

5

FULL-LENGTH

Maryland

MCAP

GRADE 5 MATH

★ PRACTICE TESTS ★



**5 FULL-LENGTH
PRACTICE TESTS**



**COMPLETE
STANDARDS
REVIEW**



**SKILL PRACTICE,
WORD PROBLEMS,
AND MORE!**

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



$$12 \times 3 = 36$$



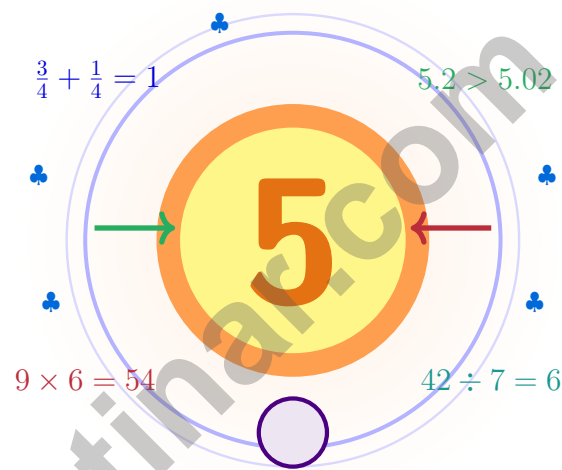
$$\frac{7}{10} = 0.7$$



BUILT FOR SUCCESS. DESIGNED TO HELP EVERY STUDENT.

5 Maryland MCAP Grade 5 Math Practice Tests

Five practice tests woven into one calm, steady routine



Five full tests, a friendly quick review, smart strategy pages, and student-tested support that turn Grade 5 practice in The Old Line State into a steady quest of real growth.

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 ©

Open the Quest Map, Maryland

Five practice tests woven into one calm, steady routine

Welcome Letter for Maryland Math Crew

This book is your practice zone, not a place to be perfect. Each of the five tests gives you a chance to notice clues, choose a strategy, check your thinking, and come back stronger for the next round. Math is like the Chesapeake – wide, full of life, and best understood with a careful map and steady hands on the wheel.

Some questions will feel easy right away. Some will make you slow down, draw, estimate, or retry. That is excellent news. It means your math brain is doing real work.

Spot Clues

Notice the numbers, units, and tricky words.

Make a Plan

Choose the strategy or model that fits.

Bounce Back

Mistakes show you exactly where to grow next.

A strong quest habit for Maryland: slow down, write neatly, estimate before you solve, and keep going even when a problem looks tricky at first. That is exactly how confident math students are built.

Testinar.com



Scan me



A Map of the Pages

A simple routine that turns five tests into real growth

Step 1: Warm Up

Sharpen your math brain with the quick review.

Wake up important ideas before you begin so your brain is ready to use them.

Step 2: Quest Run

Take a full practice test in a calm spot.

Find a quiet space, work carefully, and let accuracy matter more than speed.

Step 3: Debrief

Score honestly and circle missed questions.

Circle missed questions and look for patterns. Which skill or habit needs another try?

Step 4: Repair Kit

Fix the missed work and lock the lesson in.

Read the explanation, repair the work, and carry that lesson into the next test.

A Five-Week Maryland Quest Map

Week	Mission Focus
Week 1	Take Test 1 and chart your bay – the first reading sets the rest.
Week 2	Take Test 2 and notice one habit that grew steadier.
Week 3	Take Test 3 and sharpen fractions, decimals, and measurement work.
Week 4	Take Test 4 and slow down on multi-step problems.
Week 5	Take Test 5 with calm captain-style focus.



Table of Contents

★ Practice Test 1	_____	20
★ Practice Test 2	_____	34
★ Practice Test 3	_____	49
★ Practice Test 4	_____	63
★ Practice Test 5	_____	78
Practice Test Answer Keys	_____	92
Practice Test Answers and Explanations	_____	96

Grade 5 Mathematics Reference Materials

PERIMETER AND AREA

Perimeter of Rectangle $P = 2l + 2w$ or $P = 2(l + w)$

Area of Rectangle $A = l \times w$

Area of Triangle $A = \frac{1}{2} \times b \times h$

Volume of Rectangular Prism $V = l \times w \times h$

LENGTH

Customary

1 foot (ft) = 12 inches (in.)

1 yard (yd) = 3 feet (ft)

1 yard (yd) = 36 inches (in.)

