

4

Maryland MCAP

Grade 3

MATH

PRACTICE TESTS

Standards-Aligned Practice



STANDARDS-ALIGNED

Practice to build skills and boost confidence



4 FULL-LENGTH TESTS

Realistic questions to prepare for test day



ANSWER KEYS & EXPLANATIONS

Detailed solutions to learn and improve



4 Maryland MCAP Grade 3 Math Practice Tests

Standards-Aligned Review with Mixed Practice and Answer Key



Four focused 30-question missions for Grade 3 math: number facts, fractions, measurement, data, area, shapes, answer keys, and clear explanations for every item.

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Welcome to the Maryland Math Launch

Four missions, careful work, and a stronger Grade 3 thinker



Read the mission. Show the work. Check the answer. Launch again.

To the Grade 3 Mission Leader

This book is a four-mission practice launch for the Maryland MCAP. Each test gives you a fresh chance to multiply, divide, read graphs, compare fractions, measure, find area, and explain math in a way someone else can follow.

Maryland has Chesapeake shores, city routes, and waterways that connect many small choices. Good math uses the same habit: pause, check the details, and move forward with a steady plan.

Notice

Find the numbers, units, and question before choosing a path.

Model

Draw an array, number line, table, or quick equation.

Verify

Ask whether your answer fits the story and the unit.

Launch promise: I will slow down at the important moments, show the work I can, and use every miss as a clue for the next mission.

How to Use This Book

A four-mission routine for steady Grade 3 growth

1. Warm Up the System

Read the review pages first. Remind your brain how equal groups, fractions, clocks, graphs, and area models work.

2. Fly One Mission

Take one complete 30-question test. Keep your work neat enough that you can check it later.

3. Review the Flight

Use the answer key, then pause. A wrong answer is useful when you can name what happened.

4. Repair and Relaunch

Rework a few missed questions before starting the next test. The repair step is where the score begins to move.

A Four-Session Plan

Session 1	Take Test 1 and mark the topics that need attention.
Session 2	Take Test 2 and focus on showing every step clearly.
Session 3	Take Test 3 and watch for units, labels, and two-step problems.
Session 4	Take Test 4 and finish with calm, careful checking.

Best mission habit: After checking answers, write one sentence: “Next time I will pay attention to _____.”



Test Overview

What each Grade 3 math mission asks you to do

Each practice test has 30 questions. Across four tests, you will practice the kind of Grade 3 math thinking used on the Maryland MCAP: reading carefully, choosing a strategy, doing accurate computation, and explaining enough work to make your answer clear.

Multiple Choice

Look for the best answer. Estimate first when you can, cross out choices that do not fit, and reread the question before you choose.

Open Response

Write the answer and show the reason. A good Grade 3 response may use a drawing, equation, table, number line, or a few clear words.

Math Ideas Inside the Four Tests

- multiplication, division, arrays, missing factors, and two-step word problems
- place value, rounding, addition, subtraction, and multiplying by tens
- unit fractions, number lines, equivalent fractions, and comparing fractions
- time, mass, liquid volume, picture graphs, bar graphs, and line plots
- area, perimeter, unit squares, rectangles, and shape categories

What strong MCAP work looks like: the answer matches the question, the units make sense, and the work is clear enough to check.



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1) $308 + 175 = ?$

 A. 483 C. 475 B. 484 D. 493

2) Use fact families to solve this: $\square \times 9 = 45$. What is $45 \div 9$?

 A. 4 C. 9 B. 45 D. 5

3) Ben tiles a square using unit squares. He puts 5 tiles in each row and 5 tiles in each column. How many tiles does he use?

 A. 10 C. 15 B. 25 D. 50

4) A picture graph shows coins saved. Each symbol is 5 coins. Ty saved 6 symbols, Kim saved 8 symbols. How many fewer coins does Ty have than Kim?

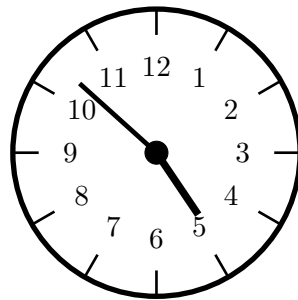
 A. 2 coins C. 15 coins B. 10 coins D. 30 coins5) Tina knows that $\square \div 4 = 9$. She can check her answer by multiplying. Which multiplication helps her check? A. $4 \times 9 = 36$ C. $4 \times 4 = 16$ B. $9 \times 4 = 32$ D. $9 \times 9 = 81$

6) What is 4×50 ?



