

10 Missouri MAP

GRADE
6
MATH

PRACTICE TESTS

Standards-Aligned Review
Mixed Practice & Answer Key



10 PRINTED TESTS

Realistic practice to build confidence and mastery



2 ONLINE TESTS

Extra practice for continued success



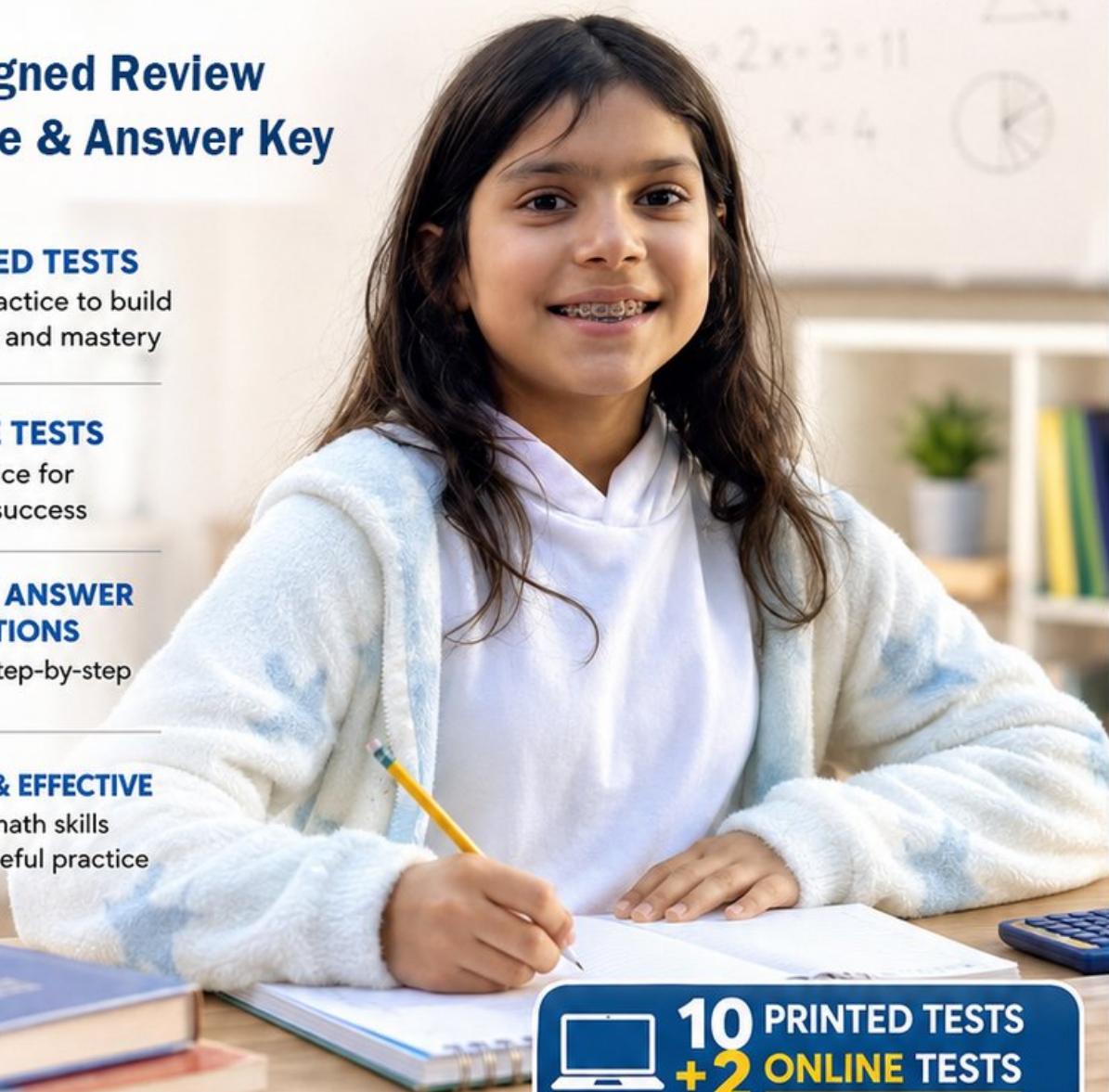
DETAILED ANSWER EXPLANATIONS

Learn with step-by-step solutions



FOCUSED & EFFECTIVE

Target key math skills with purposeful practice



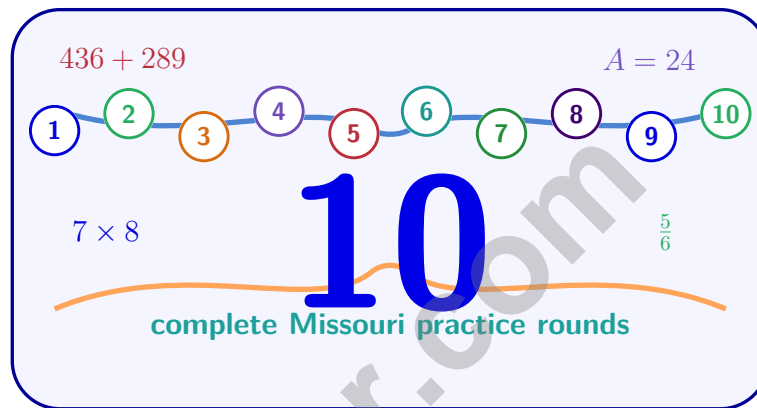
10 PRINTED TESTS
+ 2 ONLINE TESTS

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

PRACTICE • REVIEW • SUCCEED

10 Missouri MAP Grade 6 Math Practice Tests

Standards-Aligned Show-Your-Work Reasoning for Missouri Assessment Program



Ten complete 40-question Grade 6 practice rounds for MAP, 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!

Ten steady rounds on a Show-Me State math route

This book gives you ten full Grade 6 practice tests for MAP. Each round uses river gateways, rolling hills, and proof-ready practice 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

Do not just choose it; show why it works. I will slow down for the question, circle what matters, solve one step at a time, and use mistakes as clues for getting stronger.

Read

Plan

Check

How to Use This Book

A ten-session routine for show-your-work reasoning

1. **Preview the skills.** Read the quick review pages before the first test.
2. **Take one test at a time.** Work in a quiet place and answer all 40 questions.
3. **Mark your confidence.** Put a small star beside problems you solved with a strong plan.
4. **Check, then retry.** For missed questions, try the problem again before reading the explanation.
5. **Track your next move.** Use the growth log to name one habit and one skill for the next test.

Missouri review rhythm: Test one day, correct carefully the next day, then return for the next round when your corrections feel clear.



What Is Inside?

