

8

Maryland

MCAP

GRADE 6

MATH

PRACTICE TESTS

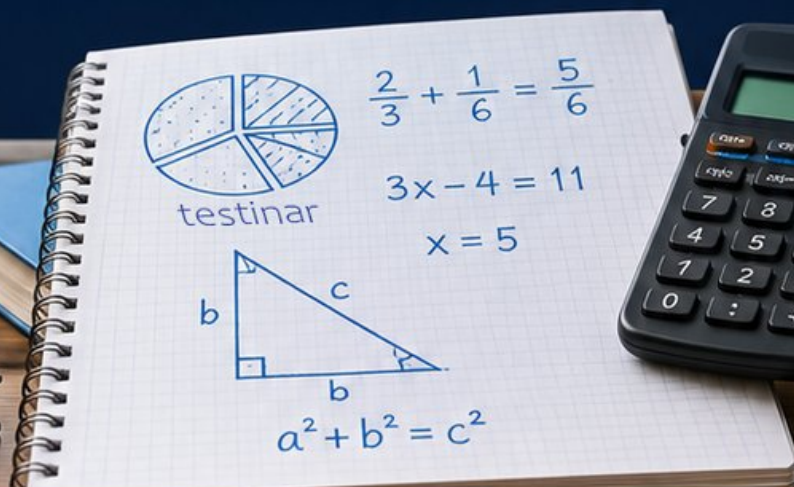
8
PRINTED
TESTS

+

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



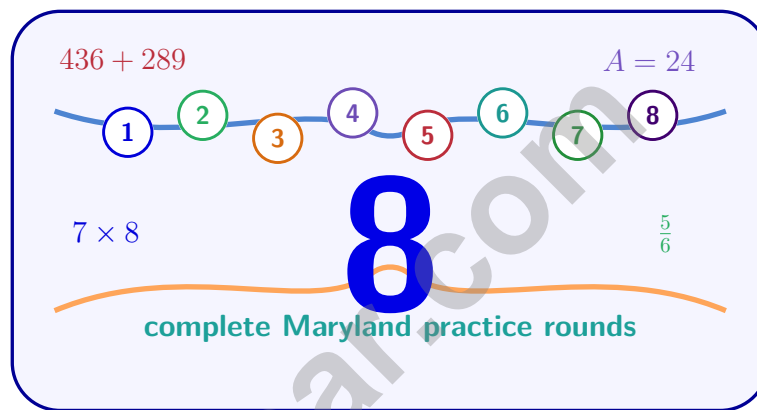
STRENGTHEN
MATH SKILLS



REVIEW, PRACTICE,
AND IMPROVE

8 Maryland MCAP Grade 6 Math Practice Tests

Standards-Aligned Chesapeake Review Precision for Maryland Comprehensive Assessment Program



Eight complete 40-question Grade 6 practice rounds for MCAP, built for Chesapeake review precision with ratios, rational numbers, expressions, equations, geometry, statistics, answer keys, and clear explanations for every item.

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Welcome, Maryland Math Explorer!

Eight focused rounds using Chesapeake review precision

This book gives you eight full Grade 6 practice tests for MCAP. Each round uses bay bridges, classroom charts, and careful explanation habits as a fresh mental backdrop while you read closely, choose a smart strategy, show your work, and check whether your answer makes sense.

Your Maryland Practice Promise

Connect the facts before solving: identify the relationship, choose the tool, and explain the answer.

Read

Plan

Check

How to Use This Book

A eight-session routine for Chesapeake review precision

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

Maryland review rhythm: Take one round, use the answer explanations as a bridge, and return with a cleaner plan.



What Is Inside?

Eight MCAP 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. Chesapeake review precision means recognizing the skill even when the next question changes topic, changes format, or asks for an explanation.



Scan me!
For more practice
& answers

Table of Contents

★ Practice Test 1	_____	14
★ Practice Test 2	_____	29
★ Practice Test 3	_____	43
★ Practice Test 4	_____	58
★ Practice Test 5	_____	74
★ Practice Test 6	_____	89
★ Practice Test 7	_____	104
★ Practice Test 8	_____	120
Practice Test Answer Keys	_____	139
Practice Test Answers and Explanations	_____	144

6) Solve for x : $5x = 30$.

