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MISSISSIPPI MAAP

GRADE

7

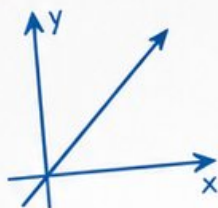
MATH

PRACTICE TESTS



Standards Aligned
Problem Solving For
Comprehensive
Assessment Programs

$$y = mx + b$$



$$2(x - 3) = 4x + 6$$

6 PRINTED TESTS



2 ONLINE TESTS



USE THESE TWO
**ADDITIONAL ONLINE
PRACTICE TESTS**
FOR EXTRA REVIEW AFTER
THE PRINTED TESTS
IN THIS BOOK.



Build
Confidence



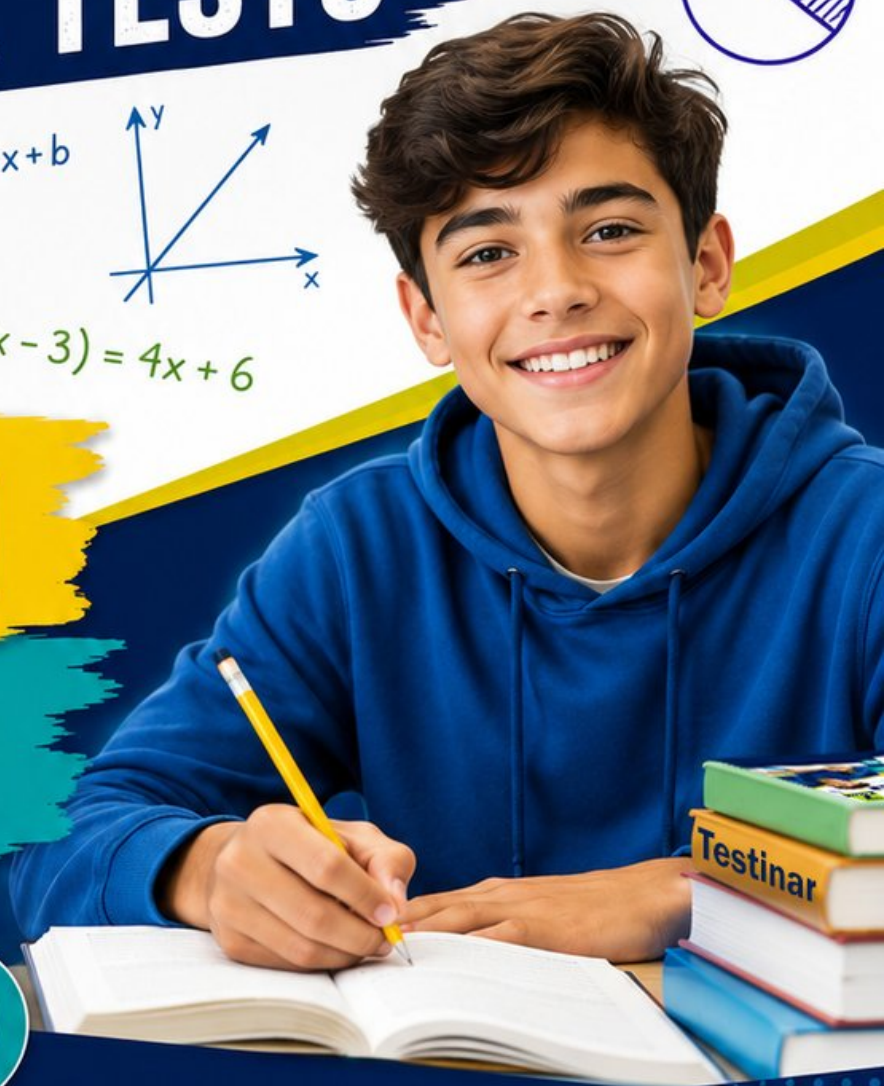
Strengthen
Math Skills



Detailed Answers
& Explanations



Improve Test
Performance



6 Mississippi MAAP Grade 7 Math Practice Tests

Standards-Aligned Practice with Review, Answer Keys, and Explanations



Six complete 40-question Grade 7 MAAP practice rounds with proportional relationships, percents, rational numbers, expressions, equations, geometry, statistics, probability, answer keys, and clear explanations for every item.

