

5 Michigan M STEP

Standards-Aligned Review with
Mixed Practice and Answer Key



5 Michigan M-STEP Grade 4 Math Practice Tests

Standards-Aligned Review with Mixed Practice and Answer Key



Five complete 30-question Grade 4 practice rounds for M-STEP, built around Great Lakes shorelines, forest roads, and reliable checking, with answer keys and clear explanations for every item.

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Welcome, Michigan Math Explorer!

Five steady rounds on the Great Lakes math route

This book gives you five full Grade 4 practice tests for M-STEP. Each round uses Great Lakes shorelines, forest roads, and reliable checking to keep practice memorable while you read carefully, choose a strategy, show work, and check the answer.

Michigan Practice Promise

I will slow down for the question, circle what matters, solve one step at a time, and use mistakes as clues for getting stronger.

Read

Plan

Check

How to Use This Book

A ten-session routine for Michigan M-STEP review

1. **Preview the skills.** Read the quick review pages before the first test.
2. **Take one test at a time.** Treat each round like a stop on the Great Lakes math route.
3. **Mark your confidence.** Put a small star beside problems you solved with a strong plan.
4. **Check, then retry.** For missed questions, try the problem again before reading the explanation.
5. **Track your next move.** Use the growth log to name one habit and one skill for the next test.

Good rhythm: Test one day, correct carefully the next day, then return for the next round when your corrections feel clear.



What Is Inside?

Five tests, 150 questions, and a full M-STEP review path

Part	What You Will Practice
Tests 1–3	Warm-up rounds for reading carefully, choosing operations, and using models.
Tests 3–5	Skill-building rounds with fractions, measurement, area, data, and two-step problems.
Tests 3–5	Stamina rounds for mixed review, neat work, and flexible strategies.
Answer Pages	Compact keys and explanations that show why each answer works.

The tests are mixed on purpose. Real test readiness means recognizing the skill even when the next question changes topic.



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1) All the factors of 24 are:

A. 1, 2, 3, 4, 8, 12, 24

C. 2, 3, 4, 6, 8, 12, 24

B. 1, 2, 4, 6, 8, 12, 24

D. 1, 2, 3, 4, 6, 8, 12, 24

2) In the number 4,567, what is the value of the digit 4?

A. 4

C. 400

B. 40

D. 4,000

3) A garden is divided into 5 equal rows. Plants are in 3 rows. Write the fraction of the garden with plants as a sum of unit fractions.

A. $\frac{3}{5}$

C. $\frac{2}{5}$

B. $\frac{1}{3} + \frac{1}{3} + \frac{1}{3}$

D. $\frac{1}{5} + \frac{1}{5} + \frac{1}{5}$

4) A student wrote: $\frac{3}{10} + \frac{3}{100} = \frac{6}{110}$. What is the correct answer?

A. $\frac{33}{100}$

C. $\frac{6}{110}$ (student is correct)

B. $\frac{6}{100}$

D. $\frac{30}{100}$

5) A person turns from facing north to a direction 110° clockwise. They then turn an additional 40° clockwise. What is the total angle turned from the original position?

A. 70°

C. 150°

B. 110°

D. 180°



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6) $\frac{4}{5}$ is equivalent to $\frac{?}{20}$. What is the missing numerator?

- A. 12 C. 18
 B. 24 D. 16

7) A candy shop sells 3 large bags of candy. Each bag weighs 16 ounces. How many ounces is that total? If they sell for \$4 per bag, how much money do they make?

- A. 13 ounces and \$10 C. 48 ounces and \$16
 B. 16 ounces and \$12 D. 48 ounces and \$12

8) Which pair of line segments is perpendicular?



- A. Diagram A C. Diagram C
 B. Diagram B D. Diagram D

9) Ava read $\frac{4}{5}$ of her book on Monday and $\frac{1}{5}$ on Tuesday. What fraction of the book did she read in both days?

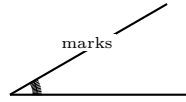
- A. $\frac{5}{5}$ C. $\frac{4}{10}$
 B. $\frac{3}{5}$ D. $\frac{6}{10}$

10) A store has 96 ounces of dried apples to pack into bags of 8 ounces each. How many bags are needed?

- A. 8 bags C. 88 bags
 B. 12 bags D. 104 bags



11)



This angle is marked from 0° to 30° . How many one-degree angles does the angle contain?