7) An error was found in a proportional relationship table. The equation should be $y = 6x$. Which point does NOT fit the pattern?

x	1	2	3	4
y	6	12	18	25

- A. (1, 6) does not fit
- B. (2, 12) does not fit
- C. (3, 18) does not fit
- D. (4, 25) does not fit
- 8) A company allocates a budget as follows: \$3000 for operations, \$2000 for marketing, \$1500 for salaries, and \$1500 for equipment. If revenue is \$10000, what percent of revenue is unallocated?
- A. 10%
- B. 40%
- C. 30%
- D. 20%
- 9) A student ordered -4.2 , -4.1 , 0.3 as: 0.3 , -4.1 , -4.2 . What error did the student make?
- A. Forgot that negatives are less than positives
- B. Thought $-4.2 > -4.1$
- C. Confused decimal places
- D. Used correct order



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10) The expression $C = \pi d$ gives the circumference of a circle with diameter d . Using $\pi \approx 3.14$, find C when $d = 2.5$.

A. 5.0

C. 12.56

B. 7.85

D. 19.625

11) You must be older than 18 to vote. Which inequality best describes this, with a as your age?

A. $a \leq 18$

C. $a < 18$

B. $a \geq 18$

D. $a > 18$

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

13) A circular running track has a radius of 50 meters. Using $\pi \approx 3.14$, what is the approximate area of the track?

A. 157 m^2

C. 7850 m^2

B. 314 m^2

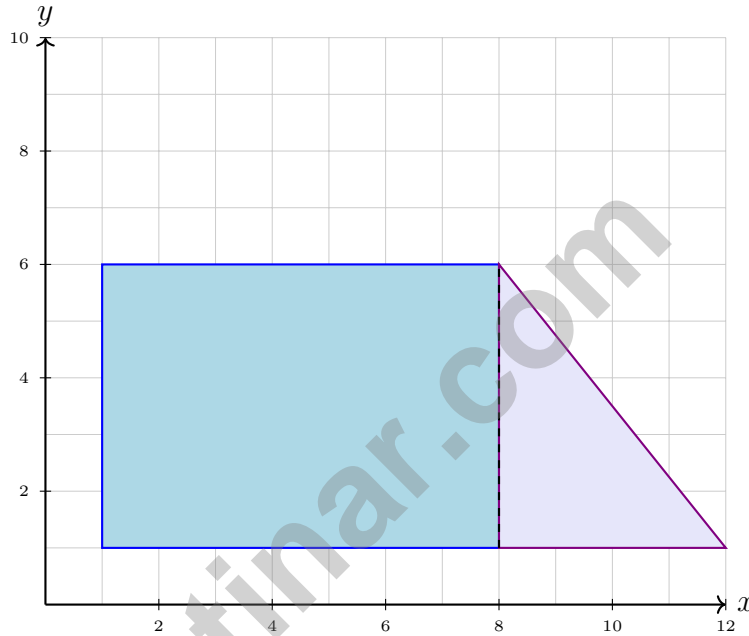
D. 15700 m^2

14) A trapezoid has an area of 80 sq ft, one base of 14 ft, and a height of 10 ft. What is the length of the other base?



1) Which phrase best describes the inequality $x \geq 12$?

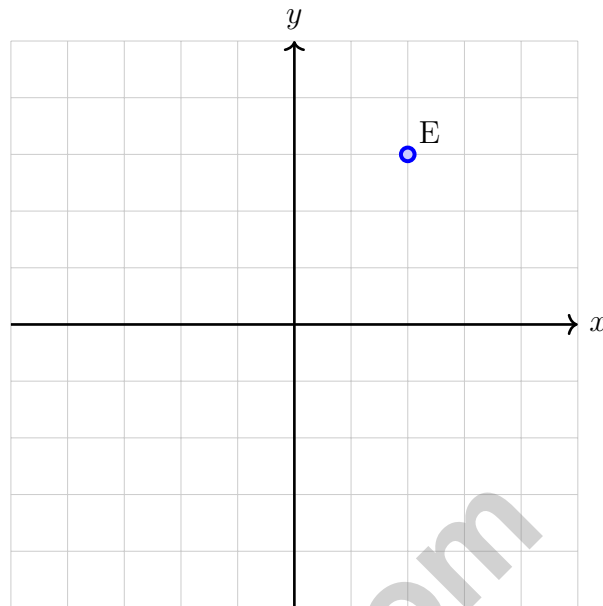
- A. Less than 12
- B. Greater than 12
- C. No more than 12
- D. At least 12



2)

A composite figure consists of a rectangle and a triangle. The rectangle has vertices at $(1, 1)$, $(8, 1)$, $(8, 6)$, and $(1, 6)$. The triangle has vertices at $(8, 1)$, $(12, 1)$, and $(8, 6)$. What is the total area?

- A. 40 square units
- B. 45 square units
- C. 50 square units
- D. 55 square units



3)

Point E is located at $(2, 3)$. If it is translated 3 units to the right and 2 units down, what are the coordinates of its image E' ?