Jay Daie and Reza Nazari



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Welcome, Mississippi Grade 7 Problem Solver!

Six focused rounds for sharper MAAP math thinking

This book gives you six full Grade 7 MAAP math practice tests. Each round is built to help you notice structure, compare quantities, use proportional reasoning, handle rational numbers, and explain your thinking with care.

Your Mississippi Practice Promise

I will read every question carefully, choose a strategy that fits, write enough work to prove my answer, and use corrections as training for the next test.

Read

Model

Verify

How to Use This Book

A six-session plan for confident Grade 7 review

1. **Warm up with the review pages.** Notice the big ideas before starting the tests.
2. **Complete one test at a time.** Treat each 40-question round like a real practice session.
3. **Show your reasoning.** Jot a proportion, equation, diagram, number line, or quick estimate when it helps.
4. **Correct actively.** Rework missed items before reading the explanation.
5. **Choose the next target.** After each test, name one skill and one habit to improve.

Mississippi review rhythm: Work a test, score it, study your misses, then come back ready for the next round with one clear goal.



What Is Inside?

Six MAAP tests, 240 questions, and a complete review path

Part	What You Will Practice
Tests 1–3	Proportional relationships, unit rates, percents, rational-number operations, and careful reading.
Tests 4–6	Expressions, equations, inequalities, scale drawings, geometry, and multi-step problem solving.
Answer Pages	Compact keys and explanations that show why each answer works.

The tests are mixed on purpose. Grade 7 success means recognizing which idea is being tested even when the next question changes format.



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& answers

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- 1) A health clinic surveyed 150 patients and found that 42 have high blood pressure. The clinic sees 500 patients per month. About how many have high blood pressure?
- ☐ A. 84 ☐ C. 140
☐ B. 112 ☐ D. 168
- 2) Find x : $2x + 1.5 = 5.5$
- ☐ A. $x = 1$ ☐ C. $x = 3$
☐ B. $x = 2$ ☐ D. $x = 4$
- 3) A company has 250 employees. If 12% work in the office and the rest work remotely, how many work remotely?
- ☐ A. 30 ☐ C. 162
☐ B. 88 ☐ D. 220
- 4) A simulation uses a spinner with two equal sections to model guessing on a multiple-choice question with four choices. Is this a good model?
- ☐ A. Yes, because both have equally likely outcomes ☐ C. No, because the probabilities do not match
☐ B. Yes, because the spinner is easy to use ☐ D. No, because you cannot use a spinner twice
- 5) A researcher collects data about exercise habits by surveying 150 people at a gym. Which statement about this sample is true?
- ☐ A. It is a random sample of the general population ☐ C. It is biased because it overrepresents people who exercise regularly
☐ B. It is representative of all adults' exercise habits ☐ D. It has no bias because the sample size is large