Ten MAP tests, 400 questions, and a full review path

Part	What You Will Practice
Tests 1–3	Warm-up rounds for ratios, rational numbers, operations, and careful reading.
Tests 4–6	Skill-building rounds with expressions, equations, geometry, data, and problem models.
Tests 7–9	Stamina rounds for mixed review, neat work, and flexible strategy choices.
Test 10	Final Missouri round to show growth across the whole book.
Answer Pages	Compact keys and explanations that show why each answer works.

The tests are mixed on purpose. Show-your-work reasoning means recognizing the skill even when the next question changes topic.



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& answers

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1) Which of the following statements about the range is true?

- A. The range is always equal to the median.
- B. The range is affected only by the mean.
- C. The range only looks at the maximum and minimum values.
- D. The range is found by adding the maximum and minimum.

2) A juice company sells juice in two sizes. A 48-ounce bottle costs \$8.00. A 64-ounce bottle costs \$9.60. Which is the better value per ounce?

- A. 48-oz at \$0.17/oz
- B. 48-oz at \$0.15/oz
- C. 64-oz at \$0.15/oz
- D. 64-oz at \$0.17/oz

3) A student's monthly budget is: School supplies \$30, Entertainment \$40, and Food \$50. What percent of the budget is school supplies?

Category	Amount	Percent
School supplies	\$30	?
Entertainment	\$40	?
Food	\$50	?
Total	\$120	100%

- A. 25%
- B. 30%
- C. 33%
- D. 40%

4) A toy dinosaur model is 10 cm tall. The scale is 1 cm = 0.8 m. How tall is the actual dinosaur?

- A. 4 m
- B. 6 m
- C. 8 m
- D. 10 m

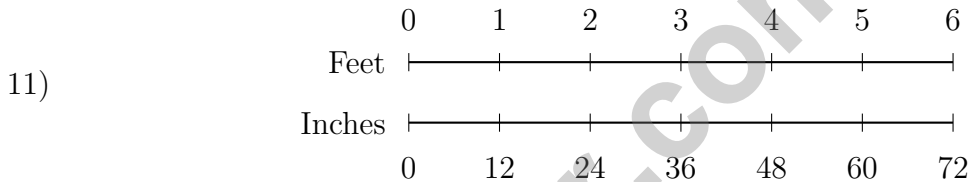


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9) A garden has tomato plants and pepper plants in a ratio of 8 : 3. If there are 24 tomato plants, how many pepper plants are in the garden?

