

8

Missouri MAP

GRADE 6

MATH

PRACTICE TESTS

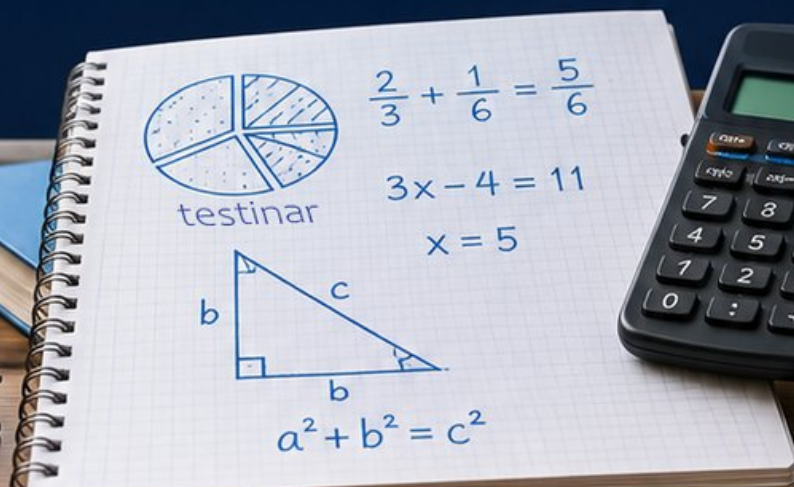
8
PRINTED
TESTS

+

2
ONLINE
TESTS

Use these two additional online practice tests for extra review after the printed tests in this book.

Standards-Aligned *Steady Southern* Problem Solving for Comprehensive Assessment Program



BUILT FOR
ACAP SUCCESS



REALISTIC TESTS
& QUESTION TYPES



STRENGTHEN
MATH SKILLS



REVIEW, PRACTICE,
AND IMPROVE

8 Missouri MAP Grade 6 Math Practice Tests

Standards-Aligned Show-Me Math Proof for Missouri Assessment Program



Eight complete 40-question Grade 6 practice rounds for MAP, built for show-me math proof with ratios, rational numbers, expressions, equations, geometry, statistics, answer keys, and clear explanations for every item.

Jay Daie and Reza Nazari



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Welcome, Missouri Math Explorer!

Eight focused rounds using show-me math proof

This book gives you eight full Grade 6 practice tests for MAP. Each round uses river crossings, city blocks, and proof-ready thinking as a fresh mental backdrop while you read closely, choose a smart strategy, show your work, and check whether your answer makes sense.

Your Missouri Practice Promise

Show the reason, not just the answer: model, calculate, and confirm with the question.

Read

Plan

Check

How to Use This Book

A eight-session routine for show-me math proof

1. **Preview the skills.** Scan the quick review pages before beginning the first round.
2. **Work in order.** Take one 40-question test at a time in a quiet place.
3. **Mark confidence.** Put a small star beside problems where your plan felt strong.
4. **Correct actively.** Retry missed items before reading the full explanation.
5. **Plan the next round.** Use the growth log to choose one habit and one skill to practice.

Missouri review rhythm: Use each test to gather evidence about strengths and the next skill to repair.



What Is Inside?

Eight MAP tests, 320 questions, and a full review path

Part	What You Will Practice
Tests 1–3	Foundation rounds for ratios, rational numbers, operations, and careful reading.
Tests 4–6	Skill-building rounds with expressions, equations, geometry, data, and problem models.
Tests 7–8	Final stamina rounds for mixed review, neat work, and flexible strategy choices.
Answer Pages	Compact keys and explanations that show why each answer works.

The tests are mixed on purpose. Show-me math proof means recognizing the skill even when the next question changes topic, changes format, or asks for an explanation.



Scan me!
For more practice
& answers

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1) On a number line, four points are labeled. Point W is at $-\frac{5}{4}$, point K is at -0.75 , point J is at -0.25 , and point L is at $\frac{1}{4}$. Which point is farthest to the left?

A. Point W

C. Point J

B. Point K

D. Point L

2) Which formula correctly finds the area of a triangle?

A. $A = b + h$

C. $A = \frac{1}{2}bh$

B. $A = 2bh$

D. $A = bh$

3) Find the GCF of 15 and 20.