Metric

1 meter (m) = 100 centimeters (cm)

1 centimeter (cm) = 10 millimeters (mm)

1 kilometer (km) = 1,000 meters (m)

CAPACITY

Customary

1 cup (c) = 8 fluid ounces (fl oz)

1 pint (pt) = 2 cups (c)

1 quart (qt) = 2 pints (pt)

1 gallon (gal) = 4 quarts (qt)

Metric

1 liter (L) = 1,000 milliliters (mL)

WEIGHT AND MASS

Customary

1 pound (lb) = 16 ounces (oz)

Metric

1 kilogram (kg) = 1,000 grams (g)

1 gram (g) = 1,000 milligrams (mg)

TIME

1 minute (min) = 60 seconds (sec) 1 week = 7 days

1 hour (hr) = 60 minutes (min) 1 year = 12 months

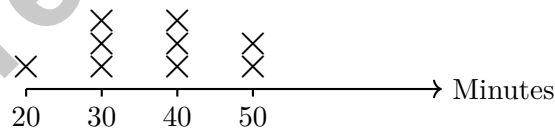
1 day = 24 hours (hr) 1 year = 52 weeks



1) Complete the table:

Gallons	Quarts	Pints
1	4	8
2	8	16
?	12	24

- A. 2 gallons
- B. 3 gallons
- C. 4 gallons
- D. 6 gallons
- 2) A rectangular prism has a volume of 500 cm^3 . If the length is 25 cm and the width is 5 cm, what is the height?
- A. 2 cm
- B. 3 cm
- C. 4 cm
- D. 5 cm
- 3) A display pedestal has volume 84 cubic inches. Its base is 6 inches by 7 inches. What is its height?
- A. 1 inch
- B. 2 inches
- C. 3 inches
- D. 42 inches
- 4) The line plot shows the number of minutes students practiced an instrument:





What is the total number of minutes all students practiced?


- A. 300 minutes
- B. 310 minutes
- C. 320 minutes
- D. 330 minutes



- 5) The model shows 3 wholes, with each whole cut into pieces of size $\frac{1}{2}$. How many pieces of size $\frac{1}{2}$ are there in all?

1 whole 

1 whole 

1 whole 

3 wholes, each cut into pieces of size $\frac{1}{2}$

- A. 5 C. 6
 B. 2 D. 3
- 6) Evaluate: $24 - 2 \times (3 + 5)$
- A. 8 C. 26
 B. 16 D. 44
- 7) Simplify: $\frac{4}{6} \times \frac{3}{8}$ (after simplifying each fraction first)
- A. $\frac{12}{42}$ C. $\frac{1}{3}$
 B. $\frac{2}{3} \times \frac{3}{8} = \frac{1}{4}$ D. $\frac{2}{5}$
- 8) Find the sum: $4\frac{5}{6} + 1\frac{1}{3}$.

Record your answer in the space provided.



Grade 5 Mathematics Reference Materials

PERIMETER AND AREA

Perimeter of Rectangle	$P = 2l + 2w$ or $P = 2(l + w)$
Area of Rectangle	$A = l \times w$
Area of Triangle	$A = \frac{1}{2} \times b \times h$
Volume of Rectangular Prism	$V = l \times w \times h$

LENGTH

Customary	Metric
1 foot (ft) = 12 inches (in.)	1 meter (m) = 100 centimeters (cm)
1 yard (yd) = 3 feet (ft)	1 centimeter (cm) = 10 millimeters (mm)
1 yard (yd) = 36 inches (in.)	1 kilometer (km) = 1,000 meters (m)

CAPACITY

Customary	Metric
1 cup (c) = 8 fluid ounces (fl oz)	1 liter (L) = 1,000 milliliters (mL)
1 pint (pt) = 2 cups (c)	
1 quart (qt) = 2 pints (pt)	
1 gallon (gal) = 4 quarts (qt)	

WEIGHT AND MASS

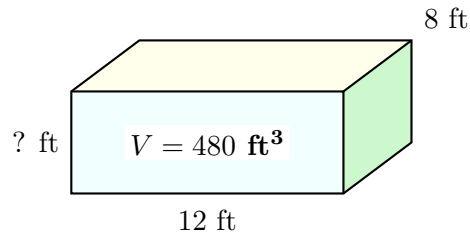
Customary	Metric
1 pound (lb) = 16 ounces (oz)	1 kilogram (kg) = 1,000 grams (g)
	1 gram (g) = 1,000 milligrams (mg)

TIME

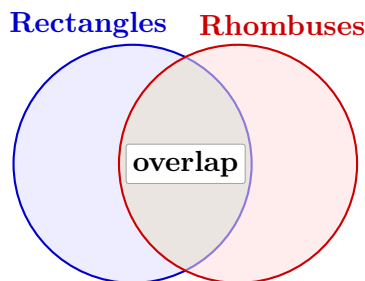
1 minute (min) = 60 seconds (sec)	1 week = 7 days
1 hour (hr) = 60 minutes (min)	1 year = 12 months
1 day = 24 hours (hr)	1 year = 52 weeks



- 1) A building blueprint shows a room with volume 480 cubic feet. The length is 12 feet and the width is 8 feet. What must the height be?



