

4 Maryland MCAP

GRADE
6
MATH

PRACTICE TESTS

Standards Aligned Problem Solving
For Comprehensive Assessment Programs

4

**PRINTED
TESTS**



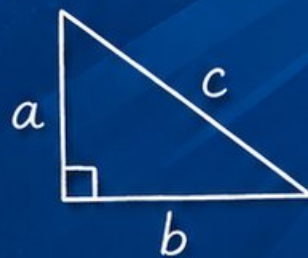
2

**ONLINE
TESTS**



- ✓ Build Confidence
- ✓ Master Key Math Skills
- ✓ Answer Explanations for Every Question
- ✓ Test-Taking Strategies That Work

$$2x + 5 = 21$$
$$x = 8$$



$$\frac{3}{4} + \frac{1}{2} = \frac{5}{4}$$



**USE THESE TWO
ADDITIONAL ONLINE
PRACTICE TESTS**

**FOR EXTRA REVIEW AFTER
THE PRINTED TESTS
IN THIS BOOK.**

4 Maryland MCAP Grade 6 Math Practice Tests

Standards-Aligned Chesapeake Review Precision for Maryland Comprehensive Assessment Program



Four 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.

Jay Daie and Reza Nazari



Copyright ©

Testinar Inc



Published by Testinar Inc

Testinar.com

All rights reserved. No part of this publication may be reproduced, distributed, or transmitted in any form or by any means, including photocopying, recording, or other electronic or mechanical methods, without the prior written permission of the author, except in the case of brief quotations embodied in critical reviews and certain other noncommercial uses permitted by copyright law, including Section 107 or 108 of the 1976 United States Copyright Act.

This publication is independently produced and has no official connection to any state, district, or national testing program.

Test names and organizational names used herein are the property of their respective trademark holders.



Copyright ©

Welcome, Maryland Math Explorer!

Four focused rounds using Chesapeake review precision

This book gives you four 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 four-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?

Four MCAP tests, 160 questions, and a full review path

Part	What You Will Practice
Tests 1–2	Foundation rounds for ratios, rational numbers, operations, and careful reading.
Tests 3–4	Skill-building and final stamina rounds with expressions, equations, geometry, data, and problem models.
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	_____	28
★ Practice Test 3	_____	45
★ Practice Test 4	_____	59
Practice Test Answer Keys	_____	75
Practice Test Answers and Explanations	_____	78

1) A class is making necklaces. For each necklace, they use 8 red beads and 12 blue beads. What is the simplified ratio of red to blue?

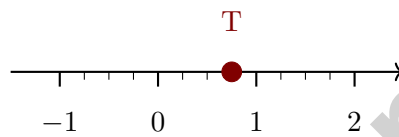
A. 2 : 3

C. 8 : 12

B. 3 : 2

D. 4 : 6

2) The number line below has tick marks at quarters. What is the coordinate of point T?



A. $\frac{1}{4}$

C. $\frac{3}{4}$

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

D. 1

3) What is the reflection of the point (2, 6) across the x -axis?

A. (-2, 6)

C. (-2, -6)

B. (2, -6)

D. (6, 2)

4)

Player	Score
Alice	8
Bob	-3
Carol	5
David	-1

Who has the lowest score?

A. Alice

C. Carol

B. David

D. Bob



5) The distance between points $(4, 5)$ and $(4, y)$ is 7 units. The points have the same x -coordinate. What could y be?

A. $y = -3$ or $y = 12$

C. $y = -1$ or $y = 11$

B. $y = -2$ or $y = 12$

D. $y = 0$ or $y = 10$

6) What is $\frac{-20}{4}$?

A. 5

C. -4

B. 4

D. -5

7) Which statement correctly identifies the height of a parallelogram?

 A. The height is the length of one of the slanted sides. C. The height is the same as the longer base. B. The height is the perpendicular distance between two parallel sides. D. The height is always equal to one side length.

8) A student is calculating the area of a triangle with base 8 units and height 6 units. The student writes: $\text{Area} = 8 \times 6 = 48$ square units. What is the student's error?

 A. The student used the wrong base and height. C. The student should have added, not multiplied. B. The student forgot to divide by 2. The correct area is 24 square units. D. The answer is correct; there is no error.

