10 Colorado CMAS PRACTICE TESTS

GRADE 6 MATH

Standards-Aligned Review
Mixed Practice & Answer Key

10 PRINTED TESTS
Realistic practice to build confidence and mastery

2 ONLINE TESTS
Extra practice for continued success

DETAILED ANSWER EXPLANATIONS
Learn with step-by-step solutions

FOCUSED & EFFECTIVE
Target key math skills with purposeful practice

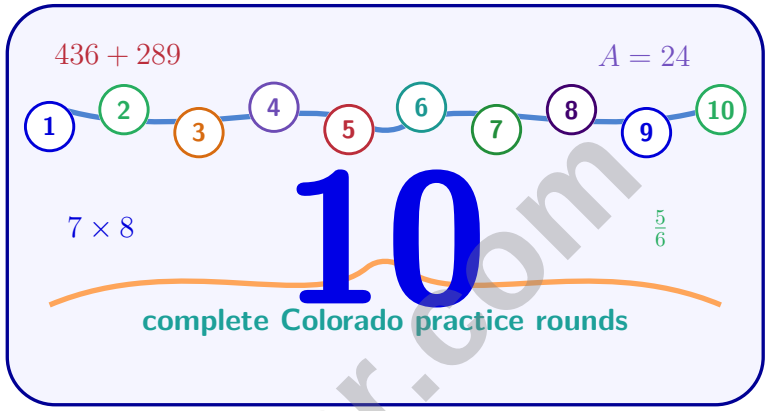
10 PRINTED TESTS +2 ONLINE TESTS

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

PRACTICE • REVIEW • SUCCEED

10 Colorado CMAS Grade 6 Math Practice Tests

Standards-Aligned High-Altitude Focus for Colorado Measures of Academic Success



Ten complete 40-question Grade 6 practice rounds for CMAS, with ratios, rational numbers, expressions, equations, geometry, statistics, answer keys, and clear explanations for every item.

Jay Daie and Reza Nazari

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Welcome, Colorado Math Explorer!

Ten steady rounds on a Rocky Mountain practice climb

This book gives you ten full Grade 6 practice tests for CMAS. Each round uses mountain passes, clear air, and step-by-step climbs 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: read, plan, solve, check. I will slow down for the question, circle what matters, solve one step at a time, and use mistakes as clues for getting stronger.

How to Use This Book

A ten-session routine for high-altitude focus

1. **Preview the skills.** Read the quick review pages before the first test.
2. **Take one test at a time.** Work in a quiet place and answer all 40 questions.
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.

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

What Is Inside?

Ten CMAS tests, 400 questions, and a full review path

Part	What You Will Practice
Tests 1–3	Warm-up rounds for ratios, rational numbers, operations, and careful reading.
Tests 4–6	Skill-building rounds with expressions, equations, geometry, data, and problem models.
Tests 7–9	Stamina rounds for mixed review, neat work, and flexible strategy choices.
Test 10	Final Colorado round to show growth across the whole book.
Answer Pages	Compact keys and explanations that show why each answer works.

The tests are mixed on purpose. High-altitude focus means recognizing the skill even when the next question changes topic.

