

# 9

$$256 \div 8 = 32$$



$$48 \times 7 = 336$$

# Colorado CMAS

## GRADE 4

# MATH

## PRACTICE TESTS

Standards-Aligned Review with  
Mixed Practice and Answer Key



**9 FULL-LENGTH  
PRACTICE TESTS**



**STANDARDS-ALIGNED  
REVIEW**



**MIXED PRACTICE  
BUILD SKILLS & CONFIDENCE**



**ANSWER KEY  
FOR ALL TESTS**



$$\frac{3}{4} + \frac{1}{4} = 1$$



$$725 - 358 = 367$$

PREPARE  
**PRACTICE**  
SUCCEED  
PERFORM

**PRACTICE TODAY.  
SUCCEED TOMORROW.**

# 9 Colorado CMAS Grade 4 Math Practice Tests

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



Nine complete 30-question Grade 4 practice rounds for CMAS, built around mountain passes, blue skies, and steady summit steps, with answer keys and clear explanations for every item.

**Jay Daie and Reza Nazari**



# Copyright ©

## Testinar Inc



Published by Testinar Inc

[Testinar.com](http://Testinar.com)

All rights reserved. No part of this publication may be reproduced, distributed, or transmitted in any form or by any means, including photocopying, recording, or other electronic or mechanical methods, without the prior written permission of the author, except in the case of brief quotations embodied in critical reviews and certain other noncommercial uses permitted by copyright law, including Section 107 or 108 of the 1976 United States Copyright Act.

This publication is independently produced and has no official connection to any state, district, or national testing program.

Test names and organizational names used herein are the property of their respective trademark holders.



*Copyright ©*

# Welcome, Colorado Math Explorer!

Nine steady rounds on the Rocky Mountain math route

This book gives you nine full Grade 4 practice tests for CMAS. Each round uses mountain passes, blue skies, and steady summit steps to keep practice memorable while you read carefully, choose a strategy, show work, and check the answer.

## Colorado 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 Colorado CMAS 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 Rocky Mountain 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?

Nine tests, 270 questions, and a full CMAS review path

Part	What You Will Practice
Tests 1–3	Warm-up rounds for reading carefully, choosing operations, and using models.
Tests 4–6	Skill-building rounds with fractions, measurement, area, data, and two-step problems.
Tests 7–9	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.



Scan me!  
For more practice  
& answers

# Table of Contents

★ Practice Test 1	_____	15
★ Practice Test 2	_____	27
★ Practice Test 3	_____	38
★ Practice Test 4	_____	50
★ Practice Test 5	_____	61
★ Practice Test 6	_____	72
★ Practice Test 7	_____	84
★ Practice Test 8	_____	95
★ Practice Test 9	_____	107
<b>Practice Test Answer Keys</b>	_____	<b>117</b>
<b>Practice Test Answers and Explanations</b>	_____	<b>123</b>

- 1) A van can carry 8 students. If there are 360 students going on a field trip, how many vans are needed?

360 students	
$\div 8$ students per van	
Van 1	Van 2
Total: ? vans	

- A. 45                                       C. 48  
 B. 42                                       D. 40
- 2) A bar model shows 4 equal bars representing containers of milk, each holding 6 liters. How many liters in total?



- A. 10 L                                       C. 24 L  
 B. 16 L                                       D. 30 L
- 3) Look at the numbers: 1,111, 2,222, 3,333. In each number, the value of the digit in the thousands place is how many times the value of the digit in the hundreds place?
- A. 1 time                                       C. 100 times  
 B. Equal                                       D. 10 times



Scan me!  
For more practice  
& answers

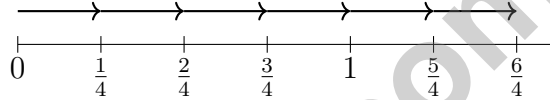
4) Kai baked  $4\frac{2}{4}$  batches of cookies on Saturday and  $2\frac{1}{4}$  batches on Sunday. What is the total?

- A.  $5\frac{3}{4}$  batches                       C.  $6\frac{2}{4}$  batches  
 B.  $6\frac{1}{4}$  batches                         D.  $6\frac{3}{4}$  batches

5) Which of these letters does **not** have a line of symmetry?