4) Four vertices are at $(3, 1)$, $(8, 1)$, $(8, 3)$, and $(3, 3)$. What type of quadrilateral is this?

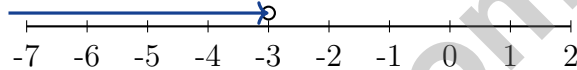
 A. Rectangle C. Triangle B. Trapezoid D. Pentagon

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1) A student uses a scale drawing where 1 inch = 4 feet. She measures a desk as 3 inches in the drawing. She says the actual desk is $\frac{3}{4}$ feet long. Which is the student's error?

- A. The units are wrong; she should say inches, not feet.
- B. She divided instead of multiplied; the actual length is 12 feet.
- C. She used the scale backward; the actual length is 12 inches.
- D. The measurement of 3 inches is wrong.

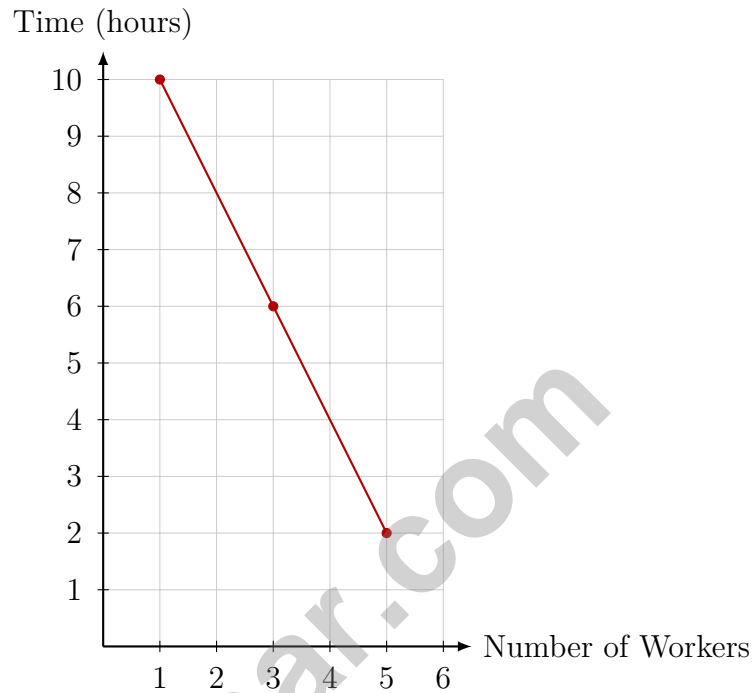
2) Which number line shows $x < -3$?



- A. Open circle at -3 , arrow left
- B. Closed circle at -3 , arrow left
- C. Open circle at -3 , arrow right
- D. Closed circle at 3 , arrow left



- 3) The graph below shows the relationship between the number of workers and the time needed to complete a job.



As the number of workers increases, the time decreases. What is the rate of change?

- A. 2 hours per worker
- B. -2 hours per worker
- C. 0.5 hours per worker
- D. -0.5 hours per worker
- 4) 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



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& answers

Maryland MCAP Practice Test Answer Keys

How to use this Maryland MCAP 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 Chesapeake review precision
3. rework the problem before reading the full explanation, using this reminder: Connect the facts before solving: identify the relationship, choose the tool, and explain the answer.

A calm Maryland correction routine turns every missed item into useful practice. Take one round, use the answer explanations as a bridge, and return with a cleaner plan.



Scan me!
For more practice
& answers

Maryland Practice Test Answers and Explanations

Review the eight printed MCAP tests with connected, precise, and ready for the next review habits.