- A. 27 pepper plants
- B. 8 pepper plants
- C. 3 pepper plants
- D. 9 pepper plants

10) Find the mean of the data set: 7, 14, 21, 28.



Based on the double number line, what is the rate in inches per foot?

- A. 6 inches per foot
- B. 8 inches per foot
- C. 24 inches per foot
- D. 12 inches per foot

12) A table shows two equivalent methods for doubling a recipe. Which is true?

Method 1

Cups	Cost
1	\$2
2	\$4

Method 2

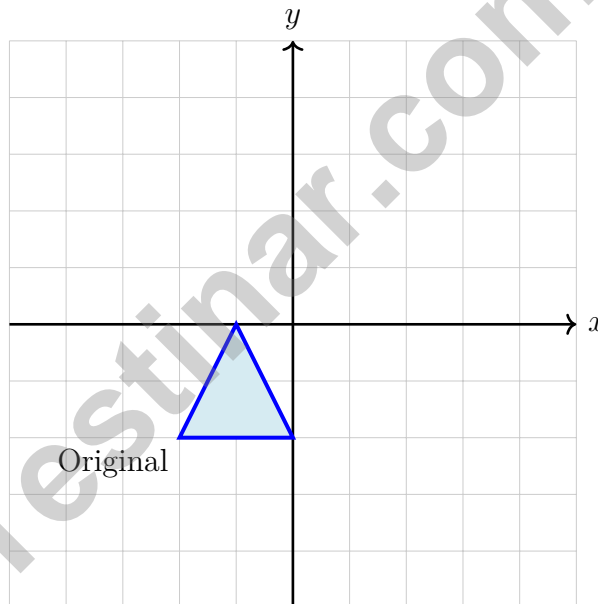
Cups	Cost
2	\$3
4	\$6

- A. Method 1: unit price \$2/cup; Method 2: \$1.50/cup
- B. Both methods cost the same
- C. Method 1 is always cheaper
- D. The methods cannot be compared



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- 1) A circle has a diameter of 20 cm. What is its approximate area using $\pi \approx 3.14$?
- A. 62.8 cm^2 C. 314 cm^2
 B. 125.6 cm^2 D. 1256 cm^2
- 2) A square prism (a cube with non-unit edge length) has edge length 9 cm. What is the total surface area?
- A. 324 cm^2 C. 486 cm^2
 B. 405 cm^2 D. 729 cm^2



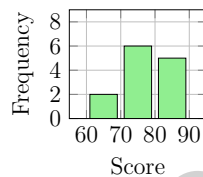
- 3) A triangle has vertices at $(-2, -2)$, $(0, -2)$, and $(-1, 0)$. If it is reflected over the y -axis, what will be the coordinates of the image of $(-2, -2)$?
- A. $(2, -2)$ C. $(2, 2)$
 B. $(-2, 2)$ D. $(-2, -2)$



4) A library worker wants to know: “Which book genre do students like best?”

To answer this question properly, the worker should:

- A. Ask one student. C. Look at what the librarian prefers.
 B. Survey many students and collect their responses. D. Count the total number of books.
- 5) A histogram of test scores shows bars that are tallest in the middle and shorter on both sides. What shape is this?



- A. Symmetric C. Skewed right
 B. Skewed left D. Bimodal
- 6) Find the mean of 3, 7, 8.
- A. 5 C. 7
 B. 6 D. 18
- 7) A recipe calls for between 200 mL and 300 mL of water. The range of acceptable volumes is:
- A. 50 mL C. 200 mL
 B. 500 mL D. 100 mL



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1) A student is asked: “In a class, the ratio of girls to boys is 5 : 3. What does this mean?”

The student’s response: “There are 5 girls and 3 boys.”

Is the student’s answer correct?

- | | |
|-----------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| <input type="checkbox"/> A. Yes, it is always correct. | <input type="checkbox"/> C. No, girls outnumber boys by exactly 2 students. |
| <input type="checkbox"/> B. Yes, but only if the ratio has been simplified. | <input type="checkbox"/> D. No, there could be 10 girls and 6 boys. |

2) If $\frac{4}{6} = \frac{x}{15}$, what is the value of x ?

- | | |
|--------------------------------|--------------------------------|
| <input type="checkbox"/> A. 8 | <input type="checkbox"/> C. 12 |
| <input type="checkbox"/> B. 18 | <input type="checkbox"/> D. 10 |

3) Sarah is 64 inches tall. How many feet tall is Sarah? (Use 1 foot = 12 inches.)