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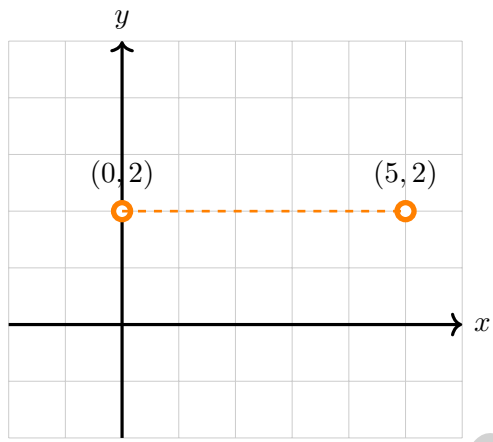
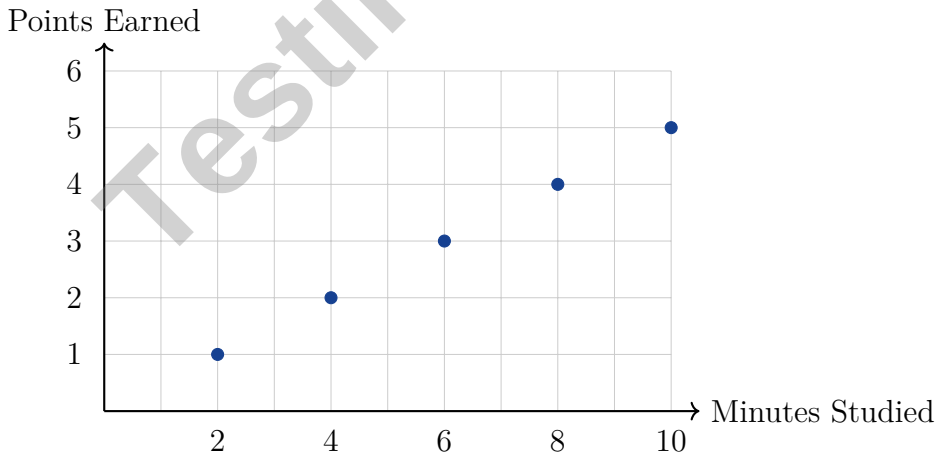
1)



What is the distance from $(0, 2)$ to $(5, 2)$?

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

2) The graph shows the relationship between minutes studied and test score points earned.



What is the unit rate (points per minute)?

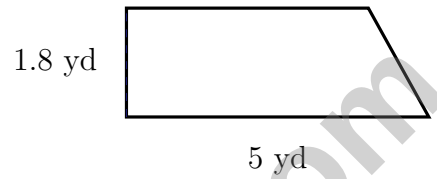
☐ A. 0.25 points per minute
☐ B. 0.5 points per minute
☐ C. 1 point per minute
☐ D. 2 points per minute

3) How many $\frac{1}{4}$-cup servings are in 2 cups?

☐ A. 6
☐ B. 8
☐ C. $\frac{1}{2}$
☐ D. 4

4) A factory makes 360 toys in 6 hours. What is the rate in toys per hour?

☐ A. 60 toys per hour
☐ B. 54 toys per hour
☐ C. 80 toys per hour
☐ D. 360 toys per hour



5)

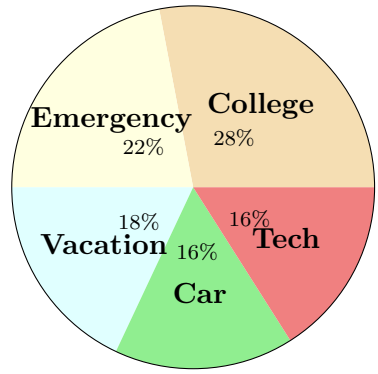
What is the area of the parallelogram shown above?

6) A store compares three brands of olive oil.

Brand	Volume	Price
Extra Virgin	25.5 oz	$12.75
Pure	51 oz	$24.48
Light	68 oz	$34.00

Which brand has the lowest unit price per ounce?

☐ A. Extra Virgin at $0.50/oz
☐ B. Pure at $0.48/oz
☐ C. Light at $0.50/oz
☐ D. Light at $0.51/oz

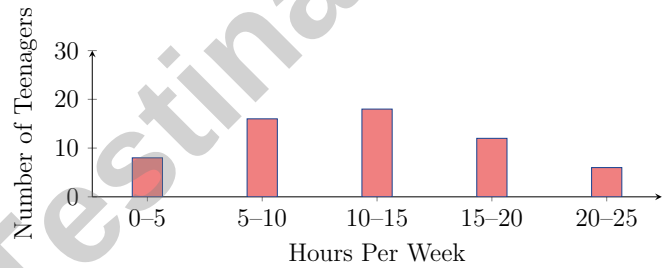


7)

The pie chart shows savings goals. If total savings is \$5000, how much is allocated to the College fund?

☐ A. \$1000
☐ B. \$1200
☐ C. \$1400
☐ D. \$1600

8) The histogram shows the number of hours per week teenagers spend on social media. How many teenagers spend between 5 and 15 hours per week?