9) A store buys items for \$40 and sells them with a 50% markup. What is the selling price?



Scan me!
For more practice
& answers

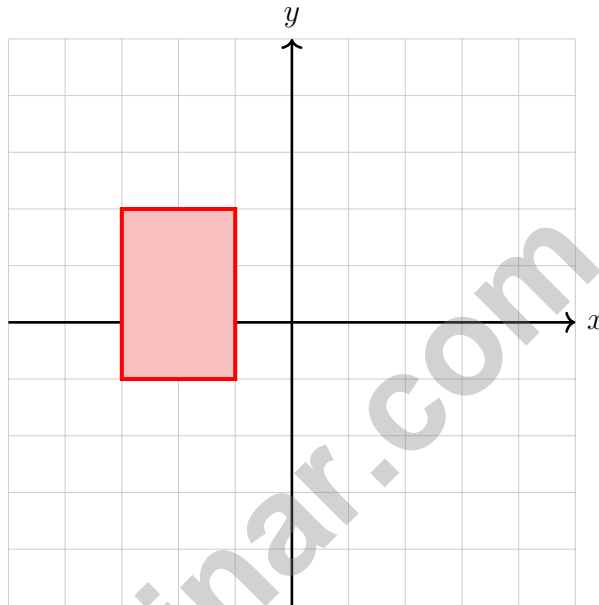
10) A square prism (a cube with non-unit edge length) has edge length 9 cm. What is the total surface area?

A. 324 cm^2

B. 405 cm^2

C. 486 cm^2

D. 729 cm^2



11)

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

A. $(1, 2)$

B. $(-1, -2)$

C. $(-1, 2)$

D. $(1, -2)$

12) A pizza has a diameter of 12 inches. What is its approximate area using $\pi \approx 3.14$?

A. 37.68 in^2

B. 75.36 in^2

C. 113.04 in^2

D. 452.16 in^2



- 1) A fitness app records heart rates (bpm). The stem-and-leaf plot shows:

Stem	Leaf
6	8
7	2, 4, 6, 8
8	1, 3, 5, 7, 9
9	0, 2

Which range contains the most recorded heart rates?

- A. 80 – 89 bpm
- B. 70 – 79 bpm
- C. 60 – 69 bpm
- D. 90 – 99 bpm
- 2) A restaurant manager asks customers: “How much time did you spend eating lunch today?”

Here are responses (in minutes):

25	45	30	50	35
----	----	----	----	----

What does this data show about the question?

- A. The question is non-statistical.
- B. Everyone spends the same time eating lunch.
- C. The question is statistical because responses vary.
- D. Lunch time is always 30 minutes.
- 3) Compare two box plots: Dataset A has median 50 and IQR 15; Dataset B has median 45 and IQR 20. Which statement is true?

- A. Dataset A has a higher center and less spread.
- B. Dataset A has a lower center and more spread.
- C. Both datasets have the same center.
- D. Dataset B is more skewed.

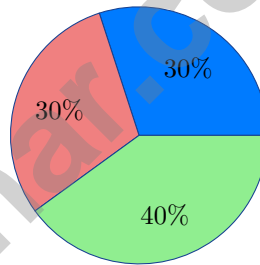


4) A basketball team's game scores: $\{78, 82, 85, 87, 88, 89, 90, 92, 96\}$. If a student calculated the median as 88 but got the mean as 79, what is the student's error?

- A. Median is correct but mean is wrong; mean should be about 87.4
- B. Median is wrong; should be 87.
- C. Both calculations are correct but the student misunderstood spread
- D. Median is correct but mean is wrong; mean should be 89.33

5) A probability line goes from 0 to 1. Where would you place an event with probability $\frac{1}{4}$?

- A. At 0 (impossible).
- B. Between 0 and $\frac{1}{2}$ (unlikely).
- C. At $\frac{1}{2}$ (even chance).
- D. Between $\frac{1}{2}$ and 1 (likely).



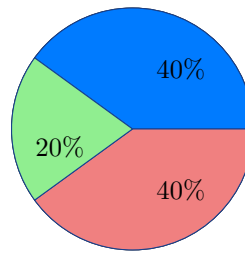
6)

A circle graph shows survey results from 250 people. Which section represents the most people?