- A. 4 feet C. 6 feet
 B. 5 feet D. 8 feet
- 2) Which symbol makes the statement true? $7 \times (8 + 2) \square 7 \times 10$
- A. > C. =
 B. < D. Cannot tell
- 3) Which number is equivalent to 5.300?
- A. 5.3 C. 5.003
 B. 5.03 D. 500.3
- 4) A Venn diagram has one circle for rectangles and one circle for rhombuses. The overlap represents figures that are both rectangles and rhombuses.



Which type of figure belongs in the overlap?

- A. Triangle C. Rhombus that is not a square
 B. Rectangle that is not a square D. Square



Grade 5 Mathematics Reference Materials

PERIMETER AND AREA

Perimeter of Rectangle $P = 2l + 2w$ or $P = 2(l + w)$

Area of Rectangle $A = l \times w$

Area of Triangle $A = \frac{1}{2} \times b \times h$

Volume of Rectangular Prism $V = l \times w \times h$

LENGTH

Customary

1 foot (ft) = 12 inches (in.)

1 yard (yd) = 3 feet (ft)

1 yard (yd) = 36 inches (in.)

Metric

1 meter (m) = 100 centimeters (cm)

1 centimeter (cm) = 10 millimeters (mm)

1 kilometer (km) = 1,000 meters (m)

CAPACITY

Customary

1 cup (c) = 8 fluid ounces (fl oz)

1 pint (pt) = 2 cups (c)

1 quart (qt) = 2 pints (pt)

1 gallon (gal) = 4 quarts (qt)

Metric

1 liter (L) = 1,000 milliliters (mL)

WEIGHT AND MASS

Customary

1 pound (lb) = 16 ounces (oz)

Metric

1 kilogram (kg) = 1,000 grams (g)

1 gram (g) = 1,000 milligrams (mg)

TIME

1 minute (min) = 60 seconds (sec) 1 week = 7 days

1 hour (hr) = 60 minutes (min) 1 year = 12 months

1 day = 24 hours (hr) 1 year = 52 weeks



1) Add: $2.57 + 3.49 = ?$

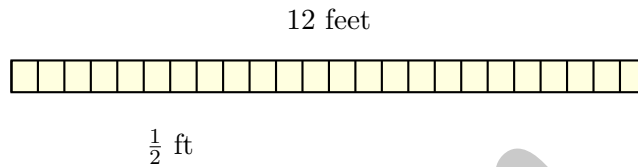
A. 6.04

C. 6.06

B. 6.05

D. 6.15

2) A carpenter has a board that is 12 feet long. She cuts it into pieces that are $\frac{1}{2}$ foot long. How many pieces does she get?



A. 12 pieces

C. 24 pieces

B. 18 pieces

D. 30 pieces

3) A school packs 216 seed packets equally into 18 boxes. How many seed packets are in each box?

Record your answer in the space provided.

4) Identify the correct rounding statement:

A. 6.234 rounded to the nearest tenth is 6.24

C. 6.234 rounded to the nearest whole number is 7

B. 6.234 rounded to the nearest tenth is 6.2

D. 6.234 rounded to the nearest hundredth is 6.24



Grade 5 Mathematics Reference Materials

PERIMETER AND AREA

Perimeter of Rectangle $P = 2l + 2w$ or $P = 2(l + w)$

Area of Rectangle $A = l \times w$

Area of Triangle $A = \frac{1}{2} \times b \times h$

Volume of Rectangular Prism $V = l \times w \times h$

LENGTH

Customary

1 foot (ft) = 12 inches (in.)

1 yard (yd) = 3 feet (ft)

1 yard (yd) = 36 inches (in.)