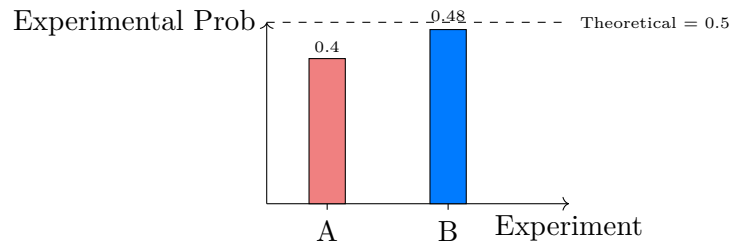


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- 6) A spinner is divided into 8 equal sections. 2 sections are labeled “Win”, 3 are labeled “Lose”, and 3 are labeled “Try Again”. What is the probability of spinning “Win”?
- ☐ A. $\frac{1}{8}$ ☐ C. $\frac{3}{8}$
☐ B. $\frac{1}{4}$ ☐ D. $\frac{1}{2}$
- 7) A pizza place offers 3 types of crust, 6 sauce options, and 8 toppings. How many single-topping pizzas can be made?
- ☐ A. 17 ☐ C. 72
☐ B. 42 ☐ D. 144
- 8) Two datasets have the same mean of 50. Dataset X has an IQR of 10. Dataset Y has an IQR of 25. What does this imply?
- ☐ A. Dataset X is more spread out ☐ C. Both are identical except for
☐ B. Dataset Y is more spread out in outliers
the middle 50% ☐ D. Dataset Y has a smaller range
- 9) A back-to-back stem-and-leaf plot compares the heights of two basketball teams. The stem represents tens of inches. For Team A, stem 7 has leaves 0, 2, 4, 6 (on the left). For Team B, stem 7 has leaves 1, 3, 5, 8 (on the right). How many players are in the 70–79 inch range in total?
- ☐ A. 4 players ☐ C. 12 players
☐ B. 8 players ☐ D. 16 players
- 10) Three coins are flipped. What is the probability of getting at least one head?
- ☐ A. $\frac{1}{8}$ ☐ C. $\frac{6}{8}$
☐ B. $\frac{3}{8}$ ☐ D. $\frac{7}{8}$



- 11) A researcher conducted two experiments. Experiment A: flipped a coin 60 times, got heads 24 times. Experiment B: flipped a coin 600 times, got heads 288 times. Which statement best describes these results?



- ☐ A. Experiment A's result is more reliable because it is smaller.
 ☐ C. Both experiments give the same experimental probability.
- ☐ B. Experiment B's result is closer to the theoretical probability of 0.5.
 ☐ D. Experiment A proves the coin is biased.
- 12) Given raw data: 51, 54, 58, 61, 64, 68, 71, 75. In a stem-and-leaf plot, what is the correct representation?
- ☐ A. Stem 5: 1, 4, 8; Stem 6: 1, 4, 8; Stem 7: 1, 5
 ☐ C. Stem 5: 1, 4, 8; Stem 6: 1, 4; Stem 7: 1, 5, 8
- ☐ B. Stem 5: 1, 4, 5, 8; Stem 6: 1, 4; Stem 7: 1, 5
 ☐ D. Stem 5: 51, 54, 58; Stem 6: 61, 64; Stem 7: 71, 75
- 13) On a probability number line from 0 to 1, where would you place the probability 0.75?
- ☐ A. One-quarter of the way from 0 to 1
 ☐ C. Three-quarters of the way from 0 to 1
- ☐ B. Halfway between 0 and 1
 ☐ D. At 0



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1) Solve: $3 - \frac{x}{2} \geq 9$

☐ A. $x \leq -12$

☐ C. $x > 12$

☐ B. $x \geq -12$

☐ D. $x < -6$

2) Which point lies on the line of reflection $y = x$?

☐ A. $(-4, 4)$

☐ C. $(3, 3)$

☐ B. $(2, -2)$

☐ D. $(5, -5)$

3) A store advertises “*Save 30% on all winter coats!*” If a coat originally costs \$120, what is the sale price?

☐ A. \$36

☐ C. \$90

☐ B. \$150

☐ D. \$84

4) A bag contains 3 red marbles, 2 blue marbles, and 5 green marbles. To simulate drawing one marble, which probability does rolling a standard die best represent?

☐ A. Probability of drawing red

☐ D. Probability of drawing blue or green

☐ B. Probability of drawing blue

☐ C. Probability of drawing green

5) A number from 1 to 4 is selected, and then a letter from A to C is selected. How many favorable outcomes result in an even number and a vowel (A)?

☐ A. 1

☐ C. 3

☐ B. 2

☐ D. 6



- 6) A dataset represented in a stem-and-leaf plot has 15 values ranging from 42 to 88. If the data is split into a lower half and upper half to find quartiles, how many values are in the lower half?

- 7) A box plot shows test scores with minimum 45, $Q1 = 65$, median = 75, $Q3 = 85$, maximum = 95. What is the interquartile range (IQR)?