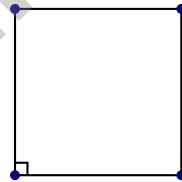
- A. *M*                                       C. *T*  
 B. *O*                                       D. *Z*

6) Use the number line to find  $6 \times \frac{1}{4}$ .



- A.  $\frac{1}{4}$                                        C.  $\frac{6}{24}$   
 B.  $\frac{6}{4}$  or  $1\frac{1}{2}$                          D. 2

7) How many right angles are shown in this figure?



- A. 1 right angle                         C. 3 right angles  
 B. 2 right angles                        D. 4 right angles



8) Which equation does NOT show a multiplicative comparison?

A.  $18 = 3 \times 6$

C.  $20 = 4 \times 5$

B.  $18 = 12 + 6$

D.  $35 = 5 \times 7$

9) The sides of an angle are:

 A. segments C. rays B. lines D. circles

10) 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.  $\frac{1}{5} + \frac{1}{5} + \frac{1}{5}$

11) Looking at this pattern, what is the rule?

8, 16, 24, 32, 40, ...

 A. Subtract 8 C. Multiply by 2 B. Add 6 D. Add 8

12) How many square tiles fit in a grid that is 26 units long and 12 units wide?

A. 200

C. 262

B. 352

D. 312

13) Isabella baked  $4\frac{1}{2}$  trays of cookies. She sold  $1\frac{1}{2}$  trays. How many trays of cookies does she have left?

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

C.  $3\frac{1}{2}$

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

D.  $3\frac{2}{2}$



Scan me!  
For more practice  
& answers

- 1) This fraction bar shows a decomposition. The light part is  $\frac{3}{5}$  and the dark part is  $\frac{2}{5}$ .



The whole fraction is:

- A.  $\frac{3}{5}$ 
 C.  $\frac{5}{5}$   
 B.  $\frac{2}{5}$ 
 D.  $\frac{6}{5}$
- 2) A rectangle has an area of 56 square centimeters. The width is 7 centimeters. What is the length?
- A. 6 cm
  C. 8 cm  
 B. 7 cm
  D. 9 cm
- 3) Diego says that  $\frac{8}{10} = 0.08$ . Is he correct?
- A. Yes,  $\frac{8}{10} = 0.08$ 
 C. No,  $\frac{8}{10} = 80.0$   
 B. No,  $\frac{8}{10} = 0.8$ 
 D. No,  $\frac{8}{10} = 8.0$
- 4) Which number is divisible by 3?
- A. 37
  C. 57  
 B. 44
  D. 62



- 5)  $\frac{4}{12}$   $\frac{4}{12}$  ?

A trail is divided into three equal sections. First hikers cover  $\frac{4}{12}$  (red) and next hikers cover  $\frac{4}{12}$  (gold). How much trail is left?

- A.  $\frac{8}{12}$ 
 C.  $\frac{12}{12}$   
 B.  $\frac{4}{12}$ 
 D.  $\frac{2}{12}$



- 6) In the number 3,817, the digit 8 represents which of these?
- A. 8 ones  C. 8 hundreds  
 B. 8 tens  D. 8 thousands
- 7) A piece of string weighs  $\frac{3}{5}$  ounce. What is the weight of 4 pieces?
- A.  $\frac{3}{20}$  ounce  C.  $\frac{7}{5}$  ounces  
 B.  $\frac{12}{5}$  ounces  D.  $\frac{4}{5}$  ounce
- 8) What does  $\frac{10}{100}$  equal?
- A.  $\frac{10}{10}$   C.  $\frac{0}{100}$   
 B.  $\frac{1}{10}$   D.  $\frac{100}{100}$
- 9) A pet store has 14 hamsters. Another pet store has 3 times as many hamsters. How many hamsters does the other store have?
- A. 17  C. 56  
 B. 30  D. 42
- 10) A pot has 8 cups of soup. Two friends share the soup equally. How many cups does each person get?
- A. 2 cups  C. 6 cups  
 B. 4 cups  D. 8 cups
- 11) Mia bought 2,310 beads to share equally among herself and 4 friends (5 people total). How many beads does each person get?
- A. 462  C. 450  
 B. 448  D. 458



Scan me!  
For more practice  
& answers

- 1) Hassan ate  $\frac{2}{6}$  of a pizza and Iris ate  $\frac{1}{3}$  of an identical pizza. Who ate more, or did they eat the same amount?