- A. 29 one-degree angles C. 31 one-degree angles
 B. 30 one-degree angles D. 60 one-degree angles
- 12) A baker divides 6 equal portions, each worth $\frac{1}{12}$ of the cake. What fraction of the cake is 6 portions?
- A. $\frac{1}{12}$ C. $\frac{12}{6}$
 B. $\frac{6}{12}$ D. $\frac{1}{6}$
- 13) Which fractions are greater than $\frac{1}{2}$?
- A. $\frac{4}{10}$ and $\frac{3}{8}$ C. $\frac{2}{5}$ and $\frac{3}{6}$
 B. $\frac{5}{8}$ and $\frac{6}{10}$ D. $\frac{1}{3}$ and $\frac{2}{4}$
- 14) A recipe needs 3 cups of milk. How many tablespoons is this? (Hint: 1 cup = 16 tablespoons)
- A. 16 C. 32
 B. 24 D. 48
- 15) Select the TWO multiplication equations that show: "Something is 2 times as many as another thing."
- A. $10 = 5 + 5$
 B. $10 = 2 \times 5$
 C. $14 = 2 \times 7$
 D. $14 = 7 + 7$
 E. $6 \times 6 = 36$



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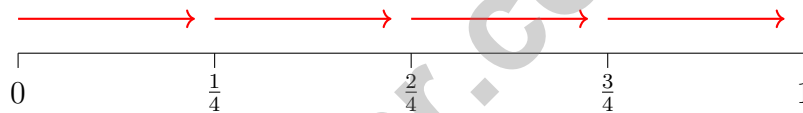
1) What is the main characteristic of a line in geometry?

- A. It has exactly two endpoints C. It is always horizontal
 B. It continues forever in both directions D. It is shorter than a line segment

2) A bakery makes 25 trays of cookies. Each tray holds 28 cookies. How many cookies are made?

- A. 600 cookies C. 750 cookies
 B. 800 cookies D. 700 cookies

3) A number line shows equal jumps. Use it to find how many $\frac{1}{4}$ are in $\frac{4}{4}$.



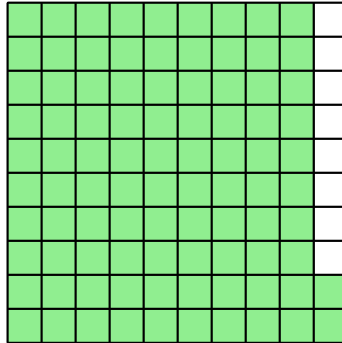
- A. 1 C. 3
 B. 2 D. 4

4) A sequence of multiples is: $\frac{1}{8}, \frac{2}{8}, \frac{3}{8}, ?$. Which is the next multiple?

- A. $\frac{3}{9}$ C. $\frac{3}{16}$
 B. $\frac{4}{8}$ D. $\frac{4}{16}$

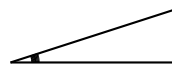


5) How many hundredths are shaded in this grid?



- A. 8 hundredths or 0.08 C. 92 hundredths or 0.92
 B. 80 hundredths or 0.80 D. 20 hundredths or 0.20
- 6) Which metric measurement is the longest?
- A. 2 kilometers C. 3,500 meters
 B. 9,000 meters D. 15 kilometers
- 7) If you move the digit 4 from the tens place to the thousands place, how many times greater does its value become?
- A. 10 times C. 1,000 times
 B. 2 times D. 100 times

8)



This angle shows tick marks from 0 to 18 degrees. Write the measure of this angle.



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1) Diego read $\frac{4}{10}$ of a book on Monday and $\frac{5}{10}$ on Tuesday. How much of the book did he read?

A. $\frac{9}{10}$ of the book

C. $\frac{1}{10}$ of the book

B. $\frac{9}{20}$ of the book

D. $\frac{10}{10}$ or 1 book

2) What is $3,564 \div 6$?

A. 594

C. 614

B. 604

D. 584

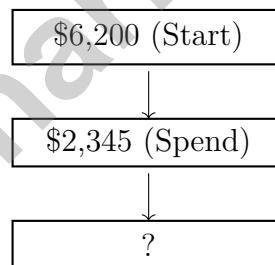
3) Look at this angle diagram. If point M is the vertex, what are the two rays called?