- | | |
|-------------------------------------------------|------------------------------------|
| <input type="checkbox"/> A. $5\frac{1}{3}$ feet | <input type="checkbox"/> C. 5 feet |
| <input type="checkbox"/> B. $6\frac{1}{2}$ feet | <input type="checkbox"/> D. 7 feet |

4) A 6-pack of soda costs \$3.60. What is the cost per can (unit rate)?

- | | |
|------------------------------------|------------------------------------|
| <input type="checkbox"/> A. \$0.50 | <input type="checkbox"/> C. \$0.70 |
| <input type="checkbox"/> B. \$0.80 | <input type="checkbox"/> D. \$0.60 |



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- 5) A gym membership costs \$40 per month. Create a table for months 0, 1, 2, and 3. Is the cost proportional to the number of months?

Months	0	1	2	3
Cost (\$)	0	40	80	120

- A. No; 0 months costs \$0
- B. Cannot determine from the table
- C. No; there is no constant fee
- D. Yes; the ratio cost/months is constant
- 6) A student's test score improved from 75 to 93.75. What is the percent increase in the score?

- 7) A school is organizing sports equipment. They have 16 soccer balls and 24 basketballs. They want to distribute them equally into bins with no equipment left over. What is the maximum number of bins needed?
- A. 4 bins
- B. 40 bins
- C. 16 bins
- D. 8 bins
- 8) A bakery sells cookies in packs of 6. On Monday, they sold 36 cookies, and on Tuesday, they sold 42 cookies. How many packs did they sell in total over both days?
- A. 6 packs
- B. 10 packs
- C. 13 packs
- D. 78 packs



Missouri MAP Practice Test Answer Keys

How to use this section with a Grade 6 student:

1. check the answer first
2. mark questions to try again
3. rework the problem before reading the full explanation

A calm correction routine turns every missed item into useful practice.

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Practice Test Answers and Explanations

