

9

# Michigan M-STEP

## GRADE 3 MATH PRACTICE TESTS

COMPLETE STANDARDS REVIEW WITH SKILL PRACTICE,  
WORD PROBLEMS, AND ANSWER KEY



10

FOR THE COMPREHENSIVE ASSESSMENT PROGRAM



# 9 Michigan M-STEP Grade 3 Math Practice Tests

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



Nine complete 30-question Grade 3 practice rounds with operations, fractions, measurement, data, area, shapes, answer keys, and clear explanations for every item.

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# Michigan, Start Your Nine-Round Math Map

A bright Grade 3 mission from first try to confident finish

This book gives you nine chances to practice like a thoughtful Michigan M-STEP test taker. Each round mixes numbers, shapes, fractions, data, measurement, and word problems so your brain learns to switch skills calmly.

Michigan has Great Lakes shores, forest roads, car plants, snowy sidewalks, and steady school routines, where careful steps matter. Strong math follows that same idea: compare what the question asks, choose a useful tool, show the work, and measure before moving on.

## Your Michigan Math Promise

I will slow down enough to understand the question. I will show the work that helps me think. I will use mistakes as practice fuel, then try again with a sharper plan.

**Nine rounds is not about rushing. It is about building a math habit that stays strong.**

# How to Use This Book

A nine-session routine for clear Michigan review

1. **Warm up first.** Read the quick review pages and remind yourself of the big ideas.
2. **Take one test at a time.** Work without rushing. Circle words, sketch models, and label units.
3. **Check the answer key.** Mark correct answers, then star questions that need another look.
4. **Read explanations after trying again.** The explanation works best after your brain has wrestled with the problem.
5. **Use the growth log.** Track the score, one strong habit, and one skill to practice next.

**Good rhythm:** Test one day, review the next day, then take the next test when your corrections feel clear. In Michigan, that steady routine turns nine tests into one organized prep plan.



# What Is Inside the Nine Tests?

Mixed Grade 3 practice with M-STEP support

Part	What You Practice
Nine full tests	30 mixed Grade 3 questions in each round
Question styles	Multiple choice, select-all, and open-ended work spaces
Math topics	Operations, patterns, rounding, fractions, measurement, data, area, perimeter, and shapes
Answer support	Compact answer keys plus explanations for every item
Standards help	A Michigan standards reference and standard-code boxes in explanations

**Why mixed practice helps:** Real tests do not announce the next skill. These nine rounds help students recognize the math move they need, even when the topic changes from question to question.



Scan me!  
For more practice  
& answers

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1) A bag of flour has a mass of 2000 grams. A block of butter has a mass of 250 grams. How many more grams does the flour weigh than the butter?

- A. 250 grams                       C. 2000 grams  
 B. 1750 grams                     D. 2250 grams

2) What is 145 rounded to the nearest 100?

- A. 100                                 C. 150  
 B. 140                                 D. 200

3) A picture graph shows toy cars. Each car icon represents 4 cars. Diego has 12 cars. How many icons should be shown for Diego?

- A. 3 icons                             C. 6 icons  
 B. 4 icons                             D. 12 icons

4) Look at the pattern 2, 4, 6, 8, 10. What is the next number? Explain why.

**Missing Addend:** ? + 189 = 506

Hundreds	Tens	Ones
?	?	?
+	+	+
1	8	9
5	0	6

5)

What is the missing addend?

- A. 317                                 C. 406  
 B. 307                                 D. 395

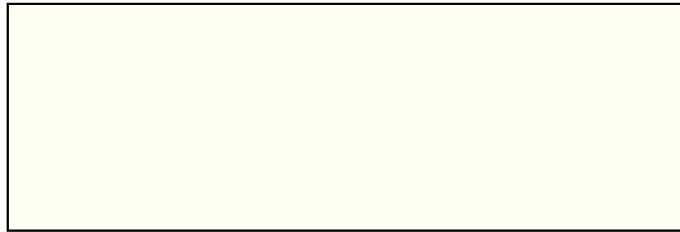


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6) Lily divides two number lines. One is divided into halves and another is divided into fourths. How many more fourths than halves are there in the same interval?

- A. 2 more  
 B. 1 more  
 C. The same  
 D. 2 fewer

3 yards



9 yards

7)

A rectangular field measures 9 yards long and 3 yards wide. What is the area of the field?

