

7 Missouri MAP

Grade 6 MATH PRACTICE 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



7 Full-Length
Printed Tests



Standards-Aligned
Math Practice



Detailed Answer Keys
and Explanations



Build Confidence.
Achieve Success.



PREPARE
PRACTICE
SUCCEED



PRACTICE
WITH PURPOSE



STRENGTHEN
MATH SKILLS



REVIEW, IMPROVE,
AND SUCCEED

7 Missouri MAP Grade 6 Math Practice Tests

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



Seven 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.

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Welcome, Missouri Math Explorer!

Eight focused rounds using show-me math proof

This book gives you seven 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 seven-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.
Test 7	Final stamina round for mixed review, neat work, and flexible strategy choices.
Answer Pages	Compact keys and explanations that show why each answer works.

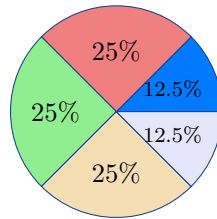
The tests are mixed on purpose. Show-me math proof means recognizing the skill even when the next question changes topic, changes format, or asks for an explanation.



Scan me!
For more practice
& answers

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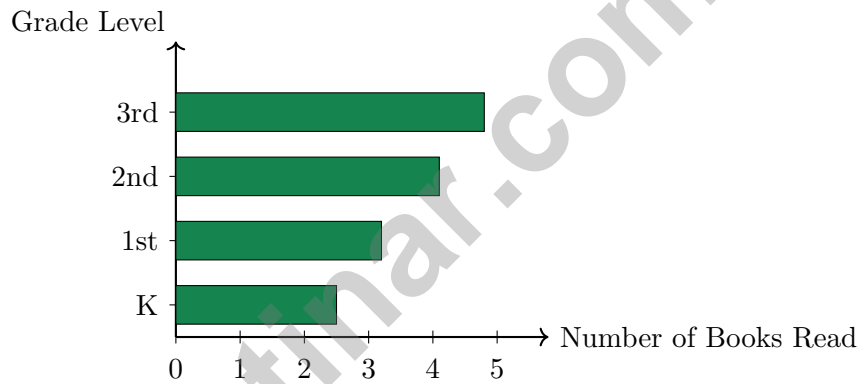
★ Practice Test 1	_____	13
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5)

A survey asked 320 families about car color preference. The circle graph shows 12.5% prefer blue. How many families prefer blue?

- A. 30
- B. 40
- C. 60
- D. 50



6)

This horizontal bar graph shows the average number of books read by different grade levels. How many more books did 3rd graders read on average compared to kindergarteners?

- A. 2.3 books
- B. 2.5 books
- C. 2.4 books
- D. 3.0 books

- 7) On a number line from 0 to 3 divided into tenths, point P is at 1.4 and point Q is at 2.8. What is the distance between points P and Q?

- 8) A class has 40 students. Twelve students are in the chess club. What percent of the class is in chess club?

- A. 12% C. 30%
 B. 20% D. 40%

- 9) A composite figure consists of a triangle and a trapezoid (or identify triangular components). If only the triangle portion has base 10 meters and height 5 meters, what is the area of just the triangle?

- A. 15 m^2 C. 50 m^2
 B. 25 m^2 D. 75 m^2

- 10) A bank account has a balance of $-\$45$ (overdrawn). A withdrawal of $\$30$ is attempted. What is the new balance? What does the answer mean in context?



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- 1) A book club reads pages at a constant rate. The table shows how many pages are read in different times:

Pages Read	Time (hours)
45	1.5
90	3
?	4.5

- A. 120 C. 135
 B. 130 D. 150
- 2) In a student club, the ratio of 6th graders to 7th graders is 4 : 6. If there are 12 sixth graders, how many seventh graders are in the club?

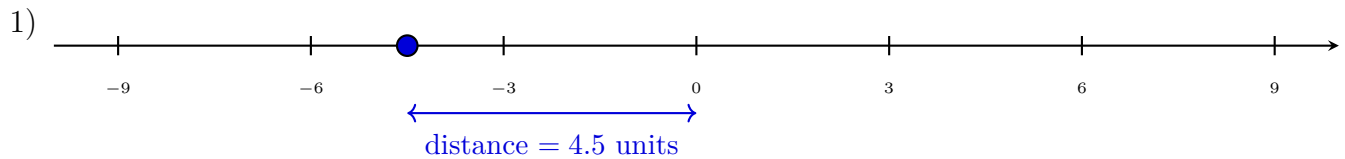
- 3) A machine produces 420 items in 7 hours. At this rate, how many items will the machine produce in 12 hours?