4) Find the mean of 5, 15, 20, 30.

A. 15

C. 20

B. 25

D. 17.5

5) How many $\frac{1}{4}$ -cup servings are in 2 cups?

A. 6

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

B. 8

D. 4



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6) Which expression matches “the product of a number f and the difference of 10 and 2”?

A. $f \cdot 10 - 2$

B. $f - 10 + 2$

C. $(f - 10) \cdot 2$

D. $f(10 - 2)$

7) Evaluate $5m - 7$ when $m = 2$.

A. 3

B. 6

C. 10

D. 17

8) For $x \leq 5$, what boundary number is used on the number line?



9) Solve for x : $x + 9 = 16$

A. $x = 7$

B. $x = 9$

C. $x = 16$

D. $x = 25$

10) A student found the volume of a rectangular prism with dimensions $\frac{5}{2}$ m, 3 m, and 4 m. They calculated $\frac{5}{2} \times 3 = 7.5$ and then stopped. What is the correct volume?

A. 7.5 m^3

B. 15 m^3

C. 22.5 m^3

D. 30 m^3

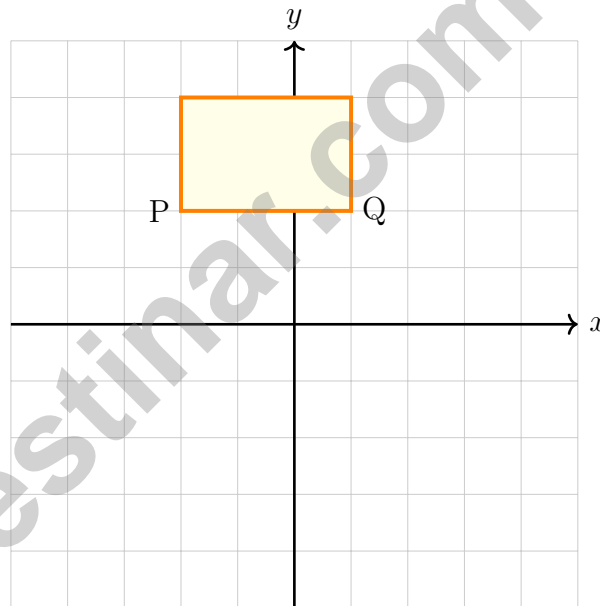


11) Three vertices of a square are at $(2, 2)$, $(7, 2)$, and $(7, 7)$. What is the fourth vertex?

- A. $(2, 7)$ C. $(2, 2)$
 B. $(7, 2)$ D. $(5, 5)$

12) A triangular prism net shows 2 triangles and 3 rectangles. If each rectangle has dimensions 8 cm by 4 cm, and the sum of the three base sides is 12 cm, what is the lateral surface area?

- A. 32 cm^2 C. 96 cm^2
 B. 48 cm^2 D. 192 cm^2



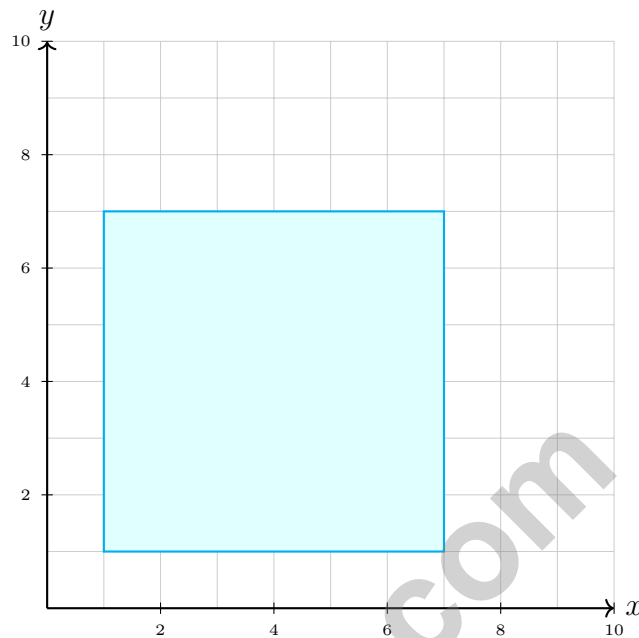
13)

Rectangle $PQRS$ is shown. If it is reflected over the x -axis, the vertex $Q(1, 2)$ will move to which point?