- A. 24 sq yd  
 B. 27 sq yd  
 C. 12 sq yd  
 D. 36 sq yd

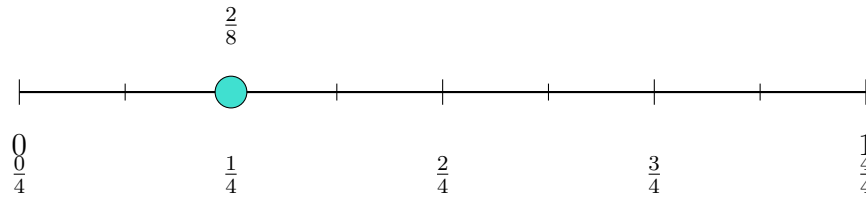
8) A T-shaped figure is divided by dashed lines into three rectangles. The given areas are 10 sq units, 6 sq units, and 6 sq units. What is the total area?

- A. 10 sq units  
 B. 22 sq units  
 C. 16 sq units  
 D. 360 sq units





1) Which fraction is equivalent to  $\frac{1}{4}$ ?



A.  $\frac{2}{8}$

B.  $\frac{3}{8}$

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

D.  $\frac{2}{4}$

2) Noah has 12 toy cars. He wants to make 2 equal rows. How many cars will be in each row?

A. 5

B. 14

C. 10

D. 6

3) A square is 5 unit squares long on each side. How many unit squares cover it?

A. 20 unit squares

B. 10 unit squares

C. 12 unit squares

D. 25 unit squares

4) Eli paints a rectangular wall. The wall is 8 feet wide and 3 feet tall. How many square feet does Eli paint?

A. 24 sq ft

B. 16 sq ft

C. 11 sq ft

D. 32 sq ft



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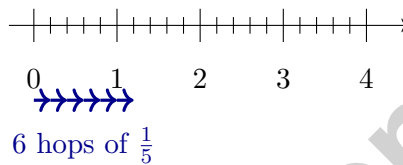
5)

100	→ Regroup?
90	
5	

Which regrouping step is needed to add  $195 + 210$ ?

- A. Regroup tens to hundreds       C. No regrouping needed  
 B. Regroup hundreds to tens       D. Regroup twice

6)



A frog makes 6 equal hops of size  $\frac{1}{5}$  on a number line divided into fifths. Where does the frog land after 6 hops?

- A. At  $\frac{1}{5}$        C. At 1  
 B. At  $\frac{6}{5}$  (between 1 and 2)       D. At  $\frac{5}{6}$

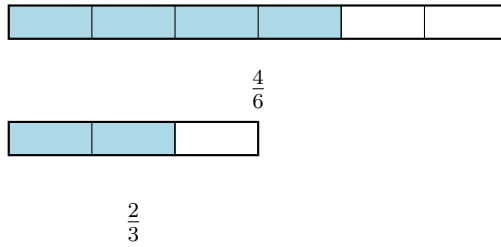
7) How many minutes after 6 : 15 is 6 : 35?

8) How many whole units does the shaded bar show?



- A. 1       C. 6  
 B. 3       D. 2

1) Which fraction is equivalent to  $\frac{4}{6}$ ?



- |                                           |                                           |
|-------------------------------------------|-------------------------------------------|
| <input type="checkbox"/> A. $\frac{1}{3}$ | <input type="checkbox"/> C. $\frac{1}{2}$ |
| <input type="checkbox"/> B. $\frac{2}{3}$ | <input type="checkbox"/> D. $\frac{3}{4}$ |

2) Noah has  $\frac{3}{1}$  cookies. How many whole cookies does he have?

- |                               |                               |
|-------------------------------|-------------------------------|
| <input type="checkbox"/> A. 1 | <input type="checkbox"/> C. 0 |
| <input type="checkbox"/> B. 6 | <input type="checkbox"/> D. 3 |

3) Noah has 3 groups of stickers. Each group has 4 red and 3 blue stickers. Which expanded equation finds the total?

- |                                                     |                                                            |
|-----------------------------------------------------|------------------------------------------------------------|
| <input type="checkbox"/> A. $3 \times (4 + 3) = 21$ | <input type="checkbox"/> C. $3 + 4 + 3 = 10$               |
| <input type="checkbox"/> B. $3 \times 4 = 12$       | <input type="checkbox"/> D. $3 \times 4 + 3 \times 3 = 21$ |

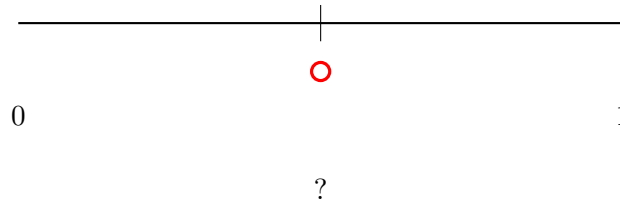
4) Each box holds 6 pencils. One box has 6 pencils. Two boxes have 12 pencils. Three boxes have 18 pencils.

