{9}{8} - 2\frac{7}{8} = 1\frac{2}{8}$, which simplifies to $1\frac{1}{4}$.
- 11) **Choice C is correct.** **(5.NBT.A.2)** $3.5 \times 10 = 35$ mm (move decimal 1 place right).
- 12) **The correct answer is 5.** **(5.MD.C.5)** The base area is $8 \times 5 = 40$ square meters. Since $200 \div 40 = 5$, the height is 5 m.
- 13) **The correct answer is 700,000.** **(5.NBT.A.2)** 100,000 has five zeros, so $7 \times 100,000$ is 7 followed by five zeros: 700,000.
- 14) **Choice C is correct.** **(5.G.A.2)** The vertical line is at $x = 7$. The point (3, 5) is at $x = 3$. The horizontal distance is $7 - 3 = 4$ units.
- 15) **Choice C is correct.** **(5.MD.C.4)** Volume = $18 \times 12 \times 10 = 216 \times 10 = 2160$ in³.
- 16) **Choice B is correct.** **(5.NBT.A.3)** The tenths place is the first position after the decimal point. In 3.915, the tenths digit is 9.
- 17) **Choice D is correct.** **(5.NF.B.5)** $8 \times \frac{5}{4} = 10$ units. The scaled bar is longer because the factor is greater than 1.
- 18) **Choice D is correct.** **(5.G.A.2)** The first coordinate, 6, matches the x-axis label: minutes. The second coordinate, 72, matches the y-axis label: cookies baked. So the point means cookies baked is 72 when minutes is 6.
- 19) **Choice D is correct.** **(5.MD.B.2)** Count X marks at $\frac{1}{2}$, $\frac{3}{4}$, and 1. That is $1 + 2 + 4 = 7$ ribbons that are 1 inch or shorter.
- 20) **Choice A is correct.** **(5.MD.C.4)** The base area is 100 square meters. Since $500 \div 100 = 5$, the height is 5 m.
- 21) **Choice A is correct.** **(5.NBT.B.7)** Hundredths: $8 + 6 = 14$ (regroup 1 tenth); tenths: $3 + 4 + 1 = 8$; ones: $5 + 2 = 7$. The chart shows 7 ones, which is correct.
- 22) **Choices A, B are correct.** **(5.NF.A.2)** $\frac{4}{10}$ simplifies to $\frac{2}{5}$, and $\frac{6}{15}$ also simplifies to $\frac{2}{5}$. Choices C and D are not equivalent to $\frac{2}{5}$.
- 23) **The correct answer is 180.** **(5.MD.C.4)** $9 \times 4 \times 5 = 180$ in³.
- 24) **Choice A is correct.** **(5.NBT.A.1)** $0.42 \div 10 = 0.042$. In 0.42 the digit 4 is in the tenths place; after dividing by 10, it moves one place to the right, so the digit 4 is now in the hundredths place.
- 25) **The correct answer is 84 cubic feet.** **(5.MD.C.3)** Subtract the known part from the total: $210 - 126 = 84$ cubic feet. That is the missing part's volume.
- 26) **Choice A is correct.** **(5.G.A.2)** The second coordinates follow 2, 5, 8, 11, adding 3 each step. The plotted points are (1,2), (2,5), (3,8), and (4,11), so they match.
- 27) **Choice D is correct.** **(5.NF.A.2)** $1 = \frac{12}{12}$; $\frac{12}{12} - \frac{1}{12} = \frac{11}{12}$.
- 28) **Choice A is correct.** **(5.NF.B.6)** $\frac{1}{4} \times 28 = \frac{28}{4} = 7$ sandwiches.
- 29) **Choice C is correct.** **(5.NF.B.7)** $5 \div \frac{1}{4} = 5 \times 4 = 20$. It takes 20 jumps of $\frac{1}{4}$ to reach 5.
- 30) **The correct answer is 4.** **(5.OA.A.1)** $9 + 3 = 12$; $12 \times 2 = 24$; $24 - 4 = 20$; $20 \div 5 = 4$.



Math Athlete, Listen Up!

◇ 3 practice tests done. That's serious training. Your math muscles are strong, your endurance is high, and your reflexes (recognizing problem types) are quick. You're in great shape for the big test. ◇

★ **Trainer's wisdom:** muscle memory is real, even in math. The more you do something, the more your brain knows how to do it without thinking. You've built that muscle memory over 3 tests. Now it's automatic. ★

Athlete's Performance Card

- **Endurance:** TOP-TIER! You can finish a long test without burnout.
- **Strength:** STRONG! You handle multi-step problems with power.
- **Speed:** SHARP! You move efficiently from question to question.
- **Recovery:** GREAT! You bounce back fast from tough questions.

Trainer's tip: on test day, hydrate, breathe deeply, and warm up with the easier questions first. Build your rhythm. Your training will carry you the rest of the way.

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 Trainer (You're In Great Shape)

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.



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



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

- ✓ Reinforce classroom learning
- ✓ Improve accuracy and speed
- ✓ Reduce test anxiety
- ✓ Achieve your best score!



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