

# 6

# Michigan M STEP

## GRADE 3

# MATH

## PRACTICE TESTS

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



6 Full-Length  
Practice Tests



Detailed Answer Keys  
and Explanations



Master Skills.  
Boost Scores.  
Succeed!

# 6 Michigan M-STEP Grade 3 Math Practice Tests

*Standards-Aligned Review with Mixed Practice and Answer Key*



Six complete 30-question practice labs for Grade 3 math: operations, fractions, measurement, data, area, shapes, answer keys, and clear explanations for every item.

**Jay Daie and Reza Nazari**



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# Welcome to the Six Skill Labs

Six full tests, six focused resets, and a stronger Grade 3 problem solver



Notice the pattern. Choose a tool. Explain the answer.

## To the Grade 3 Math Builder

This book gives you six practice labs for the Michigan M-STEP. Each lab is a complete 30-question test, so students can practice accuracy, stamina, and clear mathematical thinking.

Michigan brings Great Lakes shores, forest roads, car plants, and snowy sidewalks. Strong math uses that same care: read the task, select a strategy, build the solution, and build answers one reliable part at a time.

### Decode

Find the question, the units, and the useful numbers.

### Design

Use an equation, array, number line, graph, or sketch.

### Confirm

Make sure the answer matches the question.

**Six-lab promise:** I will work with patience, show useful thinking, and treat corrections as part of learning.

# How to Use This Book

A six-lab routine for steady Grade 3 growth

Use one practice lab at a time. The goal is not only to finish more pages. The goal is to finish, review, repair, and bring a smarter habit to the next test. For Michigan students, each lab is a short route through Great Lakes shores, forest roads, car plants, and snowy sidewalks: steady, alert, and ready for the next clue.

1. **Warm up.** Skim the reference materials and remind yourself of common tools.
2. **Take one test.** Work steadily and mark problems that need a second look.
3. **Check answers.** Use the compact answer keys first.
4. **Read explanations.** Study missed items and any lucky guesses.
5. **Redo two problems.** Rewrite the work cleanly without peeking.
6. **Set the next lab goal.** Choose one skill or habit to improve.

**Best review habit:** A mistake is most useful when you can say why it happened and what you will do differently next time.



## What Is Inside?

Six complete practice tests with review support

Part	What You Do	Why It Helps
Practice Tests 1–6	Solve six different 30-question tests.	Build stamina and see Grade 3 skills mixed together.
Answer Keys	Check each answer in compact boxes.	Find mistakes quickly without losing your place.
Explanations	Read why each answer works.	Turn missed items into a clear next step.
Standards Reference	See how Michigan Grade 3 standards connect to practice.	Understand the skills behind the questions.

Each test has 26 multiple-choice questions, 1 select-all question, and 3 open-ended questions. This gives students practice with quick decisions, careful reading, and short written math answers for the Michigan M-STEP path.



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For more practice  
& answers

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1) Which shows how many unit fractions of  $\frac{1}{3}$  are needed to make a whole?

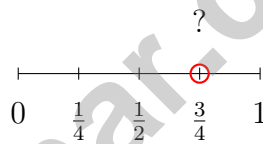
- A. 1 unit fraction                       C. 3 unit fractions  
 B. 2 unit fractions                       D. 6 unit fractions

2) What is  $63 \div 9$ ?

- A. 6     C. 8  
 B. 9     D. 7

3) A fruit stand has 3 crates of oranges with 7 oranges each and 2 crates of lemons with 8 lemons each. How many pieces of fruit in total?

- A. 30     C. 40  
 B. 48     D. 37



4)

On the number line, the red dot is at the same position as which label?

- A.  $\frac{1}{2}$      C.  $\frac{1}{4}$   
 B.  $\frac{3}{4}$      D. Between  $\frac{1}{2}$  and  $\frac{3}{4}$

5) Ava skip counts by 2s: 2, 4, 6, 8, 10.

What do all these numbers have in common?

- A. They are all odd                               C. They are all greater than 5  
 B. They are all multiples of 3                       D. They are all even



6) Which does NOT equal  $6 \times 3$ ?

A.  $3 \times 6$

C.  $6 \times 2 + 6 \times 1$

B.  $6 \times (2 + 1)$

D.  $4 \times 3 + 2$

7) 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?



8) A rectangle is 9 units by 4 units. If we write  $9 \times 4$  using the distributive property with  $4 = (2 + 2)$ , what do we get?

A.  $(9 \times 2) + (9 \times 2) = 18 + 18 = 36$

C.  $(9 + 2) + (9 + 2) = 22$

B.  $9 + 2 + 2 = 13$

D.  $2 + 2 = 4$

9) Mia spent \$176 on books and \$245 on pencils. How much did Mia spend in total?

A. \$411

C. \$420

B. \$431

D. \$421

10) Which situation can be solved using  $24 \div 6$ ?