- A. $(1, -2)$ C. $(1, 2)$
 B. $(-1, 2)$ D. $(-1, -2)$



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1)

A rectangle on the coordinate plane has vertices at $(1, 1)$, $(7, 1)$, $(7, 7)$, and $(1, 7)$. What is its area?

- A. 24 square units C. 36 square units
 B. 30 square units D. 42 square units

2) A movie ticket costs at least \$8 but less than \$12. Which inequality correctly represents the price c ?

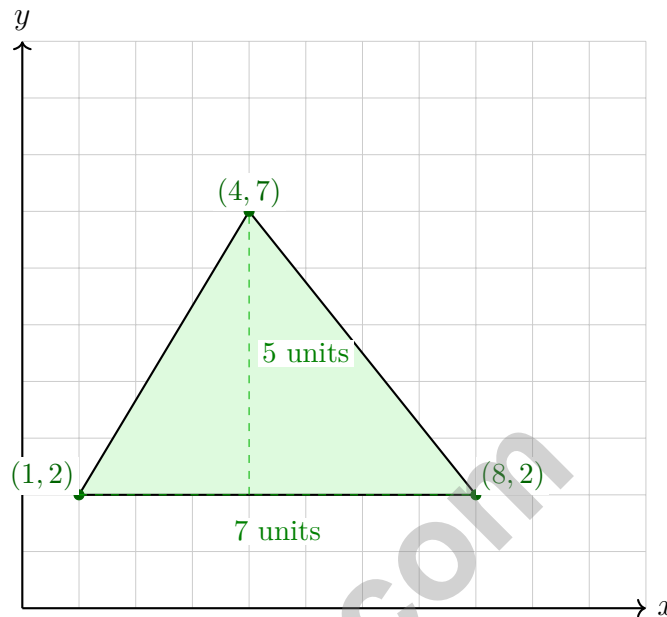
- A. $c \leq 8$ and $c > 12$ C. $c < 8$ and $c < 12$
 B. $c > 8$ and $c = 12$ D. $c \geq 8$ and $c < 12$



- 3) Which triangle has the same area as a rectangle with length 12 cm and width 5 cm?
- A. Base 6 cm, height 10 cm C. Base 12 cm, height 5 cm
 B. Base 10 cm, height 12 cm D. Base 20 cm, height 3 cm
- 4) Most students scored 85 or higher on a test, but a few scored in the 60s. What is the shape?
- A. Skewed right C. Symmetric
 B. Skewed left D. Bimodal
- 5) A basketball player's points over 7 games: 12, 18, 15, 20, 14, 16, 19. What is the median?
- A. 14 C. 16
 B. 15 D. 17
- 6) A survey shows that the probability a person likes ice cream is 90%. What is the probability that a person does **not** like ice cream?
- A. 0.1 C. 0.5
 B. 0.2 D. 0.9
- 7) A student wrote this to solve $x + 8 = 15$: "I added 8 to both sides and got $x = 23$." What is the error?
- A. The student should divide by 8 D. The student should subtract 8
 B. The student should multiply by 8 instead
 C. The answer $x = 23$ is correct



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& answers



1)

A student says this triangle has area 35 square units. What is the error in their reasoning?

- A. They forgot to divide by 2. C. They added instead of multiplying.
 B. They used the wrong height. D. There is no error.

2) If $\frac{1}{4}$ gallon of paint costs \$8, how much does 1 gallon of paint cost?



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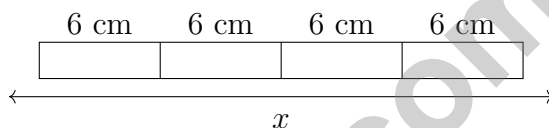
3) Which pair of dimensions would give a triangle an area of 48 cm^2 ?

- A. Base 6 cm, height 10 cm C. Base 10 cm, height 9 cm
 B. Base 8 cm, height 12 cm D. Base 16 cm, height 5 cm

4) Write an expression for “three times a number e , decreased by 9”.

