

8

Montana MAST

GRADE 3

MATH

PRACTICE TESTS

Standards-Aligned Review with
Mixed Practice and Answer Key



8 Full-Length
Practice Tests



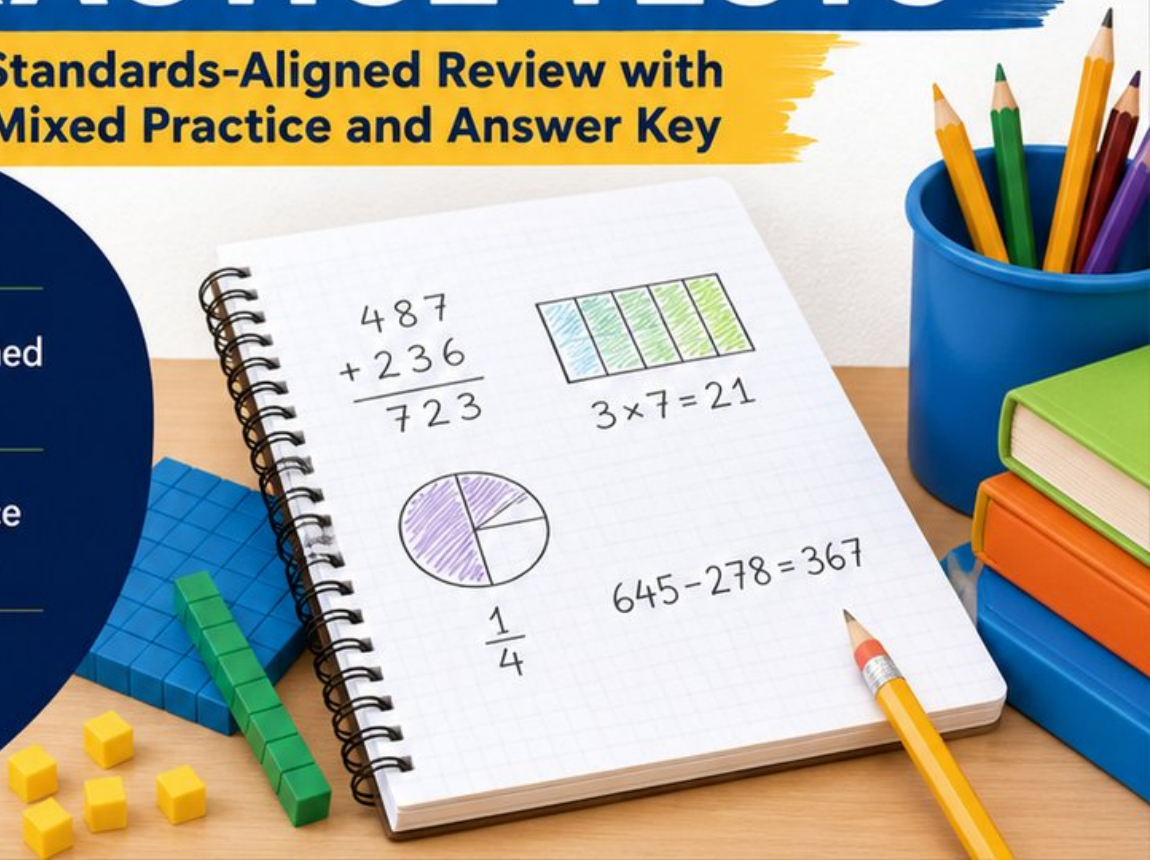
Standards-Aligned
Questions



Build Confidence
and Math Skills



Answer Key
Included



8 Montana MAST Grade 3 Math Practice Tests

Standards-Aligned Review with Mixed Practice and Answer Key



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

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Montana, Your Eight-Test Math Path Begins

Eight focused rounds, one stronger Grade 3 problem solver

This book gives you eight full chances to practice like a careful test taker for the Montana MAST. Each test is a new route through numbers, shapes, data, measurement, and word problems. Work slowly enough to notice what the question asks, and proudly enough to show your thinking.

Montana has big-sky ranges, ranch roads, glacier views, open plains, and wide thinking space, where careful steps matter. Strong math follows that same path: notice the question, choose a tool, show the work, and use space on the page to show clear thinking.

Your Montana Math Promise

I will read the whole question, choose a smart strategy, write clear work, and check whether my answer makes sense.

Eight rounds. Thirty questions each. One careful step at a time.