- 8) A die is rolled and a spinner with 6 equal sections is spun. What is the probability of rolling a number greater than 2 AND spinning a number less than 4?

☐ A. $\frac{1}{3}$
☐ B. $\frac{8}{36}$

☐ C. $\frac{2}{3}$
☐ D. $\frac{4}{9}$

- 9) A bag contains only red and blue marbles. A marble is drawn 150 times with replacement. Red appears 84 times. Based on this experiment, which is the best estimate of the probability of drawing a red marble on the next draw?

☐ A. 0.44
☐ B. 0.50

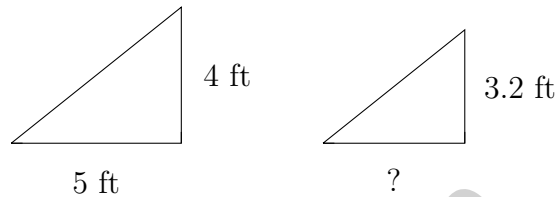
☐ C. 0.56
☐ D. 0.84



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& answers

- 1) A rectangular blueprint shows a hallway that is 2.5 inches by 8 inches at a scale of 1 in : 4 ft. Another blueprint of the same hallway shows it as 5 inches by 16 inches. What is the scale of the second blueprint?

- ☐ A. 1 in : 2 ft ☐ C. 1 in : 8 ft
☐ B. 1 in : 4 ft ☐ D. 2 in : 1 ft



2)

Two similar right triangles are shown. The left triangle has legs 5 ft (horizontal) and 4 ft (vertical). The right triangle has a vertical leg of 3.2 ft. Find the horizontal leg of the right triangle.

- ☐ A. 2.56 ft ☐ C. 4 ft
☐ B. 3.2 ft ☐ D. 5 ft

- 3) What is the area of a circle with radius $\frac{1}{2}$ meter? Use $\pi \approx 3.14$.

- ☐ A. 0.785 m^2 ☐ C. 3.14 m^2
☐ B. 1.57 m^2 ☐ D. 6.28 m^2

- 4) What does MAD (Mean Absolute Deviation) measure?

- ☐ A. The average distance of data points from the mean ☐ C. The most frequently occurring value
☐ B. The middle value in an ordered dataset ☐ D. The difference between max and min



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& answers

- 5) Triangle ABC has sides 13 cm, 5 cm, and 12 cm. Compute $13^2 - (5^2 + 12^2)$.

- 6) A histogram shows the distribution of test scores for two classes with the same mean (80) but different shapes: Class A is symmetric (bell-shaped), Class B is right-skewed (tail on right). What does this tell you about variability?

- ☐ A. Class A has higher variability
- ☐ B. Class B has higher variability
- ☐ C. You cannot determine variability from shape alone
- ☐ D. Both classes have the same variability

- 7) A book originally costs \$30. Which form best shows the factored structure of a 10% discount (that you keep 90% of the price)?

- ☐ A. $30 - 0.1(30)$
- ☐ B. $30(1 - 0.1)$
- ☐ C. 0.9×30
- ☐ D. $30 + 10$

- 8) Looking at the garden plant histograms again, which range of plant counts is shared by both neighborhoods (overlap region)?

- ☐ A. 20–25 plants (overlap of both distributions)
- ☐ B. 15–35 plants (entire combined range)
- ☐ C. No overlap; neighborhoods are completely separate
- ☐ D. Only exactly 25 plants



Mississippi MAAP Grade 7 Practice Test Answer Keys**How to use this section with a Grade 7 student:**

1. check the answer first and circle any item that needs another look
2. retry the problem with fresh work before reading the explanation
3. write one short lesson learned from each missed or guessed item

A strong review routine turns every correction into a sharper plan for the next Mississippi MAAP practice test.