A. Lines

C. Sides (or rays)

B. Segments

D. Vertices



4)

Marcus has \$6,200. He spends \$2,345. How much money does he have left?

A. \$3,855

C. \$4,055

B. \$3,945

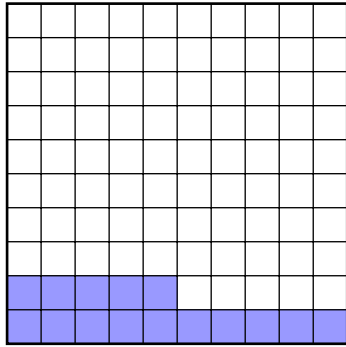
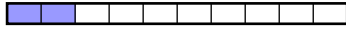
D. \$3,955



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5) Use a tenths bar and a hundredths grid to show $\frac{2}{10} + \frac{15}{100}$.

Tenths bar: 2 out of 10

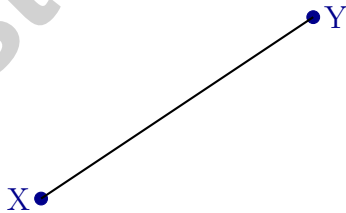


Hundredths grid: 15 out of 100

Which sum is shown by these models?

- A. $\frac{17}{100}$
 C. $\frac{35}{100}$
 B. $\frac{20}{100}$
 D. $\frac{215}{100}$

6) What are the endpoints of this line segment?



- A. X and Y
 C. Only Y
 B. Only X
 D. The midpoint



Practice Test Answer Keys

How to use this section with a Grade 4 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 D is correct.** (4.OA.B.4) Walk through the factor pairs: 1×24 , 2×12 , 3×8 , 4×6 . Combine both sides of each pair: **1, 2, 3, 4, 6, 8, 12, 24**. *Tip:* the pairs “meet in the middle”—once they start repeating, you’ve found them all.
- Choice D is correct.** (4.NBT.A.1) In 4,567, read the places from right: ones 7, tens 6, hundreds 5, thousands 4. The digit 4 is in the thousands place, so its value is $4 \times 1,000 = 4,000$. ✓
- Choice D is correct.** (4.NF.B.3) The garden has 5 equal rows, and plants are in 3 of them. So the fraction with plants is $\frac{3}{5}$, which breaks into unit fractions: $\frac{3}{5} = \frac{1}{5} + \frac{1}{5} + \frac{1}{5}$.
- Choice A is correct.** (4.NF.C.5) The student tried to add the denominators, which is wrong! The correct way: convert $\frac{3}{10} = \frac{30}{100}$, then add: $\frac{30}{100} + \frac{3}{100} = \frac{33}{100}$.
- Choice C is correct.** (4.MD.C.7) Each turn is an angle. Add the rotations together: $110^\circ + 40^\circ = 150^\circ$.
- Choice D is correct.** (4.NF.A.1) The denominator changes from 5 to 20. Divide: $20 \div 5 = 4$. So multiply the numerator by 4: $4 \times 4 = 16$.
- Choice D is correct.** (4.OA.A.3) Two separate questions in one—both use multiplication! Step 1: total weight = 3 bags \times 16 ounces = 48 ounces. Step 2: total money = 3 bags \times \$4 = \$12. So the answer must include both pieces: 48 ounces and \$12.
- Choice D is correct.** (4.G.A.1) Perpendicular segments cross at exactly 90° — look for that special little square symbol. Diagram D has it, showing two segments meeting perfectly at right angles.
- Choice A is correct.** (4.NF.B.3) Ava read parts on two different days. Add the fractions: $\frac{4}{5} + \frac{1}{5} = \frac{5}{5}$, which means she read the whole book!
- Choice B is correct.** (4.MD.A.2) There are 96 ounces of dried apples. Each bag holds 8 ounces. Divide: $96 \div 8 = 12$ bags. He needs **12** bags.
- Choice B is correct.** (4.MD.C.5) The angle is marked from 0° to 30° , so it contains **30** one-degree angles.
- Choice B is correct.** (4.NF.B.4) Each portion is worth $\frac{1}{12}$ of the cake. With 6 portions, we have $6 \times \frac{1}{12} = \frac{6}{12}$ of the cake.
- Choice B is correct.** (4.NF.A.1) Check each: $\frac{4}{10} < \frac{1}{2}$ (4 tenths), $\frac{3}{8} < \frac{1}{2}$ (3 eighths), $\frac{5}{8} > \frac{1}{2}$ (5 eighths), $\frac{6}{10} > \frac{1}{2}$ (6 tenths). Both B choices are greater.
- Choice D is correct.** (4.MD.A.1) Since 1 cup = 16 tablespoons, multiply: $3 \times 16 = 48$ tablespoons. The answer is **48** tablespoons.
- The correct answer is B, C.** (4.OA.A.1) Equations that show “2 times as many” have 2 as a factor in the multiplication. Choice B ($10 = 2 \times 5$) and choice C ($14 = 2 \times 7$) both do. Choices A and D show addition (not multiplication), and choice E has 6 as the multiplier, not 2.
- The correct answer is 8 cm.** (4.MD.A.3) Using $P = 2\ell + 2w = 38$ with $\ell = 11$: $2(11) + 2w = 38$. Solve: $22 + 2w = 38$, so $2w = 16$, thus $w = 8$ cm.
- The correct answer is $\frac{3}{8}$.** (4.MD.B.4) The shortest jump is $\frac{2}{8}$ ft and the longest is $\frac{5}{8}$ ft. The difference is $\frac{5}{8} - \frac{2}{8} = \frac{3}{8}$ foot.
- Choice C is correct.** (4.MD.C.5) From 12 to 9 going clockwise is three-quarters of the clock, which equals **270°** .
- Choice D is correct.** (4.NBT.B.5) The standard algorithm: multiply by ones ($37 \times 6 = 222$), then by tens ($37 \times 20 = 740$), then add ($222 + 740 = 962$). Choice D shows all three numbers.
- Choice B is correct.** (4.NF.C.5) 0.4 sits right in the middle: it’s bigger than 0.3 but smaller than 0.5.
- Choice C is correct.** (4.NF.B.4) Each juice bottle holds $\frac{4}{5}$ cup, and there are 3 bottles. Multiply: $3 \times \frac{4}{5} = \frac{3 \times 4}{5} = \frac{12}{5} = 2\frac{2}{5}$ cups. The answer is **$2\frac{2}{5}$** cups.
- Choice A is correct.** (4.NF.B.3) Diego used $\frac{6}{10}$ on the hike and $\frac{3}{10}$ at camp. Total water used: $6 + 3 = 9$, so $\frac{6}{10} + \frac{3}{10} = \frac{9}{10}$. ✓
- Choice B is correct.** (4.NF.B.4) Three groups of $\frac{2}{6}$: $3 \times \frac{2}{6} = \frac{6}{6}$.
- Choice A is correct.** (4.NF.B.4) We multiply the number of candies by the weight of each: $6 \times \frac{1}{8} = \frac{6}{8}$ pound. Simplify $\frac{6}{8}$ to get $\frac{3}{4}$ pound.