- 4) A fabric costs \$8.50 per meter. How much does 2.5 meters cost?
- A. \$21.25 C. \$5.75
 B. \$10.75 D. \$20.00
- 5) On an elevator, someone travels down 7 floors (represented as -7). How far did they travel in terms of absolute value?
- A. -7 floors C. 0 floors
 B. 7 floors D. 14 floors
- 6) A family has a monthly income of \$3600. They allocate: 35% to rent, 15% to food, 10% to utilities. How much do they have remaining for other expenses?
- A. \$1080 C. \$1440
 B. \$1260 D. \$1800
- 7) A budget surplus of \$400 is split evenly among 5 categories. How much does each category receive?
- A. \$60 C. \$80
 B. \$70 D. \$90
- 8) A scale drawing uses a scale of 1 inch = 5 feet. A rectangular room is drawn with dimensions 4 inches by 3 inches. What is the perimeter of the actual room?
- A. 28 feet C. 70 feet
 B. 35 feet D. 140 feet



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If a point is 4.5 units from zero, which number could it be?

- A. 4.5 only C. Both 4.5 and -4.5
 B. -4.5 only D. 0 only

2) A right triangle has legs of 11 inches and 18 inches. Calculate the area of the triangle.

A large empty rectangular box for the answer.

3) A histogram shows test scores with intervals: 60–69 (frequency 3), 70–79 (frequency 8), 80–89 (frequency 6), 90–99 (frequency 2).

What is the total number of students who took the test?

- A. 17 C. 21
 B. 19 D. 24

4) Which pair of ratios are NOT equivalent?

- A. $2 : 5$ and $4 : 10$ C. $4 : 8$ and $1 : 3$
 B. $3 : 7$ and $6 : 14$ D. $5 : 6$ and $10 : 12$



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- 5) A gardener plants flowers in a ratio of roses to tulips of 4 : 5. If the gardener plants 16 roses, how many tulips are planted?

Roses	Tulips
4	5
8	10
16	?

- A. 18 C. 22
 B. 24 D. 20
- 6) A catering company charges a constant fee per person. The graph shows points (6, 72) and (10, 120) on the line representing the cost-per-person ratio. What is the cost per person?

- A. \$8 per person C. \$12 per person
 B. \$10 per person D. \$15 per person

7)

Store	Original Price	Sale Price
Store A	\$50	\$40
Store B	\$60	\$42

Which store offers the larger percent discount?

- A. Store A (20% off) C. Store A (30% off)
 B. Store B (30% off) D. Both offer the same discount



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.