Practice Test 1 Answers and Explanations

- Choice C is correct.** (6.RP.A.2) Range depends solely on the maximum and minimum, ignoring all middle values. It is found by subtracting the minimum from the maximum, not by adding them.
- Choice C is correct.** (6.NS.B.3) 48-oz: $\$8.00 \div 48 \approx \$0.167/\text{oz}$. 64-oz: $\$9.60 \div 64 = \$0.15/\text{oz}$. The 64-oz bottle has the better (lower) unit price.
- Choice A is correct.** (6.GM.A.1) Total: $\$30 + \$40 + \$50 = \120 . School supplies: $\frac{\$30}{\$120} = \frac{1}{4} = 25\%$.
- Choice C is correct.** (6.DSP.A.2) Multiply the model height by the scale: $10 \text{ cm} \times 0.8 \text{ m/cm} = 8 \text{ m}$.
- Choice D is correct.** (6.DSP.B.4) Dogs are the 3-part amount. Since $18 \div 3 = 6$, each part is worth 6 animals, and cats are 2 parts: $2 \times 6 = 12$.
- The correct answer is 13.** (6.NS.C.8) $\text{IQR} = \text{Q3} - \text{Q1} = 23 - 10 = 13$.
- Choice A is correct.** (6.EE1.B.4) Add: $\$3.45 + \$2.20 + \$4.85 = \10.50 .
- Choice C is correct.** (6.EE1.C.9) The bar for category C extends from 0.8 to 1.4 out of 2, which is the largest segment proportionally (0.6 units out of 2).
- Choice D is correct.** (6.GM.A.2) The 8 tomato parts represent 24 plants, so each part is $24 \div 8 = 3$ plants. Pepper plants are 3 parts, so $3 \times 3 = 9$.
- The correct answer is 17.5.** (6.GM.A.3) Mean = $\frac{7 + 14 + 21 + 28}{4} = \frac{70}{4} = 17.5$.
- Choice D is correct.** (6.RP.A.2) From the double number line, 1 foot equals 12 inches. This is the standard conversion rate.
- Choice A is correct.** (6.NS.A.1) Method 1: 1 cup costs \$2, so unit price = \$2/cup. Method 2: 2 cups cost \$3, so unit price = $\$3 \div 2 = \$1.50/\text{cup}$. The methods have different unit rates and cannot be called equivalent recipes in terms of cost efficiency.
- Choice A is correct.** (6.EE1.A.2) For the equation $y = 6x$: when $x = 1$, $y = 6(1) = 6$, so $(1, 6)$ is on the line. Check other options: $(2, 8)$ gives $8 \neq 12$; $(3, 12)$ gives $12 \neq 18$; $(4, 18)$ gives $18 \neq 24$. Only A satisfies the equation.
- Choice A is correct.** (6.EE1.A.3) $\frac{1}{5} = 0.2 = 20\%$. All three representations equal the same value.
- Choice B is correct.** (6.EE1.C.9) $35\% \text{ of } 500 = 0.35 \times 500 = 175 \text{ trucks}$.
- The correct answer is 52.** (6.EE1.A.2) Mean = sum / count. $45 = \text{sum}/8 \Rightarrow \text{sum} = 360$. Sum of 7 known values = $38 + 40 + 42 + 44 + 46 + 48 + 50 = 308$. Eighth value = $360 - 308 = 52$.
- Choice D is correct.** (6.EE1.A.3) Ratio 7 : 4 with width 20 cm: each part is $20 \div 4 = 5 \text{ cm}$. Length is $7 \times 5 = 35 \text{ cm}$.
- Choice A is correct.** (6.EE1.B.4) Divide: $20 \div 8 = 2.5 \text{ gallons}$.
- The correct answer is Rectangles and triangles are polygons.** (6.GM.A.3) A is correct: a rectangle with vertices $(0, 0)$, $(4, 0)$, $(4, 3)$, $(0, 3)$ is a polygon on the coordinate plane. B is correct: a triangle with vertices $(1, 2)$, $(5, 2)$, and $(3, 6)$ is a polygon. C, D, and E are incorrect because circles, curves, and ellipses are not polygons—polygons must have only straight sides.
- Choice D is correct.** (6.EE1.B.8) Olivia's total after w weeks: $\$250 + \$15w$. Nathan's total after w weeks: $\$100 + \$20w$. Set them equal: $250 + 15w = 100 + 20w$, so $150 = 5w$ and $w = 30$ weeks.
- Choice A is correct.** (6.GM.A.1) For apples at \$2 each, the equation is $c = 2a$. The graph passes through $(0, 0)$, $(1, 2)$, $(2, 4)$, $(3, 6)$, and $(4, 8)$, representing a proportional relationship with a unit rate of \$2 per apple.
- Choice D is correct.** (6.GM.A.3) $\frac{9}{10} \times \frac{5}{3} = \frac{45}{30} = \frac{3}{2}$.
- Choice A is correct.** (6.DSP.A.2) Use long division or estimation: $24 \times 50 = 1,200$, leaving 48. Then $48 \div 24 = 2$, so $1,248 \div 24 = 52$.
- Choice D is correct.** (6.DSP.A.2) This is an LCM problem. Multiples of 8: 8, 16, 24, ... Multiples of 12: 12, 24, ... Both buses are at the station together at 24 minutes.
- Choice B is correct.** (6.DSP.B.4) GCF of 8 and 12 is 4. So $8 + 12 = 4(2 + 3)$. Choice A uses 2 (a common factor but not greatest); Choices C and D include decimals, violating whole-number arithmetic.



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Hi, Math Champion!

◇ You trained hard! 10 full practice tests is real practice. Your math game is way better now than when you started. ◇

★ **Coach's truth:** kids who practice get better. You practiced. You got better. That's how it works!
★

Your Game Stats

- **Energy:** HIGH! You can finish a long test.
- **Smart Plays:** You know lots of strategies.
- **Calm Head:** You stay cool with hard problems.
- **Game-Day Ready:** You feel strong and prepared.

Coach's tip: the night before the test, get good sleep. Eat a good breakfast. Bring a sharp pencil. Trust your training!

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

Jay Daie

Your Math Coach

PRACTICE MORE. ACHIEVE MORE. SUCCEED!

This **Grade 6 Math Practice Tests** book is designed to help students build strong math skills, deepen their understanding of key concepts, and gain the confidence they need to succeed on any test.

With 10 full-length printed tests and 2 online tests, students get the review, practice, and realistic test experience they need to improve accuracy, strengthen problem-solving abilities, and reach their full potential.

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

PERFECT FOR:

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



**CONFIDENCE TODAY.
SUCCESS 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.



Deepen Understanding

Reinforce key math concepts 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
- ✓ The Number System
- ✓ Expressions & Equations
- ✓ Geometry
- ✓ Fractions & Decimals
- ✓ Percents
- ✓ Statistics & Probability
- ✓ Data Analysis
- ✓ Measurement & Conversions
- ✓ 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.



10 PRINTED
PRACTICE TESTS



2 ONLINE
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DETAILED ANSWER
EXPLANATIONS