- A. The 40% section with 100 people.
- B. The 30% section with 75 people.
- C. The 30% section with 50 people.
- D. Both 30% sections equally.



Scan me!
For more practice
& answers



1)

A circle graph shows the results of a survey with 300 students. One section is 20%. How many students are in this section?

 A. 20 B. 60 C. 80 D. 100

2) Which option correctly identifies all expressions shown that equal 6.2?

 A. $3.1 + 3.1$ B. 3.1×2 C. $12.4 \div 2$ D. All of the above

3) A painter charges \$40 per hour. If the painter works for 3.5 hours, what is the total charge? Show that the relationship between hours and cost is proportional by checking that the equation $c = 40h$ passes through the origin.



Scan me!
For more practice
& answers

4) Find the LCM of 4 and 6.

- A. 12 C. 24
 B. 10 D. 8

5) Use the distributive property to find 7×18 by rewriting $18 = 10 + 8$.

- A. $70 + 56 = 126$ C. $140 + 8 = 148$
 B. $7 + 18 = 25$ D. $70 + 8 = 78$

6) On a number line, the number -6 is best described as:

- A. Six units to the right of zero C. At the origin
 B. Six units above zero on a vertical line D. Six units to the left of zero

7) Which statement is true?

- A. $|-7| < |7|$ C. $|-7| > |7|$
 B. $|-7|$ is undefined D. $|-7| = |7|$

8) Compare -0.2 and -0.02 . Which is greater?

- A. -0.2 C. They are equal
 B. Cannot compare D. -0.02

9) A person's annual income is \$36000. They save 12% of their income per year. How much do they save annually?



