

4 Colorado CMAS

GRADE
6
MATH

PRACTICE TESTS

Standards Aligned Problem Solving
For Comprehensive Assessment Programs

4

**PRINTED
TESTS**



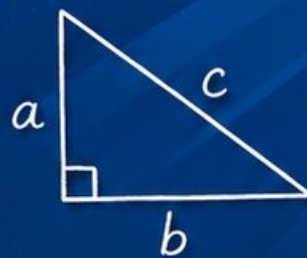
2

**ONLINE
TESTS**



- ✓ Build Confidence
- ✓ Master Key Math Skills
- ✓ Answer Explanations for Every Question
- ✓ Test-Taking Strategies That Work

$$2x + 5 = 21$$
$$x = 8$$



$$\frac{3}{4} + \frac{1}{2} = \frac{5}{4}$$



**USE THESE TWO
ADDITIONAL ONLINE
PRACTICE TESTS**

**FOR EXTRA REVIEW AFTER
THE PRINTED TESTS
IN THIS BOOK.**

4 Colorado CMAS Grade 6 Math Practice Tests

Standards-Aligned Mountain-Ready Math Thinking for Colorado Measures of Academic Success



Four complete 40-question Grade 6 practice rounds for CMAS, built for mountain-ready math thinking with ratios, rational numbers, expressions, equations, geometry, statistics, answer keys, and clear explanations for every item.

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Welcome, Colorado Math Explorer!

Four focused rounds using mountain-ready math thinking

This book gives you four full Grade 6 practice tests for CMAS. Each round uses ridge lines, trail signs, and high-country persistence as a fresh mental backdrop while you read closely, choose a smart strategy, show your work, and check whether your answer makes sense.

Your Colorado Practice Promise

Climb one step at a time: identify the skill, write the setup, and check the final result.

Read

Plan

Check

How to Use This Book

A four-session routine for mountain-ready math thinking

1. **Preview the skills.** Scan the quick review pages before beginning the first round.
2. **Mark confidence.** Put a small star beside problems where your plan felt strong.
3. **Work in order.** Take one 40-question test at a time in a quiet place.
4. **Plan the next round.** Use the growth log to choose one habit and one skill to practice.
5. **Correct actively.** Retry missed items before reading the full explanation.

Colorado review rhythm: Use each round like a trail segment: finish it, study the hard turns, then climb again.



What Is Inside?

Four CMAS tests, 160 questions, and a full review path

Part	What You Will Practice
Tests 1–2	Foundation rounds for ratios, rational numbers, operations, and careful reading.
Tests 3–4	Skill-building and final stamina rounds with expressions, equations, geometry, data, and problem models.
Answer Pages	Compact keys and explanations that show why each answer works.

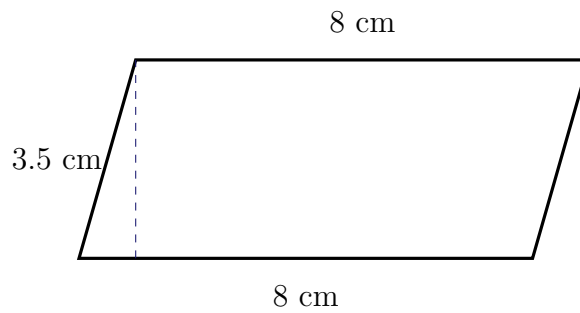
The tests are mixed on purpose. Mountain-ready math thinking means recognizing the skill even when the next question changes topic, changes format, or asks for an explanation.



Scan me!
For more practice
& answers

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1)

A parallelogram has a base of 8 cm and a height of 3.5 cm (shown by dashed lines). What is the area?

A. 11.5 cm^2

B. 19 cm^2

C. 28 cm^2

D. 56 cm^2

2) What is the value of $|-12|$?

A. 12

B. 0

C. -12

D. 24

3) In a group of 200 people, 50 are left-handed. What percent are left-handed?

4) Which decimal is equivalent to $-\frac{2}{5}$?

A. -0.2

B. -0.25

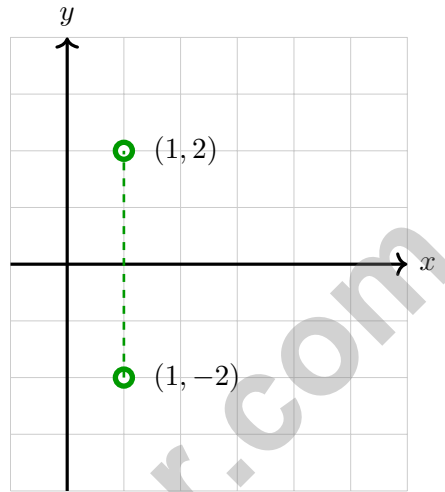
C. -0.4

D. -0.5



5) What is the relationship between the points $(5, 3)$ and $(5, -3)$?