- A. $3(e - 9)$ C. $3 - e - 9$
 B. $9 - 3e$ D. $3e - 9$

5) A tape diagram shows that a length is divided into 4 equal parts, each measuring 6 cm. Write and solve an equation for the total length x .



- A. $4x = 6$; $x = 1.5$ C. $x - 4 = 6$; $x = 10$
 B. $x + 4 = 6$; $x = 2$ D. $\frac{x}{4} = 6$; $x = 24$

6) A height requirement states that riders must be taller than 48 inches. Which inequality matches this?

- A. $h \geq 48$ C. $h < 48$
 B. $h \leq 48$ D. $h > 48$



Missouri MAP Practice Test Answer Keys

How to use this Missouri MAP answer section with a Grade 6 student:

1. check the answer first, then write one quick reason the choice is correct
2. mark questions to try again, especially the skills that feel connected to show-me math proof
3. rework the problem before reading the full explanation, using this reminder:
Show the reason, not just the answer: model, calculate, and confirm with the question.

A calm Missouri correction routine turns every missed item into useful practice. Use each test to gather evidence about strengths and the next skill to repair.



Scan me!
For more practice
& answers

Missouri Practice Test Answers and Explanations

Review the eight printed MAP tests with evidence-minded, steady, and ready to prove more habits.

Practice Test 1 Answers and Explanations

- Choice A is correct.** (6.NS.C.7) $-\frac{5}{4} = -1.25$ is the least value, so it is farthest to the left (most negative).
- Choice C is correct.** (6.GM.A.1) The area formula for any triangle is $A = \frac{1}{2}bh$, where b is base and h is height.
- The correct answer is 5.** (6.NS.B.4) The greatest whole number dividing both piles is $\text{GCF}(15, 20) = 5$ —your friendly handshake between $15 = 5 \cdot 3$ and $20 = 5 \cdot 4$.
- Choice D is correct.** (6.DSP.A.2) Mean = $\frac{5 + 15 + 20 + 30}{4} = \frac{70}{4} = 17.5$.
- Choice B is correct.** (6.NS.B.3) You are counting how many $\frac{1}{4}$ -cup servings fit inside 2 cups—that's a division problem: $2 \div \frac{1}{4}$. Rewrite as 2×4 , which equals 8 servings.
- Choice D is correct.** (6.EE1.A.3) “The difference of 10 and 2” is $(10 - 2)$. “The product of f and” that difference is $f(10 - 2)$.
- Choice A is correct.** (6.EE1.A.2) Substitute $m = 2$: $5(2) - 7 = 10 - 7 = 3$.
- The correct answer is 5.** (6.EE1.B.5) The boundary value is 5.
- Choice A is correct.** (6.EE1.B.4) Subtract 9 from both sides: $x = 16 - 9 = 7$.
- Choice D is correct.** (6.GM.A.2) The correct volume is $V = 2.5 \times 3 \times 4 = 7.5 \times 4 = 30 \text{ m}^3$. The student forgot to multiply by the height.
- Choice A is correct.** (6.GM.A.3) A square with side length 5 units has vertices at $(2, 2)$, $(7, 2)$, $(7, 7)$, and $(2, 7)$.
- Choice C is correct.** (6.GM.A.1) Lateral surface area = sum of three rectangles = $3 \times (8 \times 4) = 3 \times 32 = 96 \text{ cm}^2$. (Perimeter \times height = $12 \times 8 = 96 \text{ cm}^2$.)
- Choice A is correct.** (6.GM.A.3) Reflection over the x -axis: $Q(1, 2) \rightarrow Q'(1, -2)$.
- Choice D is correct.** (6.RP.A.2) Area = $\pi r^2 \approx 3.14 \times 15^2 = 3.14 \times 225 = 706.5 \text{ ft}^2$.
- Choice A is correct.** (6.DSP.A.2) The mode is the value that appears most often. The value 3 appears three times.
- Choice B is correct.** (6.EE1.C.9) The median is the middle value that best represents the center of the dataset.
- Choice B is correct.** (6.DSP.B.5) Mean = $(150 + 175 + 200 + 225 + 500)/5 = 250$, pulled high by the outlier. Median = 200, closer to typical orders. Median is more appropriate here.
- The correct answer is Plan X shows a proportional relationship, and it is represented by $e = 20h$.** (6.EE1.B.7) Statement A is correct: Plan X has equation $e = 20h$, so it is proportional. Statement C matches the equation for Plan X. Plan Y has equation $e = 100 + 10h$, so it is not proportional and its graph does not pass through the origin. After 10 hours, both plans pay \$200, so D is false.
- Choice C is correct.** (6.DSP.B.4) Stem-and-leaf plots are used for numerical data. Test scores are numerical and have a reasonable range.
- Choice A is correct.** (6.NS.A.1) The 45% section is largest (270 items), and the 30% section is second-largest ($0.30 \times 600 = 180$ items).
- Choice C is correct.** (6.NS.B.2) Counting the data: 1 appears once, 2 appears 3 times, 3 appears 4 times, 4 appears once, and 5 appears once. The tallest stack would be above 3 goals.
- Choice D is correct.** (6.RP.A.1) Match 35 red pens to the 7 red parts: $35 \div 7 = 5$, so each part is worth 5 pens. Blue has 5 parts, so $5 \times 5 = 25$ blue pens.
- Choice B is correct.** (6.DSP.A.3) The car travels 60 miles per hour. In 3 hours: $60 \times 3 = 180$ miles.
- Choice B is correct.** (6.GM.A.3) The ratio is nuts:dried fruit = 4:3. If nuts = 12, then $12 \div 4 = 3$, so dried fruit = $3 \times 3 = 9$. The point is $(12, 9)$.
- Choice A is correct.** (6.DSP.A.1) Shaded portion is 75% of the total. If 75% equals 75 students, then $100\% = \frac{75}{0.75} = 100$ students.