- 2) Which number rounds to 80,000 when rounded to the nearest ten thousand?

- A. 79,999                       C. 85,001  
 B. 85,000                       D. 74,999

- 3) Which fraction with denominator 100 is equivalent to  $\frac{3}{10}$ ?

- A.  $\frac{3}{100}$                                C.  $\frac{30}{100}$   
 B.  $\frac{13}{100}$                              D.  $\frac{33}{100}$

- 4) A straight angle of  $180^\circ$  is divided into four equal angles. What is the measure of each angle?

- A.  $45^\circ$                                C.  $36^\circ$   
 B.  $90^\circ$                                D.  $60^\circ$



- 5)  $\frac{4}{6}$  sugar                       $\frac{2}{6}$  flour

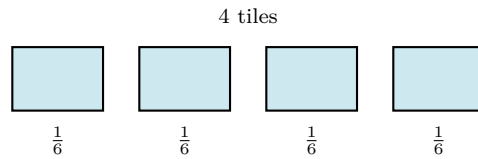
A cake recipe uses  $\frac{4}{6}$  cup of sugar and  $\frac{2}{6}$  cup of flour. What is the total amount of sugar and flour combined?

- A.  $\frac{6}{6}$                                        C.  $\frac{2}{6}$   
 B.  $\frac{6}{12}$                                      D.  $\frac{3}{6}$



Scan me!  
For more practice  
& answers

6) Maya lined up 4 unit-fraction tiles. If each tile is  $\frac{1}{6}$ , what is the total?



- |   |   |
|---|---|
| <input type="checkbox"/> A. $\frac{1}{6}$ | <input type="checkbox"/> C. $\frac{4}{6}$ |
| <input type="checkbox"/> B. $\frac{2}{6}$ | <input type="checkbox"/> D. $\frac{6}{6}$ |

7) What is  $1,428 \div 6$ ?

- |                                 |                                 |
|---------------------------------|---------------------------------|
| <input type="checkbox"/> A. 238 | <input type="checkbox"/> C. 248 |
| <input type="checkbox"/> B. 242 | <input type="checkbox"/> D. 244 |

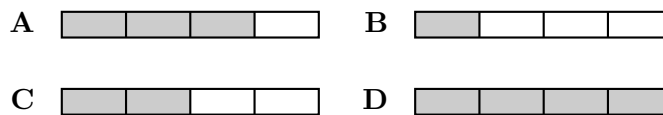
8) Ava reads 8 pages a day for 12 days. Noah reads 10 pages a day for 9 days. How many more pages does Ava read than Noah?

- |                                      |                                      |
|--------------------------------------|--------------------------------------|
| <input type="checkbox"/> A. 2 pages  | <input type="checkbox"/> C. 26 pages |
| <input type="checkbox"/> B. 18 pages | <input type="checkbox"/> D. 6 pages  |

9) Starting at 12, the minute hand moves to 3. What angle has it swept?

- |  |   |
|--|---|
| <input type="checkbox"/> A. $30^\circ$ | <input type="checkbox"/> C. $90^\circ$  |
| <input type="checkbox"/> B. $60^\circ$ | <input type="checkbox"/> D. $120^\circ$ |

10) Which picture shows  $3 \times \frac{1}{4}$ ?



- |                                       |                                       |
|---------------------------------------|---------------------------------------|
| <input type="checkbox"/> A. Picture A | <input type="checkbox"/> C. Picture C |
| <input type="checkbox"/> B. Picture B | <input type="checkbox"/> D. Picture D |