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

Practice Test 1 Answers and Explanations

- 1) **Choice A is correct.** (6.RP.A.3) Red comes first, so begin with 8 : 12. Divide both parts by the GCF, 4, to get 2 : 3.
- 2) **Choice C is correct.** (6.SP.B.4) Point T is three tick marks to the right of 0. With quarter-mark spacing, this is $\frac{3}{4}$.
- 3) **Choice B is correct.** (6.NS.C.8) Reflection across the x -axis changes the sign of the y -coordinate while the x -coordinate remains the same. The point (2, 6) becomes (2, -6).
- 4) **Choice D is correct.** (6.NS.C.7) Bob has a score of -3, which is the lowest of all scores: $-3 < -1 < 5 < 8$.
- 5) **Choice B is correct.** (6.NS.C.8) Since $|5 - y| = 7$, then $y = 5 - 7 = -2$ or $y = 5 + 7 = 12$.
- 6) **Choice D is correct.** (6.NS.B.3) A negative divided by a positive is negative: $\frac{-20}{4} = -5$.
- 7) **Choice B is correct.** (6.G.A.1) The height must be perpendicular to the base, not just any side length.
- 8) **Choice B is correct.** (6.G.A.1) The formula for a triangle is Area = $\frac{1}{2} \times$ base \times height. The student multiplied base and height but forgot the $\frac{1}{2}$ factor. The correct area = $\frac{1}{2} \times 8 \times 6 = 24$ square units.
- 9) **The correct answer is 60.** (6.RP.A.3) Markup is 50% of \$40 = $0.50 \times 40 = \$20$. Selling price is $\$40 + \$20 = \$60$.
- 10) **Choice C is correct.** (6.G.A.4) $SA = 6s^2 = 6(9)^2 = 6(81) = 486 \text{ cm}^2$.
- 11) **Choice A is correct.** (6.NS.C.8) Reflection over the y -axis: $(-1, 2) \rightarrow (1, 2)$.
- 12) **Choice C is correct.** (6.RP.A.1) Radius $r = \frac{12}{2} = 6$ in. Area = $\pi r^2 \approx 3.14 \times 6^2 = 3.14 \times 36 = 113.04 \text{ in}^2$.
- 13) **Choice A is correct.** (6.NS.B.2) Since $5,200 \div 13 = 400$, adding 13 to the dividend gives $5,213 \div 13 = 401$ exactly.
- 14) **Choice B is correct.** (6.NS.B.3) $-12 + 7 + (-2) = -12 + 7 - 2 = -5 - 2 = -7$.
- 15) **Choice A is correct.** (6.G.A.2) $V = 4 \times 1.5 \times 2.5 = 6 \times 2.5 = 15 \text{ m}^3$.
- 16) **Choice A is correct.** (6.G.A.3) Width = $24 \div 8 = 3$ units. Perimeter = $2(8 + 3) = 2(11) = 22$ units.
- 17) **Choice C is correct.** (6.EE.C.9) A constant increase alone is not enough, but this table also passes through (0, 0) and has a constant ratio: $c/a = 3/2 = 6/4 = 9/6 = 1.5$. Those facts confirm proportionality.
- 18) **The correct answer is $\frac{2}{5} = 40\%$ and $0.6 = 60\%$.** (6.RP.A.3) A is correct: $\frac{2}{5} = \frac{40}{100} = 40\%$. B is correct: $0.6 \times 100 = 60\%$. C is wrong because $\frac{7}{10} = 70\%$, D is wrong because $0.08 = 8\%$, and E is wrong because $\frac{1}{8} = 12.5\%$.
- 19) **The correct answer is 9.** (6.RP.A.3) Ratio 5 : 3 with 15 red marbles: each part is $15 \div 5 = 3$ marbles. Blue marbles: $3 \times 3 = 9$.
- 20) **Choice C is correct.** (6.EE.C.9) Take-home: $100\% - 18\% = 82\%$ of $\$1500 = 0.82 \times 1500 = \1230 .
- 21) **Choice C is correct.** (6.RP.A.3) Multiply: $4 \text{ cm} \times 1.5 \text{ m/cm} = 6 \text{ m}$.
- 22) **Choice A is correct.** (6.NS.A.1) The correct approach: flip $\frac{1}{4}$ to get $\frac{4}{1}$, then multiply $\frac{2}{3} \times \frac{4}{1} = \frac{8}{3} = 2\frac{2}{3}$. The student multiplied by $\frac{1}{4}$ without inverting it.
- 23) **Choice B is correct.** (6.NS.B.3) Multiply: $8 \times \$2.50 = \20.00 .
- 24) **Choice B is correct.** (6.NS.B.4) Since 7 and 11 are both prime and share no common factors, their LCM is their product: $7 \times 11 = 77$.
- 25) **Choice B is correct.** (6.NS.B.4) GCF of 35 and 49 is 7. So $35 + 49 = 7(5 + 7)$. Only Choice B uses the GCF and whole numbers.
- 26) **Choice C is correct.** (6.NS.C.5) On a number line, -6 is to the left of -3, so -6 is less than -3. The farther left a number is, the smaller it is.
- 27) **Choice D is correct.** (6.SP.B.4) The opposite of -5 is 5. The opposite of 5 is -5. So the opposite of the opposite returns to the original number.



A Quiet Word From Your Mentor

Hi, Thoughtful Student,

◇ I want to take a moment to tell you something true: you did excellent work. 4 practice tests is a real promise that you kept to yourself. That matters. ◇

★ **Mentors notice:** growth is quiet. It doesn't shout. But it shows up in how you handle a problem today vs how you did weeks ago. That growth is your real prize. ★

What I See in You

- **Hard Work:** You don't quit when problems are tough.
- **Curiosity:** You wonder why and how.
- **Kindness:** You are patient with yourself.
- **Brave Heart:** You try things that scare you.

Mentor's note: on test day, treat yourself like you would a friend. Be kind. Be patient. Be encouraging. The skills are inside you!

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

Jay Daie

Your Math Mentor

PRACTICE TODAY. SUCCEED TOMORROW!

This book includes 4 full-length Math practice tests and 2 online tests to help Grade 6 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:

4 Full-Length Printed Tests

2 Online Practice Tests

 Detailed Answer 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



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 with clear explanations and meaningful practice.



Test Confidence

Familiarize with test formats and improve accuracy and speed.



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

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



VISIT [TESTINAR.COM/MATH6](https://www.testinar.com/math6)
FOR MORE PRACTICE TESTS
AND LEARNING RESOURCES



PRACTICE
REGULARLY



STAY
FOCUSED



SOLVE
CONFIDENTLY



SUCCEED
BRIGHTLY

PREPARE TODAY. SUCCEED TOMORROW!