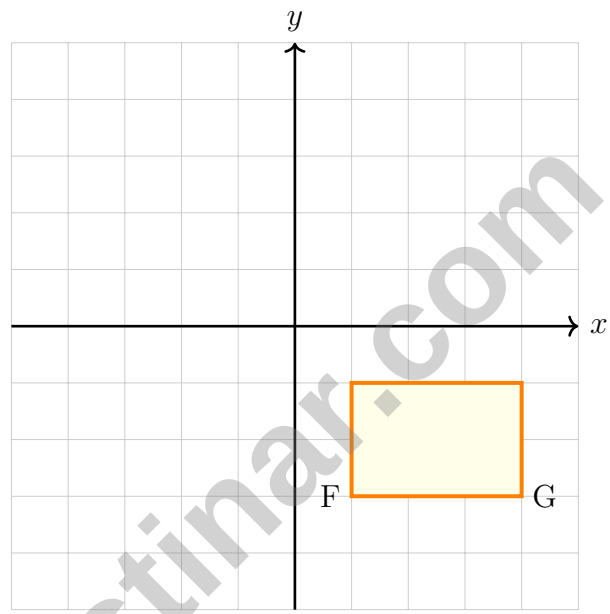


☐ A. 16 teenagers
☐ B. 34 teenagers
☐ C. 42 teenagers
☐ D. 50 teenagers

1) If the point $(6, -4)$ is reflected across the x-axis and then across the y-axis, what are the final coordinates?

☐ A. $(6, -4)$
☐ B. $(-6, 4)$
☐ C. $(6, 4)$
☐ D. $(-6, -4)$

2)



A rectangle $FGHJ$ has vertices at $(1, -3)$, $(4, -3)$, $(4, -1)$, and $(1, -1)$. If the rectangle is reflected over the x-axis, what will be the image of $(1, -1)$?

☐ A. $(1, 1)$
☐ B. $(-1, -1)$
☐ C. $(1, -1)$
☐ D. $(-1, 1)$

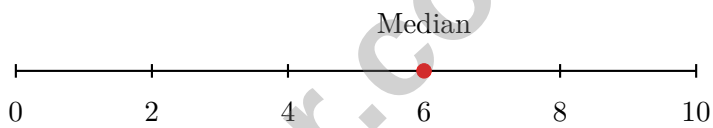
3) Consider the question: "How much time do students in my class spend on video games each week?"
What makes this a statistical question?

☐ A. It is asked every week.
☐ B. It requires a calculator to answer.
☐ C. It mentions video games.
☐ D. It involves many people with different answers.

4) What is the median of: $15, 20, 25, 30$?

☐ A. 20
☐ B. 22.5
☐ C. 25
☐ D. 27.5

5) Which number line correctly shows where the median of $2, 4, 6, 8, 10$ lies?

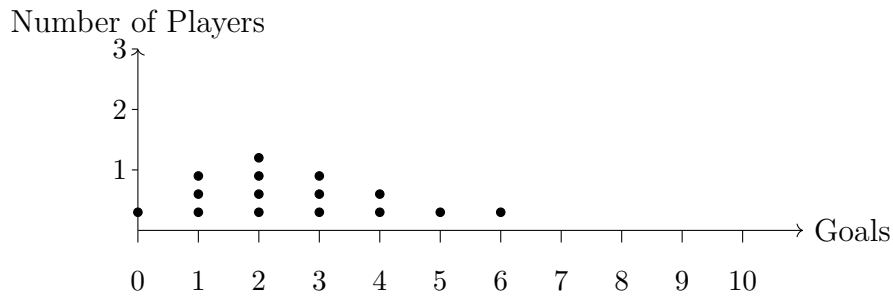


☐ A. At 2
☐ B. At 4
☐ C. At 6
☐ D. At 8

6) A data set has values: $2, 2, 5, 5, 5, 8, 8, 11$. Find the range and IQR. Use the median-of-halves method and round the IQR to the nearest whole number.

☐ A. Range $= 9$, IQR $= 4$
☐ B. Range $= 5$, IQR $= 3$
☐ C. Range $= 11$, IQR $= 5$
☐ D. Range $= 9$, IQR $= 5$

1) A dot plot shows the number of goals scored by soccer players in one season:



How many players scored 2 or 3 goals?