A. 24 cookies shared equally among 6 friends

C. 24 times 6

D. 24 plus 6

B. 6 items split between 24 people



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11) A rectangle has a length of 10 cm and a width of 2 cm. Which answer shows its area?

- A. 12 sq cm                       C. 20 sq cm  
 B. 24 sq cm                       D. 30 sq cm

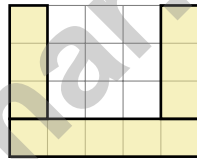
12) Ava ate  $\frac{10}{2}$  of a pizza. How many whole pizzas did she eat?

- A. 2                                       C. 5  
 B. 10                                       D. 1

13) A rectangular sign at school is 8 meters long and 4 meters wide. What is the area of the sign?

- A. 12 sq m                               C. 32 sq m  
 B. 24 sq m                               D. 64 sq m

14) This grid shows a U-shaped figure made of unit squares. Count the squares carefully.



How many unit squares form this U-shape?

- A. 5 sq units                               C. 11 sq units  
 B. 8 sq units                               D. 20 sq units

15) A soup recipe needs 2000 mL of broth. Ben has 1500 mL. How much more broth does he need?

- A. 400 mL                               C. 1000 mL  
 B. 500 mL                               D. 1500 mL



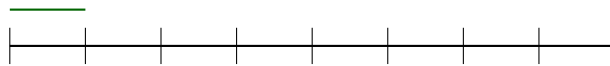




1) A zoo has about 475 animals. Round to the nearest 100 to estimate.

- A. 400                       C. 480  
 B. 470                       D. 500

2) A ribbon is marked on a number line from 0 to 1 with 8 equal spaces. Mia marks the first space. What fraction of the ribbon is marked?



- A.  $\frac{1}{8}$                        C.  $\frac{1}{9}$   
 B.  $\frac{1}{7}$                        D.  $\frac{2}{8}$

3) On a number line from 0 to 1 with 6 equal parts, Sam marks the point at  $\frac{1}{6}$ . Maya marks the point at  $\frac{3}{6}$ . How many parts apart are their marks?



- A. 1 part                       C. 3 parts  
 B. 2 parts                       D. 4 parts

4) Mia buys stickers in packs of 10. She buys 1 pack, then 2 packs, then 3 packs, then 4 packs.

How many stickers does she have with 4 packs?

- A. 10                       C. 30  
 B. 20                       D. 40

5) A bar graph shows plants in pots. One bar is 4 units (scale: 3), another is 5 units (scale: 3). What is the total?

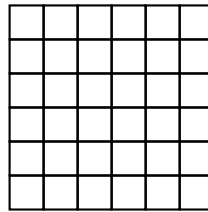
A. 9

C. 15

B. 12

D. 27

6) Maya is laying square tiles on her kitchen floor. The floor is shaped like a large square with 6 tiles along one edge. Here is the layout:



How many square tiles cover the entire floor?

A. 12 tiles

C. 36 tiles

B. 24 tiles

D. 48 tiles

7) Eli goes to bed at 9 : 23 PM. He sleeps for 9 hours and 37 minutes. What time does Eli wake up?

A. 6 : 00 AM

C. 7 : 15 AM

B. 7 : 00 AM

D. 6 : 45 AM

8) Noah organizes his toy train cars in 4 equal rows. If he has 20 cars, how many cars are in each row?