Notes From the Math Gardener

Hi, Math Gardener!

◇ Look at how much you grew! 8 tests is like 8 weeks of taking care of your math garden. Every problem was a seed. Every try was water. ◇

★ **Gardeners say:** growth takes time. You can't see roots, but they are there. You can't always feel smarter, but you are. Your math garden is full! ★

Garden Check-Up

- **Roots:** STRONG! Your basic math is solid.
- **Stems:** STURDY! You can do step-by-step problems.
- **Leaves:** GREEN! You have lots of math tools.
- **Flowers:** BRIGHT! You feel proud of your work.

Gardener tip: keep watering your math garden long after the test. Every habit you built will grow with you for years!

If you want to share something or ask a question, please email me at jay@testinar.com.

Jay Daie

Your Math Gardener

MASTER MATH. ACE YOUR TESTS.

This Grade 6 Math Practice Tests book is designed to help students build confidence, strengthen math skills, and excel on comprehensive assessments.

With 8 full-length printed tests and 2 online tests, this resource provides realistic practice, a variety of question types, and detailed answer explanations to help students achieve their best.

Perfect for classroom use, homework, test preparation, and extra practice at home.

8
PRINTED
TESTS

+

2
ONLINE
TESTS

PERFECT FOR

- ✓ Classroom Practice
- ✓ Homework & Review
- ✓ Independent Learning
- ✓ Test Preparation
- ✓ Skill Reinforcement
- ✓ Building Confidence



**PRACTICE TODAY.
SUCCEED TOMORROW.**

WHAT STUDENTS WILL GAIN



Stronger Math Skills

Build a solid foundation through targeted practice and review.



Better Problem Solving

Develop logical thinking and effective solution strategies.



Understand Key Concepts

Reinforce important math ideas aligned with standards.



Test Confidence

Get familiar with test formats and improve accuracy.



Achieve Success

Build confidence and perform your best on test day.

TOPICS COVERED

- ✓ Ratios & Rates
- ✓ Percents
- ✓ The Number System
- ✓ Statistics & Probability
- ✓ Expressions & Equations
- ✓ Data Analysis
- ✓ Geometry
- ✓ Measurement & Conversions
- ✓ Fractions & Decimals
- ✓ And More!



2 ONLINE TESTS

Extra online practice to reinforce learning and build confidence.

MORE PRACTICE. GREATER RESULTS.

Give your child the tools needed to develop strong math skills, confidence, and a positive attitude toward learning.



8 FULL-LENGTH
PRACTICE TESTS



2 ONLINE
PRACTICE TESTS



DETAILED ANSWER
EXPLANATIONS