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Practice Test Answers and Explanations

Practice Test 1 Answers and Explanations

- 1) **Choice C is correct.** (7.SP.1-7.SP.4) $\frac{42}{150} = \frac{x}{500}$. Simplify: $\frac{7}{25} = \frac{x}{500} \Rightarrow x = 140$.
- 2) **Choice B is correct.** (7.EE.3-7.EE.4) Subtract 1.5: $2x = 4$. Divide by 2: $x = 2$.
- 3) **Choice D is correct.** (7.RP.3) Office workers: $\frac{12}{100} \times 250 = 30$. Remote workers: $250 - 30 = 220$.
- 4) **Choice C is correct.** (7.SP.5-7.SP.8) True guessing probability on a 4-choice question is $\frac{1}{4}$, not $\frac{1}{2}$. A spinner with 4 equal sections would be better.
- 5) **Choice C is correct.** (7.SP.1-7.SP.4) People at a gym are by definition more active than the general population, making the sample unrepresentative of all adults.
- 6) **Choice B is correct.** (7.SP.5-7.SP.8) "Win" sections: 2 out of 8. $P(\text{Win}) = \frac{2}{8} = \frac{1}{4}$.
- 7) **Choice D is correct.** (7.SP.5-7.SP.8) By the counting principle: $3 \times 6 \times 8 = 144$ single-topping pizzas.
- 8) **Choice B is correct.** (7.SP.1-7.SP.4) IQR (Interquartile Range) measures the middle 50% of data. Dataset Y's IQR of 25 is larger than Dataset X's IQR of 10, showing greater spread in the middle half.
- 9) **Choice B is correct.** (7.SP.1-7.SP.4) Team A has 4 players (70, 72, 74, 76). Team B has 4 players (71, 73, 75, 78). Total = $4 + 4 = 8$.
- 10) **Choice D is correct.** (7.SP.5-7.SP.8) Easier using complement: $P(\text{at least one head}) = 1 - P(\text{all tails}) = 1 - \frac{1}{8} = \frac{7}{8}$.
- 11) **Choice B is correct.** (7.SP.6) Experiment A: $\frac{24}{60} = 0.4$ (differs by 0.1 from 0.5). Experiment B: $\frac{288}{600} = 0.48$ (differs by 0.02 from 0.5). This illustrates the law of large numbers: larger sample sizes produce experimental probabilities closer to the theoretical value.
- 12) **Choice A is correct.** (7.SP.1-7.SP.4) Data 51, 54, 58, 61, 64, 68, 71, 75 maps: Stem 5: 1, 4, 8; Stem 6: 1, 4, 8; Stem 7: 1, 5. Answer A is correct.
- 13) **Choice C is correct.** (7.SP.5-7.SP.8) $0.75 = \frac{3}{4}$, so it is located $\frac{3}{4}$ of the way along the number line.
- 14) **Choice D is correct.** (7.RP.3) Percent error = $\frac{|12-10|}{10} \times 100\% = \frac{2}{10} \times 100\% = 20\%$.
- 15) **Choice B is correct.** (7.EE.1-7.EE.2) Distribute 8: $8(1.5y) - 8(2) = 12y - 16$.
- 16) **Choice D is correct.** (7.NS.1-7.NS.3) $-6 - (-6) = -6 + 6 = 0$. A number minus itself is always 0.
- 17) **The correct answer is 1044.** (7.G.1-7.G.5) Actual length = $12 \times 87 = 1044$ cm. This is approximately 10.44 meters.
- 18) **Choice C is correct.** (7.RP.3) The increase is $65 - 50 = 15$. Percent: $\frac{15}{50} = 0.30 = 30\%$.
- 19) **Choice C is correct.** (7.NS.1b) Both numbers are positive, so add them: $18 + 27 = 45$.
- 20) **The correct answer is A,D.** (7.G.1-7.G.5) (A) $(1, 0) \xrightarrow{90^\circ \text{CCW}} (0, 1) \xrightarrow{\text{reflect } x\text{-axis}} (0, -1)$. ✓ (B) $(2, 3) \xrightarrow{90^\circ \text{CCW}} (-3, 2) \xrightarrow{\text{reflect } x\text{-axis}} (-3, -2)$ —mathematically correct but not asked. (C) The composite is NOT equivalent to 90° clockwise (that would be $(y, -x)$, giving $(0, -1)$ for $(1, 0)$, which matches by coincidence, but try $(2, 3) \rightarrow (3, -2)$ for 90° CW). (D) Both operations preserve distance from origin.
- 21) **The correct answer is 14.** (7.G.4-7.G.6) $C = 2\pi r \Rightarrow 88 = 2 \times \frac{22}{7} \times r \Rightarrow 88 = \frac{44}{7}r \Rightarrow r = 88 \times \frac{7}{44} = 14$ cm.
- 22) **Choice B is correct.** (7.EE.1-7.EE.2) Check: $3(2y - 4) = 6y - 12$. This is the only pair that are equivalent.
- 23) **The correct answer is 153.86.** (7.G.4-7.G.6) $A = 3.14 \times 7^2 = 3.14 \times 49 = 153.86 \text{ cm}^2$.
- 24) **The correct answer is 157.** (7.G.4-7.G.6) $V = \pi r^2 h \approx 3.14 \times (2.5)^2 \times 8 = 3.14 \times 6.25 \times 8 = 157 \text{ m}^3$.
- 25) **Choice D is correct.** (7.RP.1-7.RP.3) Multiply map distance by scale factor: $2.25 \times 30 = 67.5$ miles.
- 26) **Choice D is correct.** (7.RP.3) Discount = $\frac{1}{4} \times 28 = \7 . Sale price = $28 - 7 = \$21$.
- 27) **Choice A is correct.** (7.EE.1) Group like terms by variable: $(5x - 2x) + (3y + 4y) = (5 - 2)x + (3 + 4)y = 3x + 7y$.
- 28) **Choice C is correct.** (7.SP.1-7.SP.4) 19% of 1200 = $0.19 \times 1200 = 228$ items.
- 29) **Choice B is correct.** (7.RP.1-7.RP.3) Must pass through origin $(0, 0)$. Only option B qualifies. Slope is $\frac{9}{3} = 3$, so $y = 3x$.
- 30) **Choice D is correct.** (7.RP.1-7.RP.3) The unit rate is $6 \div 4 = 1.5$. So $y = 1.5x$. At $x = 8$, $y = 1.5 \times 8 = 12$ cups.