How to Use This Book

A simple eight-round routine for confident review

Use this Montana book as a practice plan, not a race. Finish one test, review it, fix a few problems, then carry one better habit into the next test.

1. **Preview the reference page.** Notice units, time, and measurement facts before you begin.
2. **Take one full test.** Circle anything that feels tricky so you can return to it.
3. **Check the answer key.** Mark correct answers and questions to try again.
4. **Read explanations.** Study missed items and lucky guesses first.
5. **Redo three problems.** Write fresh work without copying the explanation.
6. **Name one habit.** Pick a focus such as labels, facts, fractions, or neat work.
7. **Try the next test.** Bring that habit forward.
8. **Finish with a final check.** Look for growth across all eight tests.

Best review habit: In Montana, strong practice means slowing down enough to see the clue. When an answer is wrong, ask, “What step would I change next time?”



What Is Inside the Eight Tests?

Mixed Grade 3 math practice for the MAST

Each practice test has 30 questions. You will see multiple-choice questions, select-all questions, and open-ended questions with workspace. The mix helps students practice both choosing an answer and explaining a short mathematical result.

Part	What to Expect
Eight full tests	30 mixed Grade 3 questions in each round
Math topics	multiplication, division, place value, fractions, time, measurement, data, area, perimeter, and shapes
Answer keys	compact answer boxes for quick checking
Explanations	short reasoning for every item so mistakes become useful review
Progress pages	places to record scores, habits, and next-step goals

Montana focus: The practice path starts with big-sky ranges, ranch roads, glacier views, open plains, and wide thinking space. Strong math uses the same idea: know the path, follow the clues, and check the final answer.

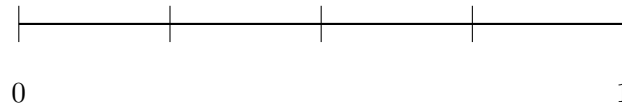


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- 1) A number line from 0 to 1 is divided into 4 equal parts. Which fraction names the first tick mark after 0?



- A. $\frac{1}{4}$ C. $\frac{1}{3}$
 B. $\frac{1}{2}$ D. $\frac{2}{4}$
- 2) A garden is 7 feet long and 5 feet wide. What is its area?
- A. 12 sq ft C. 24 sq ft
 B. 35 sq ft D. 70 sq ft
- 3) $\frac{1}{3} = \frac{2}{?}$. What is the missing denominator?
- A. 4 C. 8
 B. 6 D. 9
- 4) In a multiplication table, the diagonal shows: $1 \times 1 = 1$, $2 \times 2 = 4$, $3 \times 3 = 9$, $4 \times 4 = 16$.
What is 5×5 ?
- A. 20 C. 25
 B. 24 D. 30
- 5) There are 48 students. They are divided equally into 6 classes. Then 4 new students join one class. How many students are in that class now?
- A. 8 C. 16
 B. 12 D. 18



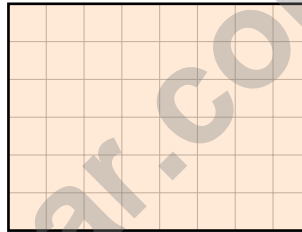
6) Noah counts unit squares to measure the area of a shape. He gets 9 unit squares. What is the area of the shape?

- A. 3 square units C. 9 square units
 B. 6 square units D. 18 square units

7) A bar graph shows cookies sold. The scale is 5 cookies per unit. Lily's bar reaches 3 units. How many cookies did Lily sell?

- A. 8 C. 15
 B. 12 D. 20

8) On a grid, a rectangle is 8 units long and 6 units wide.



How many unit squares fill it?

- A. 28 sq units C. 48 sq units
 B. 42 sq units D. 56 sq units

9) A rectangle is divided into 3 equal parts. If $\frac{2}{3}$ is shaded, how many parts are shaded?



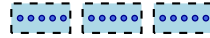
- A. 1 part C. 3 parts
 B. 2 parts D. 0 parts



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5) Which picture shows 21 items divided equally into 3 groups?

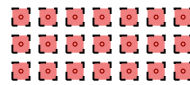
- A. Three groups of five



- B. Seven groups of three



- C. Twenty-one groups of one



- D. Three groups of seven



6) Eli drinks juice from a bottle. The bottle contained 1 liter. After he drinks some, 300 mL remains. How much juice did he drink?

- A. 300 mL C. 700 mL
 B. 500 mL D. 1000 mL

7) A rectangular whiteboard is 11 feet wide and 5 feet tall. What is the area of the whiteboard?