From Your Math Family

Hi, Math Family Member,

◇ Welcome to a special note from your math family. You finished 5 full practice tests, and that hard work matters more than any score. We see you. We are proud of you. ◇

★ **Our math family knows:** math is a journey. You have taken many steps already. The test is just one stop. Every skill you built is yours forever. ★

What Your Math Family Sees

- **Hard Work:** You keep showing up.
- **Real Growth:** You can do problems today you couldn't before.
- **Brave Heart:** You face hard problems with brave thinking.
- **Bright Future:** Your math journey is just beginning.

Family tip: on test day, picture us standing behind you, smiling and rooting for you. You are not alone. Your math family is with you!

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

Jay Daie

Your Math Family

5 PRACTICE TESTS. BUILD SKILLS. BOOST CONFIDENCE!

This **Grade 4 Math Practice Tests** book is designed to help students master essential math concepts, improve problem-solving skills, and build the confidence they need to excel.

With 5 full-length practice tests, a variety of question types, and detailed answer explanations, students get the practice they need to understand math, strengthen critical thinking, and perform their best on test day and beyond.

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Measure growth across multiple practice tests.



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Reinforce important skills aligned with grade-level standards.



Prepare for Success

Build the confidence needed to do your best on test day.

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- ✓ Addition & Subtraction
- ✓ Multiplication & Division
- ✓ Fractions & Equivalent Fractions
- ✓ Decimals
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- ✓ Perimeter & Area
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- ✓ Word Problems
- ✓ And More!



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Mixed Question Types



Answer Key Included

A+