Metric

1 meter (m) = 100 centimeters (cm)

1 centimeter (cm) = 10 millimeters (mm)

1 kilometer (km) = 1,000 meters (m)

CAPACITY

Customary

1 cup (c) = 8 fluid ounces (fl oz)

1 pint (pt) = 2 cups (c)

1 quart (qt) = 2 pints (pt)

1 gallon (gal) = 4 quarts (qt)

Metric

1 liter (L) = 1,000 milliliters (mL)

WEIGHT AND MASS

Customary

1 pound (lb) = 16 ounces (oz)

Metric

1 kilogram (kg) = 1,000 grams (g)

1 gram (g) = 1,000 milligrams (mg)

TIME

1 minute (min) = 60 seconds (sec) 1 week = 7 days

1 hour (hr) = 60 minutes (min) 1 year = 12 months

1 day = 24 hours (hr) 1 year = 52 weeks



- 1) A game graph shows a player's progress. The x-axis shows minutes played, and the y-axis shows score. What does the point (15, 450) mean?
- A. minutes played is 450 when score is 15 C. score is 450 when minutes played is 15
 B. minutes played and score are both 465 D. score is 15 when minutes played is 450
- 2) Pattern Eta: 4, 8, 12, 16. Pattern Theta: 7, 11, 15, 19. Analyze the table. Which rule applies?

Eta	Theta
4	7
8	11
12	15
16	19

- A. Theta is 3 more than Eta C. Theta is 3 less than Eta
 B. Theta is twice Eta D. Theta is 7 more than Eta
- 3) What is the value of $(20 \div 2) + 6$?
- A. 4 C. 16
 B. 8 D. 20
- 4) An aquarium has dimensions 24 inches long, 18 inches wide, and 20 inches high. What is its volume?
- A. 4,320 cubic inches C. 8,640 cubic inches
 B. 6,480 cubic inches D. 9,600 cubic inches
- 5) A rectangular prism has a base area of 24 square inches and a height of 3 inches. What is its volume?
- A. 27 cubic inches C. 72 cubic inches
 B. 48 cubic inches D. 96 cubic inches



Practice Test Answer Keys

How to use this section:

1. check your answer
2. circle missed questions
3. rework them before reading the explanation

Good correction habits build strong scores.

Testinar.com



Scan me

Practice Test Answers and Explanations

Practice Test 1 Answers and Explanations

- Choice B is correct.** (5.MD.A.1) Since 1 gallon = 4 quarts, divide 12 by 4: $12 \div 4 = 3$ gallons. This also matches 24 pints because 3 gallons equals 24 pints.
- Choice C is correct.** (5.NF.B.7) Base area = $25 \times 5 = 125$ cm². Height = $500 \div 125 = 4$ cm.
- Choice B is correct.** (5.MD.C.5) The base layer has $6 \times 7 = 42$ square units. Divide the volume by the base area: $84 \div 42 = 2$, so the height is 2 inches.
- Choice D is correct.** (5.MD.B.2) Multiply each practice time by the number of students at that time: $(20 \times 1) + (30 \times 3) + (40 \times 3) + (50 \times 2) = 20 + 90 + 120 + 100 = 330$ minutes.
- Choice C is correct.** (5.NF.B.7) Each whole contains 2 pieces of size $\frac{1}{2}$. With 3 wholes, there are $3 \times 2 = 6$ pieces.
- Choice A is correct.** (5.OA.A.1) First simplify inside the parentheses: $3 + 5 = 8$. Then multiply, $2 \times 8 = 16$, and subtract from 24 to get 8.
- Choice B is correct.** (5.NF.B.6) First simplify: $\frac{4}{6} = \frac{2}{3}$. Then $\frac{2}{3} \times \frac{3}{8} = \frac{6}{24} = \frac{1}{4}$.
- The correct answer is $6\frac{1}{6}$.** (5.NF.A.1) $4 + 1 = 5$. $\frac{5}{6} + \frac{2}{6} = \frac{7}{6} = 1\frac{1}{6}$. Total: $5 + 1\frac{1}{6} = 6\frac{1}{6}$.
- Choice B is correct.** (5.NF.B.4) Five copies of $\frac{1}{6}$ make $\frac{5}{6}$. The denominator stays 6 because the size of each piece is still sixths.
- Choice C is correct.** (5.G.B.4) No sides have matching tick marks, so all sides are different lengths, making this a scalene triangle.
- Choice C is correct.** (5.NF.B.5) Any positive number multiplied by a factor less than 1 always produces a smaller result.
- Choice C is correct.** (5.G.B.4) If it is a quadrilateral with only one pair of parallel sides and is NOT a parallelogram, it must be a trapezoid.
- Choice C is correct.** (5.G.A.2) The point is 3 units right on the x -axis and 6 units up on the y -axis, so the coordinates are (3, 6).
- Choice C is correct.** (5.NF.A.1) LCM(6,3) = 6. $\frac{1}{3} = \frac{2}{6}$. $\frac{5}{6} + \frac{2}{6} = \frac{7}{6} = 1\frac{1}{6}$.
- Choice B is correct.** (5.NBT.B.5) Sum the partial products: $400 + 10 + 360 + 9 = 779$.
- Choice B is correct.** (5.G.A.2) Rule X gives $2 \times 3 = 6$. Rule Y gives $2 \times 3 + 1 = 7$.
- Choice D is correct.** (5.NF.B.7) $2 \div \frac{1}{6} = 2 \times 6 = 12$ lessons.
- Choice B is correct.** (5.OA.A.2) Check the values: A, C, and D all equal 20. Choice B equals 24, so it is the one that does not match.
- The correct answer is 12.** (5.MD.A.1) Convert meters to centimeters before dividing. Since 3 m is 300 cm and each piece is 25 cm, $300 \div 25 = 12$ pieces.
- Choice D is correct.** (5.MD.C.3) Find each part first: Prism A is $9 \times 4 \times 6 = 216$ cubic meters, and Prism B is $6 \times 2 \times 2 = 24$ cubic meters. Because the parts do not overlap, add them: $216 + 24 = 240$ cubic meters.
- Choice C is correct.** (5.NBT.A.2) Multiply by 100: move decimal 2 places right: $3.6 \times 100 = 360$.
- Choices A, B are correct.** (5.OA.A.2) Both A and B describe 4 copies of the grouped sum (15 + 8). C adds 4 instead of multiplying by 4, and D groups the wrong numbers.
- Choice B is correct.** (5.NBT.A.3) The tenths place is the first position after the decimal point. In 3.915, the tenths digit is 9.
- Choice C is correct.** (5.OA.B.3) Multiples of 7: 49, 63, 84 are multiples; 75 is not.
- Choice C is correct.** (5.NF.B.7) Volume is the product of length, width, and height. Addition would give a linear measure, not a cubic measure.
- Choice D is correct.** (5.NF.B.7) $4 \div \frac{1}{3} = 4 \times 3 = 12$. There are 12 servings.
- Choice C is correct.** (5.MD.C.5) The base area is 88 square centimeters. Since $528 \div 88 = 6$, the height is 6 cm.
- Choice C is correct.** (5.MD.C.5) Multiply: $4.5 \times 10 = 45$ meters of fencing needed.
- The correct answer is 6480.** (5.NF.B.7) $30 \times 18 \times 12 = 6,480$ in³.