- A. 32 sq ft C. 55 sq ft
 B. 110 sq ft D. 16 sq ft



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1) Lily starts playing at 2 : 18 PM. She plays for 44 minutes. What time does Lily stop playing?

A. 3 : 00 PM

C. 3 : 12 PM

B. 3 : 02 PM

D. 2 : 58 PM

2) Mia tiles a rectangle that is 3 tiles wide and 6 tiles tall. Jordan tiles a rectangle that is 2 tiles wide and 9 tiles tall. Whose rectangle has a bigger area?

A. Mia's rectangle

C. They have the same area

B. Jordan's rectangle

D. Cannot tell from this information

3) A square has side length 6 inches. What is its area?



4)

Original	Rounded to 10	Rounded to 100
289	290	?

Complete the table: What is 289 rounded to the nearest 100?

A. 200

C. 290

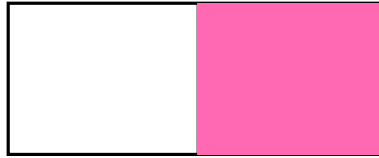
B. 280

D. 300



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- 5) A rectangle has 2 equal parts. One part is shaded.



What fraction does the shaded part show?

- A. $\frac{1}{3}$
 C. $\frac{1}{2}$
 B. $\frac{2}{1}$
 D. $\frac{2}{2}$
- 6) A student says that this rectangle is divided so each part is $\frac{1}{4}$. Is the student correct?



- A. Yes, there are 4 parts
 C. No, the parts are unequal
 B. No, there are 6 parts, so each is $\frac{1}{6}$
 D. Yes, each part is $\frac{1}{4}$
- 7) Which number sentence represents “28 beads made into 7 equal necklaces”?
- A. $28 + 7$
 C. $28 - 7$
 B. 7×28
 D. $28 \div 7$

- 8) A number line from 0 to 1 is divided into 2 equal parts. What fraction is at the first tick?