☐ A. 4
☐ B. 3
☐ C. 6
☐ D. 7

2) A blueprint shows a room at a scale of 1 cm = 2 meters. If the blueprint shows a room that is 8 cm wide, how many meters wide is the actual room?

☐ A. 20 meters
☐ B. 10 meters
☐ C. 8 meters
☐ D. 16 meters

3) A road is 5 kilometers long. How many meters long is the road? (Use 1 kilometer = 1000 meters.)

☐ A. 500 meters
☐ B. 5000 meters
☐ C. 50,000 meters
☐ D. 5 meters

4) Two banks offer simple interest on savings accounts. Bank A: principal $200, rate 5% per year, time 3 years. Bank B: principal $200, rate 3% per year, time 4 years. Which bank will earn more interest?

☐ A. Bank A earns more
☐ B. Bank B earns more
☐ C. They earn exactly the same
☐ D. Cannot determine without knowing the starting balance

5) A table has an error. Three data points should show a proportional relationship between x and y, but one point breaks the pattern.

x	1	3	5
y	5	15	27

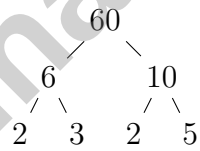
Which point should be changed to make the table proportional with constant $k = 5$?

☐ A. Change $(1, 5)$ to $(1, 5)$ (no change)
☐ B. Change $(3, 15)$ to $(3, 15)$ (no change)
☐ C. Change $(5, 27)$ to $(5, 25)$
☐ D. The table already shows proportionality

6) A receipt shows three items: \$5.25, \$12.99, and \$8.50. What is the total?

☐ A. \$26.74
☐ B. \$25.74
☐ C. \$27.00
☐ D. \$18.24

7) Using a factor tree, the prime factorization of 60 is:



☐ A. $2^2 \times 3 \times 5$
☐ B. $2 \times 3 \times 5$
☐ C. $2 \times 3 \times 10$
☐ D. $2^3 \times 3$

8) Factor $20 + 16$ using the GCF.

☐ A. $2(10 + 8)$
☐ B. $4(5 + 4)$
☐ C. $5(4 + 3.2)$
☐ D. $8(2.5 + 2)$

Colorado CMAS Practice Test Answer Keys

How to use this section with a Grade 6 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.