Hi, Persistent Problem Solver!

◇ Some Grade 7 questions ask you to hold several ideas in your mind at once. That can feel hard, and that is exactly why practice matters. ◇

★ **Remember this:** You showed persistence by continuing through the set. That habit is powerful because difficult problems often open after one more good attempt. You practiced across 6 full Grade 7 practice tests, and that repeated effort matters. ★

Persistence Tools

- **Try a Smaller Case:** Use an easier number to see the pattern.
- **Draw It:** Make the situation visible.
- **Restate It:** Say the question in your own words.
- **Check One Step:** Fix the first unclear place.

Grade 7 test-day tip: When stuck, do not restart everything. Find the first step you trust, then rebuild from there.

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

Jay Daie

Your Persistence Coach

PRACTICE TODAY. SUCCEED TOMORROW!

This book includes **6** full-length Math practice tests and **2** online tests to help Grade 7 students build confidence, strengthen skills, and excel on standardized assessments.

Each practice test is carefully crafted to reflect the latest standards and includes a variety of question types, realistic test conditions, and detailed answer explanations.

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



THIS BOOK INCLUDES:

6 Full-Length Printed Tests

2 Online Practice Tests

 Detailed Answers & Explanations



MORE PRACTICE. GREATER RESULTS.

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

WHAT YOU'LL GAIN



Build Confidence

Practice regularly to feel prepared and test-ready.



Strengthen Math Skills

Develop key math concepts and problem solving abilities.



Improve Understanding

Learn with clear explanations and step-by-step solutions.



Test Confidence

Familiarize with test formats and improve accuracy and speed.



Boost Performance

Apply your knowledge and achieve your best score!

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



2 ONLINE TESTS

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



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