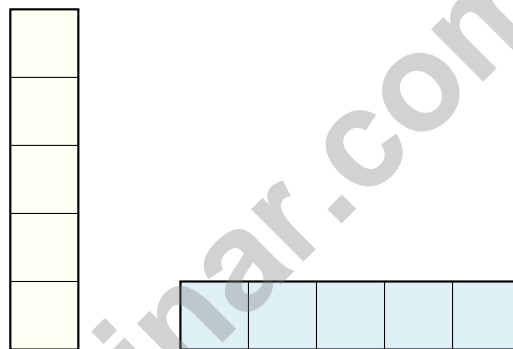
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7) Look at the clock. What time does it show?



- A. 5 : 26
- B. 4 : 52

- C. 9 : 20
- D. 9 : 52



8)

A

B

Shapes A and B both have an area of 5 unit squares. Which shows the correct pairing by dimensions?

- A. A is 1×5 , B is 5×1
- B. A is 5×1 , B is 1×5

- C. Both are the same dimensions
- D. A is 1×5 , B is 2×3



9) Round 728 to the nearest 100.

10)

×	1	2	3	4
2	2	4	6	8

All highlighted products are even. Why?

- A. Because they are in a table
- B. Because they have 4 entries
- C. Because the numbers are small
- D. Because they are multiplied by 2

11) Which equation matches the tiling shown by a rectangle with one line cutting it vertically into two parts?

- A. $7 \times (3 + 2) = (7 \times 3) + (7 \times 2)$
- B. $3 \times 2 = 6$
- C. $7 + 3 + 2 = 12$
- D. $(3 \times 7) + (2 \times 7) = 35 + 14$

12) Which picture shows 3 groups of 4?

- A. ★★ ★★ ★★ ★★ ★★
- B. ★★ ★★ ★★ ★★
- C. ★★ ★★ ★★ ★★
- D. ★★ ★★ ★★ ★★ ★★

13) Which two of the following fractions are located at the same point on a number line from 0 to 1?

- A. $\frac{1}{2}$
- B. $\frac{2}{4}$
- C. $\frac{3}{8}$
- D. $\frac{1}{3}$
- E. $\frac{2}{3}$



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1) A city library has some books. After donating 156 books, it has 489 books left. How many books did the library have at the start?

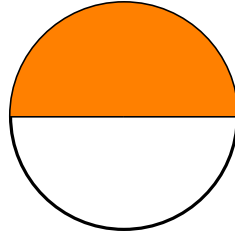
A. 645

C. 646

B. 635

D. 636

2) Look at the circle divided into 2 equal parts. One part is shaded.



What is the unit fraction?

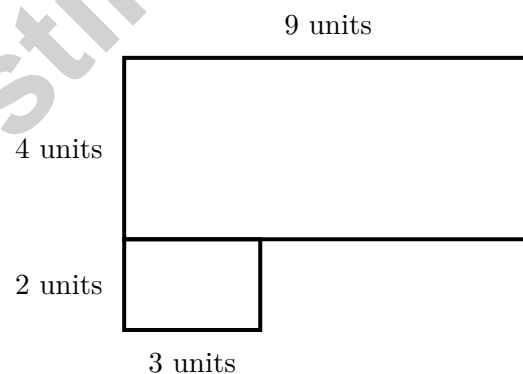
A. $\frac{1}{2}$

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

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

D. $\frac{1}{3}$

3) Eli has an L-shaped rug. The longer side is 9 units by 4 units. The shorter side is 3 units by 2 units. What is the total area of the rug?



A. 36 sq units

C. 42 sq units

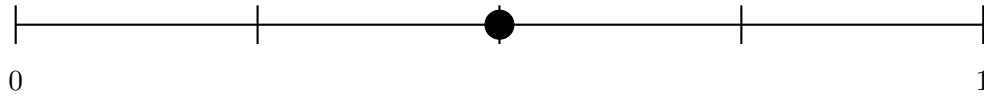
B. 6 sq units

D. 216 sq units



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- 4) A number line shows 0 to 1 divided into 4 equal parts. The marked dot is closest to which fraction?