How many pencils are in 5 boxes?

- |                                |                                |
|--------------------------------|--------------------------------|
| <input type="checkbox"/> A. 24 | <input type="checkbox"/> C. 36 |
| <input type="checkbox"/> B. 42 | <input type="checkbox"/> D. 30 |

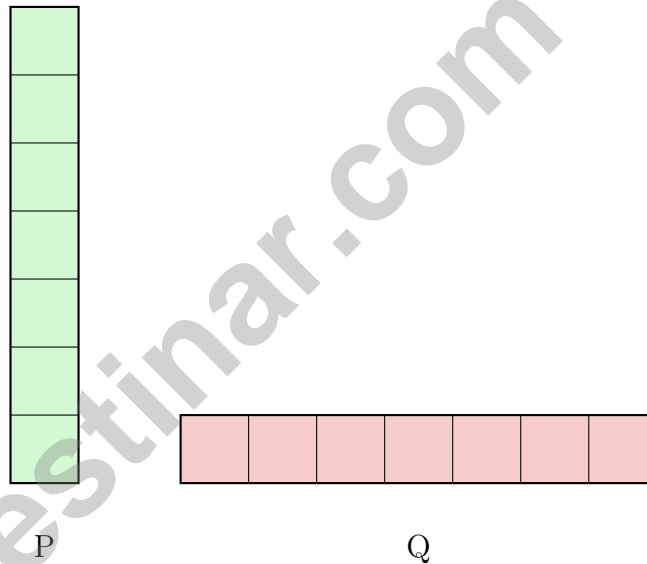


5) Identify the fraction at the marked point on this number line from 0 to 1 divided into 2 equal parts.



- A.  $\frac{1}{2}$
- B.  $\frac{1}{3}$

- C.  $\frac{1}{4}$
- D.  $\frac{2}{3}$



6)

Shape P is 1 unit by 7 units. Shape Q is 7 units by 1 unit. How do their areas compare?

- A. P is bigger
- B. Q is bigger

- C. They are equal
- D. Cannot be determined



Scan me!  
For more practice  
& 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