## 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.**

Testinar.com



Scan me!  
For more practice  
& answers

## Practice Test Answers and Explanations

### Practice Test 1 Answers and Explanations

- Choice A is correct.** (4.NBT.B.6) Ask:  $8 \times ? = 360$ . Since  $8 \times 45 = 360$ , we need **45** vans for all the students.
- Choice C is correct.** (4.MD.A.2) The bar model shows 4 containers, each holding 6 liters. Multiply:  $4 \times 6 = 24$  liters. The total is **24** liters.
- Choice D is correct.** (4.NBT.A.1) In any number, the thousands place is always 10 times the hundreds place. Example: in 2,222, thousands is 2,000 and hundreds is 200;  $2,000 \div 200 = 10$  times. ✓
- Choice D is correct.** (4.NF.B.3) Add the wholes:  $4 + 2 = 6$ . Add the fractions:  $\frac{2}{4} + \frac{1}{4} = \frac{3}{4}$ . The total is  **$6\frac{3}{4}$**  batches.
- Choice D is correct.** (4.G.A.3) The letter Z slants in one direction only. If you fold it any way—up and down, left and right, or diagonally—the halves don't match. The answer is letter **Z**.
- Choice B is correct.** (4.NF.B.4) On the number line, we make 6 jumps of  $\frac{1}{4}$  each, landing at  $\frac{6}{4} = 1\frac{1}{2}$ . So  $6 \times \frac{1}{4} = 1\frac{1}{2}$ . The answer is  **$1\frac{1}{2}$** .
- Choice D is correct.** (4.G.A.1) A square is built from four perfect corners, and each corner is exactly  $90^\circ$ . Count them: four corners means four right angles!
- Choice B is correct.** (4.OA.A.1) Multiplicative comparisons use the symbol  $\times$  (or words like “times as many”). Choices A, C, and D all use  $\times$ . Choice B uses  $+$ , which is an *additive* comparison—not multiplicative.
- Choice C is correct.** (4.MD.C.5) The two rays forming an angle are called the sides (or rays) of the angle.
- 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 D is correct.** (4.OA.B.4) Find the difference:  $16 - 8 = 8$ ,  $24 - 16 = 8$ ,  $32 - 24 = 8$ . Each term increases by 8. ✓
- Choice D is correct.** (4.NBT.B.5) Distribute and add:  $26 \times (10 + 2) = 260 + 52 = 312$  tiles.
- Choice C is correct.** (4.NF.B.3) Isabella baked many cookies but sold some. Subtract the sold amount from the total:  $4\frac{1}{2} - 1\frac{1}{2} = 3\frac{1}{2}$  trays of cookies left.
- Choice C is correct.** (4.MD.C.5) An angle that contains 80 one-degree angles measures  **$80^\circ$** .
- Choice D is correct.** (4.MD.B.4) Add all the measurements:  $\frac{1}{8} + \frac{3}{8} + \frac{3}{8} + \frac{5}{8} + \frac{5}{8} + \frac{5}{8} + \frac{7}{8} = \frac{29}{8}$  in.
- The correct answer is A, D.** (4.NF.B.3) A:  $6 + 2 = 8$  eighths = 1 whole ✓. D:  $5 + 1 = 6$  sixths = 1 whole ✓. B:  $\frac{6}{5}$  (more than 1). C:  $\frac{7}{8}$  (less than 1). E:  $\frac{5}{4}$  (more than 1).
- Choice B is correct.** (4.NF.C.5) Think of it as 3 tenths. We can write  $\frac{3}{10} = \frac{30}{100} = 0.30 = 0.3$ .
- Choice D is correct.** (4.NBT.A.2) Thousands: 307, ones: 4. Combined:  $307,000 + 4 = 307,004$  ✓
- The correct answer is 90.** (4.MD.C.6) Subtract the smaller angle from the larger:  $145^\circ - 55^\circ = 90^\circ$ . So the  $145^\circ$  angle is  $90^\circ$  larger (exactly one right angle larger!). The answer is **90** degrees.
- Choice D is correct.** (4.NF.A.1) Both bars show the same shaded length. The denominator goes from 3 to 6 (multiply by 2), so the numerator also goes from 1 to 2:  $\frac{1}{3} = \frac{1 \times 2}{3 \times 2} = \frac{2}{6}$ .
- Choice A is correct.** (4.NF.A.1) Find common denominator 120:  $\frac{9}{10} = \frac{108}{120}$ ,  $\frac{7}{8} = \frac{105}{120}$ ,  $\frac{5}{6} = \frac{100}{120}$ ,  $\frac{3}{4} = \frac{90}{120}$ . Since 108 is closest to 120,  $\frac{9}{10}$  is closest to 1.
- Choice A is correct.** (4.MD.C.7) A full rotation is  $360^\circ$ . Subtract what you've turned:  $360^\circ - 215^\circ = 145^\circ$ .
- The correct answer is  $\frac{4}{8}$ .** (4.NF.B.3) We need numerators to sum to 6. We have 2, so the missing piece is  $6 - 2 = 4$  eighths:  $\frac{4}{8}$  ✓.
- Choice A is correct.** (4.NBT.B.4) Add with regrouping: ones  $7 + 5 = 12$  (write 2, carry 1), tens  $4 + 8 + 1 = 13$  (write 3, carry 1), hundreds  $3 + 2 + 1 = 6$ , thousands  $2 + 3 = 5$ . The sum is **5,632**.
- Choice D is correct.** (4.NBT.A.3) We're rounding to the nearest thousand. Look at the hundreds digit: 5. Since  $5 \geq 5$ , we round UP! The thousands digit changes from 6 to 7, giving us **67,000**. ✓
- Choice A is correct.** (4.NF.C.5) From the table: 5 tenths = 0.5 and 8 hundredths = 0.08. Add:  $0.5 + 0.08 = 0.58$ .
- Choice C is correct.** (4.G.A.2) A square combines two key properties: four equal sides (like a rhombus) and four right angles (like a rectangle). This makes a square a special quadrilateral. The answer is **C**.