- A. They are reflections across the y -axis C. They are the same point
 B. They are in the same quadrant D. They are reflections across the x -axis

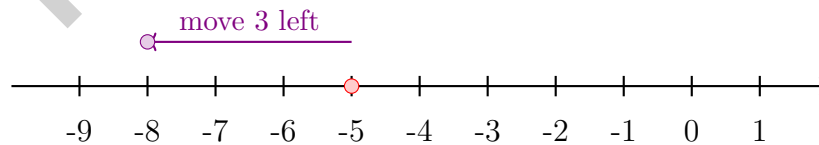


6)

What is the distance between $(1, -2)$ and $(1, 2)$?

- A. 3 units C. 5 units
 B. 4 units D. 6 units

7) Show $-5 + (-3)$ on a number line.



- A. Starts at -5 , ends at -8 , sum is -8 C. Starts at 0 , ends at -8 , sum is -8
 B. Starts at -5 , ends at -2 , sum is -3 D. Starts at -5 , ends at -3 , sum is -2



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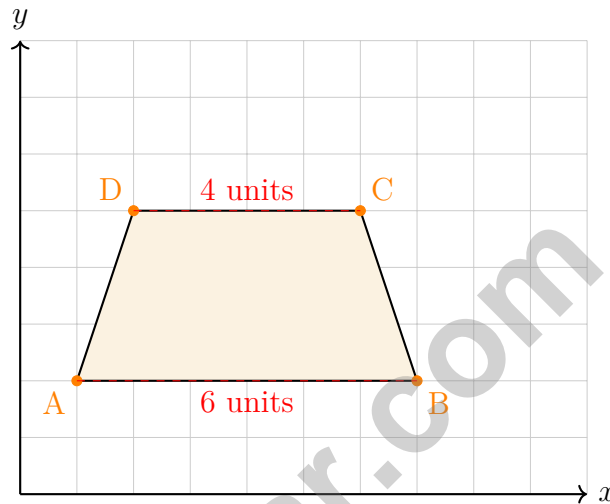
8) A rectangular prism has volume 120 cm^3 , width 5 cm, and height 4 cm. What is its length?

A. 4 cm

C. 8 cm

B. 6 cm

D. 15 cm



9)

This trapezoid has bases of 6 and 4 units and height 3 units. What is its area?

A. 12 square units

C. 18 square units

B. 24 square units

D. 15 square units



- 5) Four numbers have a mean of 25. Three of them are 20, 28, 32. What is the fourth number?

- 6) For 68, 70, 72, 75, 73, 71, 69, find the interquartile range.

- 7) A stem-and-leaf plot of student test scores is given:

Stem	Leaf
6	5, 8
7	1, 3, 4, 6, 9
8	0, 2, 5, 7
9	1, 4, 8

What is the mode of the test scores?

- A. 70 C. 80
 B. 74 D. No single mode



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- 1) A smoothie recipe uses two mixtures shown below.



Mixture A: 2 parts peach, 1 part apple



Mixture B: 3 parts peach, 2 parts apple

Which statement correctly compares the two mixtures?

- A. Both mixtures have the same peach-to-apple ratio.
- B. Mixture A has a lower peach-to-apple ratio than Mixture B.
- C. Mixture B has a higher peach-to-apple ratio than Mixture A.
- D. Mixture A has a higher peach-to-apple ratio than Mixture B.

- 2) What is $\frac{2}{3} \div \frac{4}{5}$?

A. $\frac{8}{15}$

B. $\frac{5}{6}$

C. $\frac{6}{7}$

D. $\frac{10}{15}$

- 3) A painter charges \$40 per hour. If the painter works for 3.5 hours, what is the total charge? Show that the relationship between hours and cost is proportional by checking that the equation $c = 40h$ passes through the origin.



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4) Divide 7,600 by 25 using long division.

A. 304

C. 310

B. 300

D. 312

5) Divide: $0.84 \div 0.7$

A. 1.2

C. 12

B. 0.12

D. 1.54

6) Find the LCM of 10, 12, and 15.