- 1) **Choice B is correct.** **(3.MD.A.2)** Subtract:  $2000 - 250 = 1750$  g.
- 2) **Choice A is correct.** **(3.NBT.A.1)** The tens digit is 4. Since  $4 < 5$ , round down: 145 rounds to 100.
- 3) **Choice A is correct.** **(3.MD.B.3)** Divide total by scale:  $12 \div 4 = 3$  icons.
- 4) **The correct answer is 12.** **(3.OA.D.9)** The difference between consecutive numbers is always 2:  $2 + 2 = 4$ ,  $4 + 2 = 6$ , and so on. So  $10 + 2 = 12$ .
- 5) **Choice A is correct.** **(3.NBT.A.2)** Subtract to find the missing addend:  $506 - 189 = 317$ . Check:  $317 + 189 = 506$ .
- 6) **Choice A is correct.** **(3.NF.A.2a)** There are 2 halves in the interval, but 4 fourths. So  $4 - 2 = 2$  more fourths.
- 7) **Choice B is correct.** **(3.MD.C.7b)** Area = length  $\times$  width =  $9 \times 3 = 27$  square yards.
- 8) **Choice B is correct.** **(3.MD.C.7d)** Add all three parts:  $10 + 6 + 6 = 22$  square units.
- 9) **Choice D is correct.** **(3.OA.A.4)** Divide:  $15 \div 3 = 5$ . Each unknown weight is 5. Check:  $5 \times 3 = 15$ .
- 10) **Choice B is correct.** **(3.OA.D.8)** Step 1: Cookies per bag:  $42 \div 6 = 7$  cookies. Step 2: Remaining bags:  $6 - 2 = 4$  bags. Total in remaining:  $7 \times 4 = 28$  cookies. Choice B is clearest with parentheses.
- 11) **Choice C is correct.** **(3.NF.A.3a)**  $\frac{2}{6} = \frac{1}{3}$  because both represent one-third of the page.
- 12) **The correct answer is 35 square units.** **(3.MD.C.5)** Multiply length by width:  $7 \times 5 = 35$  square units.
- 13) **Choice D is correct.** **(3.OA.C.7)**  $40 \div 5 = 8$  because  $8 \times 5 = 40$ .
- 14) **Choice A is correct.** **(3.NF.A.3d)** Same numerator (1): both fractions take 1 piece from their bar. But the first bar is divided in half (larger piece), the second in thirds (smaller piece). One half  $>$  one third. Visually: the green shaded area is larger in the first bar.
- 15) **Choice A is correct.** **(3.OA.A.2)** The picture shows 12 items split into 6 equal groups. The division sentence is  $12 \div 6 = 2$ .
- 16) **Choice A is correct.** **(3.MD.C.7c)** The distributive property lets us split 8 into 3 + 5 and add two smaller areas:  $18 + 30 = 48$ . This matches tiling the rectangle in two parts.
- 17) **Choices A, C, and D are correct.** **(3.OA.A.1)**  $4 \times 7 = 28$ . Diego's  $7 + 7 + 7 + 7$  equals 28, Sam's  $4 + 4 + 4 + 4 + 4 + 4 + 4$  equals 28, and Pia's four rows of seven dots equals 28.
- 18) **Choice C is correct.** **(3.MD.A.1)** From 4 : 30 to 5 : 30 is 1 hour (60 minutes). From 5 : 30 to 5 : 42 is 12 more minutes. Total:  $60 + 12 = 72$  minutes.
- 19) **Choice B is correct.** **(3.NF.A.1)** When a whole is divided into 3 equal pieces, each piece is  $\frac{1}{3}$  (one-third).
- 20) **Choice C is correct.** **(3.MD.C.6)** Area of a square =  $4 \times 4 = 16$  square feet.
- 21) **Choice B is correct.** **(3.MD.C.5a)** 8 square units is larger than 7, 6, or 4 square units.
- 22) **Choice B is correct.** **(3.NF.A.3c)** 15 thirds means  $15 \div 3 = 5$  wholes. Each candy bar had 3 thirds.
- 23) **Choice B is correct.** **(3.NF.A.2)**  $\frac{2}{4} = \frac{1}{2}$ , so  $\frac{2}{4}$  and  $\frac{1}{2}$  are the same point on the number line.
- 24) **Choice A is correct.** **(3.OA.B.6)** There are 20 toy cars with 5 in each group, so  $20 \div 5 = 4$  groups.
- 25) **Choice B is correct.** **(3.MD.C.7)** Lily's area =  $6 \times 5 = 30$  sq units. Mia's area =  $7 \times 4 = 28$  sq units.  $30 > 28$ , so Lily's is larger.
- 26) **Choice D is correct.** **(3.G.A.2)** Three vertical lines create 4 equal columns, so the rectangle is divided into 4 parts.
- 27) **Choice C is correct.** **(3.NBT.A.3)** Multiply  $9 \times 3 = 27$ , then multiply by 10:  $9 \times 30 = 270$ . Add exactly one zero—not zero zeros, and not two zeros.
- 28) **Choice A is correct.** **(3.NF.A.3b)** Both rectangles show the same shaded amount.  $\frac{1}{3} = \frac{2}{6}$  because  $\frac{1 \times 2}{3 \times 2} = \frac{2}{6}$ .
- 29) **The correct answer is 8.** **(3.NF.A.2b)** Each unit from 0 to 1 has 4 fourths. From 0 to 2 is 2 units, so  $2 \times 4 = 8$  fourths total.
- 30) **Choice C is correct.** **(3.MD.B.4)** Count the X's directly above the 11-inch mark. There are three X's stacked there.

### Practice Test 2 Answers and Explanations



## Hi, Math Pilot!

◇ 9 flights done in your math airplane. You have flown through smooth skies and bumpy clouds. You are a real pilot now. ◇

★ **Pilots know:** a good check before takeoff makes a smooth flight. Before each problem, do your check: read, plan, solve, verify. ★

### Pilot Skills

- **Pre-Flight:** You read the question carefully.
- **Steering:** You pick the right strategy.
- **Smooth Flight:** You stay calm in long tests.
- **Landing:** You always check your final answer.

**Pilot tip:** on test day, take off one problem at a time. Trust your training. You earned your wings!

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 Pilot

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Aligned to Standards



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