Missouri Practice Test Answers and Explanations

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

Practice Test 1 Answers and Explanations

- 1) **Choice A is correct.** **(6.GM.A.3)** Temperature drop means subtraction: $15 - 25 = -10^\circ \text{C}$.
- 2) **Choice C is correct.** **(6.DSP.B.4)** The mode (16 days, frequency 4), individual frequencies, and the median can be read directly from the dot plot. Total attendance (the sum of attendance \times frequency) requires calculation and might vary based on interpretation; it cannot be determined without additional calculation.
- 3) **Choice C is correct.** **(6.DSP.B.5)** With 6 values, the median is the average of the 3rd and 4th values: $(37+42)/2 = 39.5$.
- 4) **Choice A is correct.** **(6.DSP.B.4)** In order: 23, 25, 28, 29, 31, 34, 36, 37, 42, 45, 48. With 11 values (an odd count), the median is the middle value at position 6: 34 push-ups.
- 5) **Choice B is correct.** **(6.NS.A.1)** 12.5% of 320 is $0.125 \times 320 = 40$ families.
- 6) **Choice A is correct.** **(6.NS.B.2)** 3rd graders read approximately 4.8 books; kindergarteners read approximately 2.5 books. The difference is about $4.8 - 2.5 = 2.3$ books.
- 7) **The correct answer is 1.4.** **(6.NS.C.7)** Distance = $2.8 - 1.4 = 1.4$ units.
- 8) **Choice C is correct.** **(6.RP.A.2)** $\frac{12}{40} = \frac{3}{10} = \frac{30}{100} = 30\%$ (simplify, then write as a fraction with denominator 100).
- 9) **Choice B is correct.** **(6.GM.A.1)** $A = \frac{1}{2} \times 10 \times 5 = 25 \text{ m}^2$.
- 10) **The correct answer is $-\$75$.** **(6.NS.B.3)** $-45 + (-30) = -75$. The account is now 75 dollars overdrawn.
- 11) **Choice B is correct.** **(6.DSP.A.2)** This rewrite introduces variability: different car models have different top speeds, requiring data collection and comparison. The other options don't address the fixed-answer nature of the original.
- 12) **Choice A is correct.** **(6.DSP.A.2)** Median is the average of the two middle values (positions 3 and 4): $\frac{8+11}{2} = 9.5$.
- 13) **The correct answer is 48.** **(6.EE1.A.3)** Substitute $t = 3$: $4(3+9) = 4 \times 12 = 48$.
- 14) **Choice C is correct.** **(6.NS.C.8)** Total combinations = $3 \times 4 \times 2 = 24$.
- 15) **Choice D is correct.** **(6.EE1.A.3)** Distribute: $6(3x-1) = 6 \cdot 3x - 6 \cdot 1 = 18x - 6$.
- 16) **Choice D is correct.** **(6.EE1.B.4)** Original amount minus 2.25 used equals 3.75 left. So $x - 2.25 = 3.75$, giving $x = 6$ cups.
- 17) **Choice D is correct.** **(6.EE1.B.5)** $x < 0$ includes 0 (closed circle) and all numbers less than 0 (arrow points left).
- 18) **The correct answer is $1.5 \times 2.4 = 3.6$ (two decimal places total) and $4.8 \div 0.4 = 12$ (shift both left by one place: $48 \div 4 = 12$).** **(6.NS.B.3)** B is correct because $15 \times 24 = 360$ and the factors have two decimal places total, giving 3.6. D is correct because $4.8 \div 0.4 = 48 \div 4 = 12$. A, C, and E have incorrect decimal placement.
- 19) **Choice A is correct.** **(6.GM.A.2)** $V = 4 \times 1.5 \times 2.5 = 6 \times 2.5 = 15 \text{ m}^3$.
- 20) **The correct answer is 19.5.** **(6.EE1.A.2)** Substitute $x = 3.5$: $5(3.5) + 2 = 17.5 + 2 = 19.5$.
- 21) **Choice D is correct.** **(6.GM.A.3)** Area = $\frac{1}{2}(b_1 + b_2) \times h = \frac{1}{2}(6+4) \times 3 = \frac{1}{2}(10) \times 3 = 15$ square units.
- 22) **Choice C is correct.** **(6.DSP.A.3)** Range depends only on the extreme values (max and min), so an outlier directly changes the range. The IQR ignores extremes, and MAD is less sensitive.
- 23) **Choice D is correct.** **(6.RP.A.1)** The order is blue to red, so start with 8 : 12. Divide both parts by 4 to simplify the ratio to 2 : 3.
- 24) **Choice A is correct.** **(6.GM.A.3)** The unit rate is found when $x = 1$. From the table, the hourly wage is $36 \div 3 = 12$ dollars per hour. The point (1, 12) displays this unit rate, as it shows 1 hour earning \$12.
- 25) **Choice C is correct.** **(6.DSP.A.1)** 45% of 120 = $0.45 \times 120 = 54 \text{ m}^2$.
- 26) **Choice C is correct.** **(6.EE1.B.6)** Total ratio parts: $3 + 2 + 1 = 6$. Savings share: $\frac{3}{6} \times \$200 = \frac{1}{2} \times \$200 = \$100$.
- 27) **Choice A is correct.** **(6.RP.A.3)** Drawing 1: $5 \times 2 = 10 \text{ m}$ and $4 \times 2 = 8 \text{ m}$. Drawing 2: $10 \times 1 = 10 \text{ m}$ and $8 \times 1 = 8 \text{ m}$. Same field.
- 28) **Choice A is correct.** **(6.NS.C.5)** The increase is $8 - (-5) = 8 + 5 = 13^\circ \text{F}$.



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A Note From Your Math Friend

Hi, Math Star!

◇ Wow! You finished 7 full practice tests. That is a LOT of math problems. You worked hard, and your brain got stronger every time. ◇

★ **Here is a big idea:** mistakes are okay! Every time you got something wrong, you got smarter. Through 7 tests, you learned that trying is the most important thing. ★

Look What You Did!

- **Hard Worker:** You did not give up!
- **Smart Thinker:** You used your math tools.
- **Brave Learner:** You tried hard problems.
- **Test Ready:** You feel proud and prepared.

Big tip for test day: take your time. Read each problem twice. Show your work. Check your answer. You can do this!

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

Jay Daie

Your Math Friend

MASTER TODAY. SUCCEED TOMORROW.

This Grade 6 Math Practice Tests book is designed to help students strengthen their math skills, master important concepts, and build the confidence they need to excel on comprehensive assessments.

With 7 full-length printed tests and 2 online tests, students get the review, practice, and realistic test experience they need to improve accuracy, develop 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

★ 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.



Deeper Understanding

Reinforce key concepts aligned with standards through meaningful practice.



Test Confidence

Become familiar with test formats and improve accuracy and speed.



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.



7 FULL-LENGTH
PRINTED TESTS



STANDARDS-
ALIGNED PRACTICE



DETAILED ANSWER
KEYS & EXPLANATIONS