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.NF.1)** The first tick is at one of four equal parts, which is $\frac{1}{4}$.
- 2) **Choice B is correct.** **(3.MD.8)** Area = length \times width = $7 \times 5 = 35$ square feet. Choice A (12) is the sum $7 + 5$; Choice C (24) is common product error; Choice D (70) is double the area.
- 3) **Choice B is correct.** **(3.NF.3)** The numerator was multiplied by 2 (from 1 to 2). Multiply the denominator by 2: $3 \times 2 = 6$. So $\frac{1}{3} = \frac{2}{6}$.
- 4) **Choice C is correct.** **(3.OA.9)** $5 \times 5 = 25$. This is sometimes called a “perfect square”.
- 5) **Choice B is correct.** **(3.OA.8)** Step 1: Divide: $48 \div 6 = 8$ students per class. Step 2: Add new students: $8 + 4 = 12$ students in that class. (Choice A is step 1 only.)
- 6) **Choice C is correct.** **(3.MD.6)** If the shape is covered by 9 unit squares, the total area is 9 square units.
- 7) **Choice C is correct.** **(3.MD.3)** Multiply: $3 \times 5 = 15$ cookies.
- 8) **Choice C is correct.** **(3.MD.6)** $8 \times 6 = 48$ unit squares.
- 9) **Choice B is correct.** **(3.G.2)** $\frac{2}{3}$ of a rectangle with 3 equal parts means 2 parts are shaded.
- 10) **Choice D is correct.** **(3.OA.3)** Divide: $56 \div 8 = 7$ cartons.
- 11) **Choice A is correct.** **(3.MD.7)** Since $4 + 5 = 9$ and both parts share width 10, we use the distributive property.
- 12) **Choice D is correct.** **(3.OA.2)** The number line shows jumps of 2 from 0 to 10. There are 5 jumps, so it represents $10 \div 2 = 5$.
- 13) **Choice B is correct.** **(3.MD.5)** Add the parts: $7 + 9 = 16$ square units. Choice A (forgot Part A) and C (multiply instead of add) are common errors.
- 14) **Choice A is correct.** **(3.NBT.2)** $378 + 215$: ones $8 + 5 = 13$ (write 3, carry 1), tens $7 + 1 + 1 = 9$, hundreds $3 + 2 = 5$. Answer: 593.
- 15) **Choices B and D are correct.** **(3.NF.3)** With numerator 1, smaller denominators give larger pieces. Thirds and halves are larger than fourths. A and C have larger denominators (sixths and eighths) so they are smaller. E equals $\frac{1}{4}$ (not greater).
- 16) **Choice C is correct.** **(3.NF.1)** A whole divided into 2 equal parts gives each part the name $\frac{1}{2}$ (one-half).
- 17) **Choice C is correct.** **(3.NF.2)** On the number line, $\frac{4}{6}$ is to the right of $\frac{3}{6}$ (which equals $\frac{1}{2}$), so $\frac{4}{6} > \frac{1}{2}$.
- 18) **The correct answer is 1 inch.** **(3.MD.4)** Range = max - min = $8 - 7 = 1$ inch.
- 19) **Choice B is correct.** **(3.MD.5)** Multiply length by width: $10 \times 4 = 40$ square feet.
- 20) **Choice C is correct.** **(3.OA.7)** $9 \times 6 = 54$. Count by 6s: 6, 12, 18, 24, 30, 36, 42, 48, 54.
- 21) **Choice B is correct.** **(3.MD.5)** The vertical part has 3 unit squares. The horizontal part has 2 more unit squares. Total: $3 + 2 = 5$ unit squares cover this L-shaped figure.
- 22) **Choice B is correct.** **(3.NF.3)** $\frac{1}{2}$ and $\frac{4}{8}$ both equal half of a whole.
- 23) **Choice C is correct.** **(3.MD.7)** $3 \times 5 = 15$ square units. Choice A gives 18, B gives 16, and D gives 16.
- 24) **Choice C is correct.** **(3.G.1)** A trapezoid has exactly one pair of parallel sides. The other quadrilaterals shown have two pairs of parallel sides or other properties.
- 25) **Choice C is correct.** **(3.NBT.3)** Multiply $8 \times 6 = 48$, then multiply by 10: $8 \times 60 = 480$. The chart shows 4 hundreds, 8 tens, and 0 ones.
- 26) **Choice A is correct.** **(3.NBT.1)** The ones digit is 4. Since $4 < 5$, round down: 804 rounds to 800.
- 27) **Choice A is correct.** **(3.OA.5)** Option A shows 6 rows and 3 columns. By the commutative property, $3 \times 6 = 6 \times 3 = 18$. Flipping rows and columns shows the same product in a different order.
- 28) **Choice D is correct.** **(3.OA.1)** The array shows 3 rows with 4 circles in each row. So $3 \times 4 = 12$ circles.
- 29) **The correct answer is 4.** **(3.OA.4)** In a fact family, if $4 \times 8 = 32$, then $32 \div 8 = 4$. Multiplication and division are inverse operations.
- 30) **Choice D is correct.** **(3.OA.6)** The missing number is the product: $6 \times 7 = 42$. This fact family contains $6 \times 7 = 42$, $7 \times 6 = 42$, $42 \div 6 = 7$, and $42 \div 7 = 6$.



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Hi, Math Inventor!

◇ 8 practice tests. 8 chances to invent new ways to think. You tried things. You changed them. You made your math brain stronger! ◇

★ **Inventors know:** the first try isn't always the best try. Sometimes you fix it. Sometimes you start over. You did all of that! ★

Inventor's Workshop

- **Sketch Pad:** Full of ideas!
- **Toolbox:** Lots of math strategies.
- **Workbench:** Neat and organized.
- **Brave Mind:** You try new things.

Inventor tip: on test day, if your first try doesn't work, switch tools. Inventors don't get stuck on one tool. Pick the right one for the job!

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

Jay Daie

Your Math Inventor

PRACTICE TODAY. MASTER TOMORROW.

This book is designed to help **Grade 3** students strengthen their math skills through focused practice and real progress.

- ✓ 8 full-length practice tests
- ✓ Aligned to Grade 3 standards
- ✓ Build confidence and achieve success



EACH PRACTICE TEST INCLUDES:



Standards-
Aligned
Questions



Variety of
Question
Types



Real-World
Math
Applications



Step-by-Step
Progress
Tracking



Build Skills
and Boost
Confidence

COVERS ALL ESSENTIAL TOPICS

- ✓ Whole Numbers & Operations
- ✓ Fractions & Decimals
- ✓ Algebraic Thinking
- ✓ Geometry
- ✓ Measurement & Data
- ✓ Number Patterns
- ✓ Word Problems
- ✓ Ratio & Proportion
- ✓ Perimeter, Area & Volume
- ✓ Graphing & Data Analysis
- ✓ And More!



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