Hey there, Math Olympian!

★ Olympic-level performance! You've trained through five rigorous practice events, building stamina, strength, and strategic skills like a world-class athlete! Just as Olympians don't achieve greatness overnight, you've put in the dedicated practice necessary for excellence. Every test was training for the main event, and now you're in peak mathematical form! ★

◇ **Here's what Olympic champions understand:** mental preparation is just as important as physical practice. They visualize success, develop consistent routines, and trust their training when competition begins. You've developed those same championship qualities through these five tests! You've trained your mathematical muscles, and now they respond automatically when you need them! ◇

Olympic Training Results

- **Endurance:** You can maintain focus through entire tests without mental fatigue!
- **Speed with Accuracy:** You balance efficiency with precision like a champion!
- **Mental Toughness:** You persist through challenging problems with determination!
- **Competition Ready:** You're prepared to perform at your highest level!

Remember this championship wisdom: Olympic athletes visualize their performance before competing. Take a few moments before test day to mentally rehearse your success. Picture yourself reading questions confidently, applying your strategies smoothly, and completing the test with satisfaction. You've trained for this moment now trust your preparation!

Want to share your training insights or celebrate a breakthrough moment? Contact your coach at reza@testinar.com. I'm proud of your dedication!

Reza Nazari & Jay Daie

Your Math Coaches for Smart Strategies

5 FULL-LENGTH TESTS. STRONG SKILLS. BRIGHTER RESULTS.



Build confidence and master math with **5 full-length** practice tests designed to reflect the real test experience. This book provides the practice, review, and support students need to succeed in Grade 5 and beyond!

WHAT'S INSIDE:



5 FULL-LENGTH PRACTICE TESTS

Realistic tests that build familiarity, boost focus, and improve test readiness.



COMPLETE STANDARDS REVIEW

Covers all essential Grade 5 math topics with clear explanations and examples.



SKILL PRACTICE

Strengthen key math skills through a wide variety of practice questions.



WORD PROBLEMS

Build critical thinking and problem-solving skills with real-world questions.



FULL ANSWER KEY

Step-by-step explanations for every question to help students learn and improve.



PRACTICE MORE. LEARN BETTER. SUCCEED ANYWHERE.



Build Confidence
with consistent
practice



Improve Accuracy
and problem-
solving skills



Time Management
strategies for
test success



**Achieve Your
Best Score!**



Visit testinar.com/math5
for more Grade 5 math resources
and practice materials!



Testinar
Smart Practice. Stronger Results.