- A. $\frac{1}{4}$ C. $\frac{3}{4}$
 B. $\frac{2}{4}$ D. $\frac{4}{4}$
- 5) A bar graph shows books. Maya's bar is 7 units (scale: 2 books per unit). Leo's bar is 5 units (scale: 2 books per unit). How many fewer books does Leo have than Maya?

- 6) What is $63 \div 9$?

- A. 6 C. 8
 B. 9 D. 7

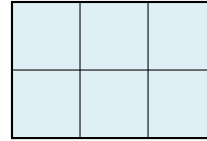
- 7) Ben ran $\frac{5}{6}$ of a mile. Lily ran $\frac{5}{8}$ of a mile. Who ran farther?

- A. Ben C. They ran the same distance
 B. Lily D. Cannot tell from the fractions

- 8) Ava measures a rectangular mat that is 7 units by 5 units. What is its area in square units?

- A. 12 sq units C. 24 sq units
 B. 35 sq units D. 70 sq units



A: 5×1 B: 3×2

6)

Which rectangle has an area of 6 unit squares?

 A. Rectangle A C. Both have the same area B. Rectangle B D. Neither has an area of 6

7) Eli has a rectangle divided into 4 equal parts. What is the denominator of the unit fraction for one part?

 A. 1 C. 4 B. 3 D. 5

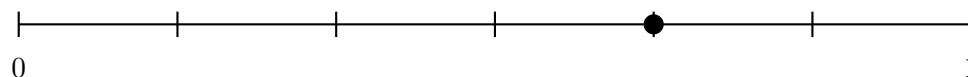
8) A rectangular field is 9 meters long and 5 meters wide. How many square meters is the field?

 A. 14 square meters C. 40 square meters B. 45 square meters D. 28 square meters

9) A rectangular picture has an area of 35 square centimeters. Which dimensions could make this area?

 A. 5 cm and 7 cm C. 4 cm and 8 cm B. 5 cm and 6 cm D. 6 cm and 6 cm

10) A number line from 0 to 1 has 6 equal parts. The dot marks which fraction?

 A. $\frac{2}{6}$ C. $\frac{4}{6}$ B. $\frac{3}{6}$ D. $\frac{5}{6}$ 

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Practice Test Answer Keys

How to use this section with a Grade 3 student:

1. check the answer first
2. mark questions to try again
3. rework the problem before reading the full explanation

A calm correction routine turns every missed item into useful practice.

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Practice Test Answers and Explanations