A. 30

C. 120

B. 60

D. 180

7) Which list shows the fractions in order from least to greatest?

A. $\frac{1}{2}, \frac{2}{3}, \frac{3}{4}, \frac{4}{5}$

C. $\frac{3}{4}, \frac{1}{2}, \frac{1}{4}, 0$

B. $0, -\frac{1}{4}, -\frac{1}{2}, -\frac{3}{4}$

D. $-\frac{3}{4}, -\frac{1}{2}, -\frac{1}{4}, 0$

8) A point on the y -axis must have which coordinate equal to zero?

A. The x -coordinate

C. Both coordinates

B. The y -coordinate

D. Neither (the origin only)



Colorado CMAS Practice Test Answer Keys

How to use this Colorado CMAS answer section with a Grade 6 student:

1. check the answer first, then write one quick reason the choice is correct
2. mark questions to try again, especially the skills that feel connected to mountain-ready math thinking
3. rework the problem before reading the full explanation, using this reminder:
Climb one step at a time: identify the skill, write the setup, and check the final result.

A calm Colorado correction routine turns every missed item into useful practice. Use each round like a trail segment: finish it, study the hard turns, then climb again.



Colorado Practice Test Answers and Explanations

Review the four printed CMAS tests with organized, persistent, and ready for higher ground habits.

Practice Test 1 Answers and Explanations

- 1) **Choice C is correct.** **(6.G.A.1)** Area = $8 \times 3.5 = 28 \text{ cm}^2$.
- 2) **Choice A is correct.** **(6.SP.B.4)** The absolute value of a number is its distance from zero on a number line, always non-negative. $|-12| = 12$.
- 3) **The correct answer is 25%.** **(6.RP.A.3)** $\frac{50}{200} = \frac{25}{100} = 25\%$ (divide both by 2).
- 4) **Choice C is correct.** **(6.SP.B.4)** $\frac{2}{5} = \frac{4}{10} = 0.4$, so $-\frac{2}{5} = -0.4$.
- 5) **Choice D is correct.** **(6.NS.C.8)** The points differ only in the sign of the y -coordinate, which is the definition of reflection across the x -axis.
- 6) **Choice B is correct.** **(6.NS.C.8)** Same x -coordinate (1): $|2 - (-2)| = |2 + 2| = 4$ units.
- 7) **Choice A is correct.** **(6.NS.B.3)** $-5 + (-3) = -8$. Start at -5 and move 3 units left, landing at -8 .
- 8) **Choice B is correct.** **(6.G.A.2)** From $V = L \times W \times H$, we have $120 = L \times 5 \times 4$. So $L = 120 \div 20 = 6$ cm.
- 9) **Choice D is correct.** **(6.G.A.3)** Area = $\frac{1}{2}(b_1 + b_2) \times h = \frac{1}{2}(6 + 4) \times 3 = \frac{1}{2}(10) \times 3 = 15$ square units.
- 10) **Choice D is correct.** **(6.G.A.1)** Width: $8 - 1 = 7$ units. Height: $5 - 1 = 4$ units. Area = $7 \times 4 = 28$ square units.
- 11) **Choice A is correct.** **(6.G.A.4)** The net has a 4×6 rectangle (one face) surrounded by four rectangles of dimensions 1×6 and 1×4 (the other faces). This corresponds to a prism with dimensions $1 \times 4 \times 6$.
- 12) **The correct answer is 60.** **(6.RP.A.3)** Markup is 50% of $\$40 = 0.50 \times 40 = \20 . Selling price is $\$40 + \$20 = \$60$.
- 13) **Choice A is correct.** **(6.NS.C.8)** Reflection over the y -axis negates the x -coordinate: $(3, 2) \rightarrow (-3, 2)$.
- 14) **Choice D is correct.** **(6.SP.A.3)** -0.8 is further left on the number line than -0.3 , so it is less. All other comparisons are false.
- 15) **Choice B is correct.** **(6.EE.A.3)** Substitute: $5(2) + 2(3) - 3(1) = 10 + 6 - 3 = 13$.
- 16) **Choice B is correct.** **(6.EE.C.9)** Total cost equals the daily rate of $\$40$ times the number of days: $C = 40d$.
- 17) **Choice B is correct.** **(6.SP.A.3)** The outlier 15 heavily skews the mean. The median (middle value) is more representative: 3.
- 18) **Choice A is correct.** **(6.EE.C.9)** A proportional relationship must pass through the origin $(0, 0)$. Graph A passes through the origin; Graph B starts at $(0, 1)$, so it does not pass through the origin.
- 19) **Choice A is correct.** **(6.EE.C.9)** Total expenses: $\$1200 + \$500 = \$1700$. Remaining: $\$2000 - \$1700 = \$300$.
- 20) **Choice D is correct.** **(6.RP.A.3)** Actual side: $2.5 \times 8 = 20$ feet. Area: $20 \times 20 = 400$ sq ft.
- 21) **The correct answer is The constant of proportionality is 4, and the cost per unit is \$4.** **(6.RP.A.3)** A is correct because $k = \frac{\$}{2} = 4$. B is correct because the cost per unit is $\$4$. The equation is $y = 4x$, so Choice C is false; Choice D is false because the graph passes through $(0, 0)$; Choice E gives the wrong unit rate.
- 22) **Choice D is correct.** **(6.NS.A.1)** $\frac{7}{10} \div \frac{1}{5} = \frac{7}{10} \times 5 = \frac{35}{10} = \frac{7}{2} = 3\frac{1}{2}$. So the chef can make $3\frac{1}{2}$ small batches.
- 23) **Choice A is correct.** **(6.NS.B.2)** $2,856 \div 12 = 238$. The long division shows quotient 238 with no remainder.
- 24) **The correct answer is 12.** **(6.RP.A.3)** Divide: $96 \text{ fl oz} \div 8 \text{ fl oz/cup} = 12$ cups.
- 25) **Choice B is correct.** **(6.NS.B.3)** $4.2 \times 0.5 = 2.1 = 2.10$. They have the same value; trailing zeros do not change the decimal's worth.
- 26) **Choice A is correct.** **(6.NS.B.4)** Multiples of 10: 10, 20, 30, 40, ... Multiples of 15: 15, 30, 45, ... The least common multiple is 30.
- 27) **Choice C is correct.** **(6.NS.B.4)** Find GCF(12, 18). Factors of 12: 1, 2, 3, 4, 6, 12. Factors of 18: 1, 2, 3, 6, 9, 18. GCF is 6. She can make 6 piles with 2 red shirts and 3 blue shirts each.
- 28) **Choice A is correct.** **(6.NS.C.5)** To order integers from least to greatest, place the most negative number first, then move toward zero and positive numbers. The order is $-4 < -1 < 0 < 2$.