Scan me!  
For more practice  
& answers

Notes From Your Math Builder

---

## Hi, Math Builder!

◇ Through 9 practice tests, you built your math house brick by brick. The walls are strong. The roof is on. You are ready for anything test day brings. ◇

★ **Builders know:** good plans make strong houses. You learned to plan, then build. That helps with any problem. ★

### Builder's Tools

- **Foundation:** ROCK SOLID. Math facts are in place.
- **Frame:** STRONG. You can break problems into parts.
- **Walls:** TIDY. Your work is neat and clear.
- **Roof:** DONE. You always answer the question.

**Builder tip:** on test day, build each answer like a tiny house. Read first. Plan next. Do the math. Then check!

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 Builder

# PRACTICE TODAY. ACHIEVE TOMORROW!

This **Grade 4 Math Practice Tests** book is designed to help students strengthen essential math skills, build confidence, and develop the problem-solving abilities needed for classroom success and test readiness.

With 9 full-length practice tests, students gain repeated exposure to important Grade 4 concepts while learning how to approach questions with accuracy, confidence, and strong mathematical thinking.

Whether used at home, in the classroom, or for independent review, this book provides meaningful practice that helps students grow stronger with every test.

## PERFECT FOR:

- ✓ Classroom Practice
- ✓ Homework & Review
- ✓ Independent Learning
- ✓ Test Preparation
- ✓ Skill Reinforcement

★ **CONFIDENCE IN MATH.  
SUCCESS FOR LIFE.**

## WHAT STUDENTS WILL GAIN



### Stronger Math Skills

Build a solid foundation through targeted practice and review.



### Better Problem Solving

Develop logical thinking and effective solution strategies.



### Test Confidence

Become familiar with test-style questions and formats.



### Track Progress

Measure growth across multiple practice tests.



### Academic Success

Strengthen skills needed for future learning.

## TOPICS COVERED

- ✓ Place Value & Number Sense
- ✓ Multi-Digit Addition & Subtraction
- ✓ Multiplication & Division
- ✓ Fractions & Equivalent Fractions
- ✓ Geometry & Shapes
- ✓ Measurement & Data
- ✓ Perimeter & Area
- ✓ Word Problems
- ✓ Patterns & Algebraic Thinking
- ✓ Graphs & Data Interpretation
- ✓ Mathematical Reasoning
- ✓ And More!



Visit [testinar.com/math4](https://testinar.com/math4) for additional Grade 4 math resources and practice materials.

## MORE PRACTICE. GREATER RESULTS.

Give your child the tools needed to develop strong math skills, confidence, and a positive attitude toward learning.

★ **A COMPLETE PRACTICE EXPERIENCE TO HELP STUDENTS THRIVE!**



Builds Confidence Through Practice



Strengthens Critical Thinking & Problem Solving



Encourages Independent Learning



Prepares Students for Future Success