Practice Test 1 Answers and Explanations

- 1) **Choice A is correct.** **(3.NBT.A.2)** Ones: $8 + 5 = 13$ (write 3, carry 1). Tens: $0 + 7 + 1 = 8$. Hundreds: $3 + 1 = 4$. Answer: 483.
- 2) **Choice D is correct.** **(3.OA.B.6)** Since $5 \times 9 = 45$, the missing factor is 5. In a fact family, the division $45 \div 9 = 5$ gives the same answer as the missing factor.
- 3) **Choice B is correct.** **(3.MD.C.7a)** Square: $5 \times 5 = 25$ tiles. Equal row and column count.
- 4) **Choice B is correct.** **(3.MD.B.3)** Ty: $6 \times 5 = 30$. Kim: $8 \times 5 = 40$. Fewer: $40 - 30 = 10$.
- 5) **Choice A is correct.** **(3.OA.A.4)** If $\square \div 4 = 9$, then the unknown is 36 because $4 \times 9 = 36$.
- 6) **The correct answer is 200.** **(3.NBT.A.3)** Multiply $4 \times 5 = 20$, then add one zero: $4 \times 50 = 200$.
- 7) **Choice B is correct.** **(3.MD.A.1)** The minute hand points to 52 (just before the 11), and the hour hand is between 4 and 5. The time is 4 : 52.
- 8) **Choice A is correct.** **(3.MD.C.5a)** Shape A is 1 unit wide and 5 units tall ($1 \times 5 = 5$). Shape B is 5 units wide and 1 unit tall ($5 \times 1 = 5$).
- 9) **The correct answer is 700.** **(3.NBT.A.1)** The tens digit is 2. Since $2 < 5$, round down: 728 rounds to 700.
- 10) **Choice D is correct.** **(3.OA.D.9)** Any number times 2 is even. Products: $2 \times 1 = 2$, $2 \times 2 = 4$, etc., are all even.
- 11) **Choice A is correct.** **(3.MD.C.7c)** A vertical line in a rectangle splits its width or length. Here the length is 7 and the other dimension splits into 3 + 2.
- 12) **Choice A is correct.** **(3.OA.A.1)** 3 groups of 4 means three separate groups, each with 4 objects. Choice A shows three groups with 4 stars in each.
- 13) **Choices A and B are correct.** **(3.NF.A.2)** $\frac{1}{2} = \frac{2}{4}$ because both represent the same distance: halfway from 0 to 1. The other fractions name different points.
- 14) **Choice C is correct.** **(3.NF.A.3)** $\frac{1}{2}$, $\frac{3}{6}$, and $\frac{2}{4}$ are all equivalent. $\frac{1}{8}$ is much smaller and not equivalent.
- 15) **Choice D is correct.** **(3.OA.C.7)** $5 \times 9 = 45$. Count by 5s: 5, 10, 15, 20, 25, 30, 35, 40, 45.
- 16) **Choice A is correct.** **(3.OA.B.5)** $(2 \times 5) \times 3$ makes 10 first because $2 \times 5 = 10$. Then $10 \times 3 = 30$.
- 17) **The correct answer is 2 scores.** **(3.MD.B.4)** The scores 81 and 82 points each occur once, so there are 2 scores occurring exactly once.
- 18) **Choice A is correct.** **(3.NF.A.2b)** The distance from $\frac{2}{4}$ to $\frac{3}{4}$ is $\frac{3}{4} - \frac{2}{4} = \frac{1}{4}$, or 1 fourth.
- 19) **Choice C is correct.** **(3.NF.A.3b)** The denominator was multiplied by 2 (from 4 to 8). Multiply the numerator by 2: $3 \times 2 = 6$. So $\frac{3}{4} = \frac{6}{8}$.
- 20) **Choice D is correct.** **(3.NF.A.3a)** (i) $\frac{1}{3}$ and (iv) $\frac{2}{6}$ are equivalent because $\frac{2}{6} = \frac{1}{3}$. Both show one-third shaded.
- 21) **Choice B is correct.** **(3.MD.C.6)** $3 \times 5 = 15$ unit squares.
- 22) **Choice A is correct.** **(3.MD.C.5)** Multiply length by width: $5 \times 7 = 35$ square inches.
- 23) **Choice A is correct.** **(3.OA.A.3)** Divide: $28 \div 4 = 7$ plates.
- 24) **Choice A is correct.** **(3.G.A.1)** A rectangle has two pairs of parallel sides: the top and bottom sides are parallel, and the left and right sides are parallel to each other.
- 25) **Choice B is correct.** **(3.MD.C.7d)** Add the areas: $18 + 10 = 28$ square units.
- 26) **Choice C is correct.** **(3.MD.C.7)** Area = $6 \times 3 = 18$ square units. You can also count by adding: $3 + 3 + 3 + 3 + 3 + 3 = 18$ (six rows of three units each).
- 27) **Choice B is correct.** **(3.G.A.2)** $\frac{1}{6}$ of a rectangle divided into 6 parts means shading 1 part.
- 28) **Choice C is correct.** **(3.OA.D.8)** Step 1: Total shells: $5 \times 8 = 40$ shells. Step 2: Subtract given away: $40 - 12 = 28$ shells kept.
- 29) **Choice B is correct.** **(3.MD.A.2)** 3 kg = 3000 g. Add: $3000 + 500 = 3500$ g.
- 30) **Choice C is correct.** **(3.MD.C.5b)** $6 \times 6 = 36$ unit square stones.



Hi, Math Detective!

◇ You did such a great job! You finished 4 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

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Build Skills. Achieve More.

This book gives **Grade 3** students the focused practice they need to master math concepts with confidence.

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