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Hi, Math Champion!

◇ Look what you did! 4 full practice tests. That's hundreds of math problems. You started as a learner. You are now a math athlete. ◇

★ **Champions know:** hard work pays off. You did the hard work. Your math skills are strong because you practiced. ★

Champion's Stats

- **Focus:** HIGH! You stay on task.
- **Speed:** STRONG! You move at the right pace.
- **Accuracy:** SHARP! You catch your own mistakes.
- **Mindset:** CHAMPION! You believe in yourself.

Champion tip: on test day, walk in proud. You trained for this. You are ready!

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

Jay Daie

Your Math Coach

PRACTICE TODAY. SUCCEED TOMORROW!

This book includes 4 full-length Math practice tests and 2 online tests to help Grade 6 students build confidence, strengthen skills, and excel on standardized assessments.

Each practice test is carefully crafted to reflect the latest standards and includes a variety of question types, realistic test conditions, and detailed answer explanations.

Perfect for classroom use, homework, test preparation, and extra practice at home.

THIS BOOK INCLUDES:

4 Full-Length
Printed Tests

2 Online Practice
Tests

 Detailed Answer
Explanations

 **MORE PRACTICE.
GREATER RESULTS.**

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

WHAT YOU'LL GAIN



Stronger Math Skills

Build a solid foundation through targeted practice and review.



Better Problem Solving

Develop logical thinking and effective solution strategies.



Deeper Understanding

Reinforce key concepts with clear explanations and meaningful practice.



Test Confidence

Familiarize with test formats and improve accuracy and speed.



Achieve Success

Build confidence and perform your best on test day.

TOPICS COVERED

- ✓ Ratios & Rates
- ✓ Percents
- ✓ The Number System
- ✓ Statistics & Probability
- ✓ Expressions & Equations
- ✓ Data Analysis
- ✓ Geometry
- ✓ Measurement & Conversions
- ✓ Fractions & Decimals
- ✓ And More!



2 ONLINE TESTS

Use these two additional online practice tests for extra review after the printed tests in this book.



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