Practice Test 1 Answers and Explanations

- Choice B is correct.** (6.EE.A.1) Parentheses first: $8 + 2 = 10$. Exponent: $2^2 = 4$. Subtract in parentheses: $4 - 1 = 3$. Finally multiply: $10 \times 3 = 30$.
- Choice D is correct.** (6.EE.B.8) The symbol \geq includes the boundary value, so we use a closed (filled) circle to show that -3 is part of the solution set.
- Choice A is correct.** (6.EE.C.9) In the equation $d = 20t$, 20 is the constant rate of change (the speed), and t is the time.
- Choice D is correct.** (6.G.A.2) The correct formula is $V = L \times W \times H$, not addition. $V = 5 \times 4 \times 3 = 60 \text{ m}^3$.
- Choice B is correct.** (6.SP.B.4) A debit card draws directly from her bank account, reducing the balance by the purchase amount. Credit cards defer payment (she borrows); interest is earned on savings, not debit purchases; and balances don't increase from purchases.
- The correct answer is 6.** (6.EE.B.5) Divide both sides by 5 : $x = 30 \div 5 = 6$. The inverse of multiplying by 5 is dividing by 5 .
- Choice D is correct.** (6.EE.C.9) For $y = 6x$: when $x = 4$, $y = 6(4) = 24$, not 25 . The point should be $(4, 24)$.
- Choice D is correct.** (6.EE.C.9) Total allocated: $\$3000 + \$2000 + \$1500 + \$1500 = \$8000$. Unallocated: $\$10000 - \$8000 = \$2000 = 20\%$ of $\$10000$.
- Choice A is correct.** (6.NS.C.7) The correct order is $-4.2 < -4.1 < 0.3$. Negatives are always less than positive numbers.
- Choice B is correct.** (6.EE.A.3) Substitute: $C = 3.14 \times 2.5 = 7.85$ units.
- Choice D is correct.** (6.EE.B.8) "Older than 18 " means strictly greater than: $a > 18$.
- The correct answer is 99.** (6.G.A.1) $A = \frac{1}{2} \times 11 \times 18 = 99 \text{ in}^2$.
- Choice C is correct.** (6.RP.A.1) Area $= \pi r^2 \approx 3.14 \times 50^2 = 3.14 \times 2500 = 7850 \text{ m}^2$.
- The correct answer is 2.** (6.G.A.1) Using $A = \frac{1}{2}(b_1 + b_2) \times h$: $80 = \frac{1}{2}(14 + b_2) \times 10 = 5(14 + b_2)$. So $16 = 14 + b_2$, giving $b_2 = 2$ ft.
- Choice A is correct.** (6.SP.A.2) Rewriting "How old is my teacher?" to "How old are the teachers at our school?" introduces variability (different teachers have different ages) and requires collecting multiple data points. Options B, C, and D don't improve the statistical nature of the original question.
- Choice C is correct.** (6.SP.A.2) Sum of all $5 = 20 \times 5 = 100$. Sum of known $4 = 15 + 18 + 22 + 25 = 80$. Fifth $= 100 - 80 = 20$.
- Choice D is correct.** (6.SP.A.2) With 7 values, the median is the 4 th value when ordered: $0.5, 0.8, 1.2, 1.5, 2.5, 2.8, 3.1$. Median is 1.5 .
- Choice D is correct.** (6.SP.A.3) The data is $5, 5, 5, 5, 7, 7, 11$. Maximum $= 11$, minimum $= 5$. Range $= 11 - 5 = 6$.
- Choice D is correct.** (6.RP.A.1) IQR $= Q_3 - Q_1$, so $24 = 56 - Q_1$. Thus $Q_1 = 56 - 24 = 32$.
- Choice A is correct.** (6.SP.B.5) Standard deviation measures spread. Hawks' lower standard deviation ($8 < 14$) indicates more consistent scoring around their mean.
- Choice D is correct.** (6.RP.A.1) Multiply the monthly rate by 12 months: $35 \times 12 = 420$ dollars per year.
- The correct answer is B: 2 kg = 2000 g; C: 0.5 miles = 2640 feet.** (6.RP.A.3) A is incorrect: $10 \times 8 = 80 \text{ fl oz}$, not 60 . B is correct: $2 \times 1000 = 2000$ grams. C is correct: $0.5 \times 5280 = 2640$ feet. D is incorrect: $1.5 \times 1000 = 1500 \text{ mL}$, not 150 . E is incorrect: $8 \times 2 = 16$ pints, not 32 .
- Choice D is correct.** (6.RP.A.2) $350 \div 14 = 25$ miles per gallon.
- Choice A is correct.** (6.RP.A.3) A proportional relationship with unit rate 3 means $y = 3x$. Option A has points $(1, 3)$, $(2, 6)$, $(3, 9)$, which satisfy $y = 3x$. The other options do not have this constant ratio.
- Choice A is correct.** (6.RP.A.3) $0.125 = \frac{125}{1000} = \frac{1}{8}$ (simplify) $= 12.5\%$.



Math Detective at Work

Hi, Math Detective!

◇ You did such a great job! You finished 8 tests like a real detective. You found the clues, used your tools, and solved the math. ◇

★ **Detectives know:** good work takes time. You took your time. You looked carefully. You found the answers! ★

Your Detective Skills

- **Sharp Eyes:** You notice the small details.
- **Smart Plans:** You pick the right way to solve.
- **Brave Heart:** You try even when it's tricky.
- **Steady Work:** You finish what you start.

Detective tip: on test day, look carefully at each problem. Underline important words. Then solve like the detective you are!

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

Jay Daie

Your Math Detective Helper

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.



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