A. 5

C. 24

B. 16

D. 80



Scan me!  
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& answers

## 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

- Choice C is correct.** **(3.NF.A.1)**  $\frac{1}{3} + \frac{1}{3} + \frac{1}{3} = \frac{3}{3} = 1$  whole. So 3 unit fractions of  $\frac{1}{3}$  make a whole.
- Choice D is correct.** **(3.OA.C.7)**  $63 \div 9 = 7$  because  $7 \times 9 = 63$ . This is related to the multiplication fact.
- Choice D is correct.** **(3.OA.D.8)** Step 1: Oranges:  $3 \times 7 = 21$ . Step 2: Lemons:  $2 \times 8 = 16$ . Total:  $21 + 16 = 37$  pieces.
- Choice B is correct.** **(3.NF.A.3d)** The dot is positioned at the third quarter mark on the number line, which is  $\frac{3}{4}$ . This is greater than  $\frac{1}{2}$ .
- Choice D is correct.** **(3.OA.D.9)** Skip counting by 2 always gives even numbers: 2, 4, 6, 8, 10, ...
- Choice D is correct.** **(3.OA.B.5)**  $6 \times 3 = 18$ . Options A, B, and C all equal 18. But  $4 \times 3 + 2 = 12 + 2 = 14$ , which does not equal 18.
- The correct answer is 4 books.** **(3.MD.B.3)** Maya:  $7 \times 2 = 14$ . Leo:  $5 \times 2 = 10$ . Fewer:  $14 - 10 = 4$ .
- Choice A is correct.** **(3.MD.C.7c)**  $9 \times (2 + 2) = 9 \times 4 = 36$ , and we can show this as two  $9 \times 2$  rectangles side by side.
- Choice D is correct.** **(3.NBT.A.2)** Add:  $176 + 245 = 421$ . Ones:  $6 + 5 = 11$  (write 1, carry 1). Tens:  $7 + 4 + 1 = 12$  (write 2, carry 1). Hundreds:  $1 + 2 + 1 = 4$ .
- Choice A is correct.** **(3.OA.A.2)**  $24 \div 6$  divides 24 items into 6 equal groups, which matches sharing 24 cookies among 6 friends.
- Choice C is correct.** **(3.MD.C.7)** Area =  $10 \times 2 = 20$  square cm.
- Choice C is correct.** **(3.NF.A.3c)**  $\frac{10}{2}$  means 10 halves. 2 halves make 1 whole, so  $10 \div 2 = 5$  wholes.
- Choice C is correct.** **(3.MD.C.7b)** Area = length  $\times$  width =  $8 \times 4 = 32$  square meters.
- Choice C is correct.** **(3.MD.C.6)** Count the bottom row: 5 squares. Count the left column above: 3 more. Count the right column above: 3 more. Total:  $5 + 3 + 3 = 11$  unit squares.
- Choice B is correct.** **(3.MD.A.2)** Subtract:  $2000 - 1500 = 500$  mL.
- Choices B and C are correct.** **(3.MD.D.8)** Option B:  $P = 2(6) + 2(5) = 22$  in. Option C:  $P = 2(10) + 2(1) = 22$  in. Option A is 20 in, option D is 18 in, and option E is 24 in.
- Choice C is correct.** **(3.NF.A.2b)**  $\frac{2}{8}$  means 2 out of 8 equal parts. Count 2 ticks from 0.
- Choice A is correct.** **(3.OA.A.3)** Divide:  $48 \div 8 = 6$  bracelets.
- Choice D is correct.** **(3.MD.C.5b)**  $7 \times 7 = 49$  unit square tiles.
- Choice C is correct.** **(3.G.A.2)** Three out of six equal strips make  $\frac{3}{6}$ .
- Choice D is correct.** **(3.OA.A.4)** Divide:  $32 \div 4 = 8$  stickers per friend.
- Choice D is correct.** **(3.OA.A.1)**  $9 \times 2$  means 9 groups of 2, so  $2 + 2 + 2 + 2 + 2 + 2 + 2 + 2 + 2 = 18$ .
- Choice B is correct.** **(3.NF.A.3)**  $\frac{4}{8}$  and  $\frac{1}{2}$  both equal half of a whole.
- Choice C is correct.** **(3.NF.A.3a)**  $\frac{3}{4} = \frac{6}{8}$  because both represent three-fourths of the cup.
- Choice B is correct.** **(3.MD.C.7d)** Composite shapes are found by dividing them into non-overlapping rectangles, finding each area, and adding them together. Choice A fails because an L-shape is not a single rectangle. Choices C and D are incorrect methods.
- Choice A is correct.** **(3.NF.A.2a)** The first of four equal parts is  $\frac{1}{4}$ .
- Choice C is correct.** **(3.MD.C.5)** Both rectangles have area  $4 \times 5 = 20$  square units. Multiplication is commutative:  $4 \times 5 = 5 \times 4$ . Rotating a rectangle doesn't change its area.
- The correct answer is 2 X's.** **(3.MD.B.4)** Two leaves measured exactly  $2\frac{1}{4}$  inches, so there would be 2 X's above the  $2\frac{1}{4}$  mark.
- Choice D is correct.** **(3.NBT.A.1)** The tens digit is 5. Since  $5 \geq 5$ , round up: 756 rounds to 800.
- The correct answer is 4 equal sides.** **(3.G.A.1)** A rhombus is defined by having 4 equal sides. When that rhombus also has 4 right angles (like a rectangle), it meets the definition of a square. A square is the shape that has properties of BOTH a rhombus and a rectangle.



## Hi, Brave Explorer!

◇ What a trip! You explored 6 full tests. You went to many math places: multiplication, fractions, area, time, and more. ◇

★ **Smart explorers know:** every trip teaches something. Through 6 tests, you learned a lot. You are a stronger math explorer now. ★

### Your Explorer Tools

- **Map Reading:** You read problems carefully.
- **Trail Skills:** You take steps in the right order.
- **Backpack:** You have many math tools.
- **Brave Heart:** You explore even hard problems.

**Explorer tip:** on test day, use the tools you packed. You have the skills. You are ready!

If you want to share something or ask a question, please email me at [jay@testinar.com](mailto:jay@testinar.com).

**Jay Daie**

Your Math Trail Guide

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# BUILD CONFIDENCE. MASTER MATH. ACHIEVE SUCCESS!



This **Grade 3 Math Practice Tests** book is the perfect companion for students who want to strengthen their math skills and excel in school. With **6** full-length practice tests designed to reflect real test formats, students get the practice they need to understand key concepts, build problem-solving skills, and tackle any challenge with confidence.

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