Practice Test Answers and Explanations

Practice Test 1 Answers and Explanations

1) **Choice C is correct.** 6.RP.A.3 Same y-coordinate (2): $|5 - 0| = 5$ units.
2) **Choice B is correct.** 6.SP.A.3 Using the point $(2, 1)$: unit rate $= 1 \div 2 = 0.5$ points per minute. Or from $(10, 5)$: unit rate $= 5 \div 10 = 0.5$ points per minute.
3) **Choice B is correct.** 6.RP.A.1 You are counting how many $\frac{1}{4}$-cup servings fit inside 2 cups—that's a division problem: $2 \div \frac{1}{4}$. Rewrite as 2×4, which equals 8 servings.
4) **Choice A is correct.** 6.SP.B.5 Divide toys by hours: $360 \div 6 = 60$ toys per hour.
5) **The correct answer is** 9. 6.SP.B.4 Area $= 5 \times 1.8 = 9$ square yards.
6) **Choice B is correct.** 6.NS.A.1 Extra Virgin: $\$12.75 \div 25.5 = \$0.50$/oz. Pure: $\$24.48 \div 51 = \$0.48$/oz. Light: $\$34.00 \div 68 = \$0.50$/oz. Pure has the lowest unit price.
7) **Choice C is correct.** 6.NS.C.8 College: 28% of $\$5000 = 0.28 \times 5000 = \$1400$.
8) **Choice B is correct.** 6.NS.C.8 Add the frequencies for the 5–10 and 10–15 ranges: $16 + 18 = 34$ teenagers.
9) **Choice A is correct.** 6.EE.A.3 Probability of failing $= 1 - \frac{4}{5} = \frac{1}{5}$.
10) **Choice D is correct.** 6.EE.B.8 A helpful way to check is to simplify. Divide both parts of 5 : 15 by 5: $\frac{5}{5} : \frac{15}{5} = 1 : 3$.
11) **Choice D is correct.** 6.RP.A.1 Yes. If apples to oranges is 7 : 3, then reversing the order to oranges to apples also reverses the numbers, giving 3 : 7.
12) **Choice C is correct.** 6.NS.B.3 The rate is 5 : 2 or 2.5 clients per week. In 6 weeks: $2.5 \times 6 = 15$ clients.
13) **Choice D is correct.** 6.EE.A.3 $40\% = \frac{40}{100} = 40$ out of 100 squares.
14) **Choice B is correct.** 6.EE.A.4 $8\% \times \$500 = 0.08 \times 500 = \$40$.
15) **Choice B is correct.** 6.G.A.1 Ratio is 3 : 7. Second column: Right = 14 means Left $= 14 \div 7 \times 3 = 6$. Third column: Left = 15 means Right $= 15 \div 3 \times 7 = 35$.
16) **Choice D is correct.** 6.EE.A.3 Converting feet to inches: multiply by 12 (since 1 foot = 12 inches). $8 \times 12 = 96$ inches. The student's process and answer are correct.
17) **Choice C is correct.** 6.EE.B.6 Total allocated: $35\% + 15\% + 10\% = 60\%$. Remaining: $100\% - 60\% = 40\%$ of $\$3600 = 0.40 \times 3600 = \$1440$.
18) **Choice C is correct.** 6.NS.B.3 A proportional distance-time graph is a straight line through the origin. Here, the line passes through $(0, 0)$, $(1, 3)$, and $(2, 6)$, so the speed stays constant at 3 miles per hour.
19) **Choice C is correct.** 6.EE.B.8 Multiply: $2.5 \times 6 = 15$ feet.
20) **The correct answer is The equation is $C = 25p + 100$ (the \$25 per person is multiplied by p, and the flat \$100 fee is added). For 10 people: $C = 25(10) + 100 = 250 + 100 = 350$ dollars..** 6.EE.C.9 Statement B is correct: $C = 25p + 100$. Statement D is correct: $C = 25(10) + 100 = 350$. Statement A reverses the coefficients (incorrect). Statement C is wrong because with 0 people, $C = 25(0) + 100 = 100$, not \$0 (the flat fee applies even with no attendees). Statement E is true (people is independent), but it is not part of the correct answer pair for this item.
21) **Choice A is correct.** 6.G.A.1 $3{,}564 \div 12 = 297$. Check: $12 \times 297 = 3{,}564$.
22) **Choice D is correct.** 6.NS.C.8 Reading the chart: 5 ones, 4 tenths, 8 hundredths gives 5.48.
23) **Choice A is correct.** 6.SP.A.3 Multiples of 9: $9, 18, 27, 36, 45, \ldots$. Multiples of 12: $12, 24, 36, 48, \ldots$. The least common multiple is 36.
24) **Choice A is correct.** 6.SP.B.4 Peek for the biggest factor both sums share evenly: that's 6. Pull it out softly: $18 + 24 = 6 \cdot 3 + 6 \cdot 4 = 6(3 + 4)$—the distributive property read backward.
25) **Choice D is correct.** 6.NS.B.3 The opposite of a number is the same distance from zero but on the other side. The opposite of -9 is 9.
26) **The correct answer is** 24. 6.RP.A.3 Side length = 6 units. Perimeter $= 4 \times 6 = 24$ units.
27) **The correct answer is** $(5, 6)$. 6.G.A.3 If the image after reflecting over the x-axis is $(5, -6)$, then the original point was $(5, 6)$ (reflect back by negating the y-coordinate again).

Hi, Math Champion!

◇ You trained hard! 10 full practice tests is real practice. Your math game is way better now than when you started. ◇

⋆ **Coach's truth:** kids who practice get better. You practiced. You got better. That's how it works! ⋆

Your Game Stats

- **Energy:** HIGH! You can finish a long test.
- **Smart Plays:** You know lots of strategies.
- **Calm Head:** You stay cool with hard problems.
- **Game-Day Ready:** You feel strong and prepared.

Coach's tip: the night before the test, get good sleep. Eat a good breakfast. Bring a sharp pencil. Trust your training!

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

Jay Daie

Your Math Coach

PRACTICE MORE. ACHIEVE MORE. SUCCEED!

This **Grade 6 Math Practice Tests** book is designed to help students build strong math skills, deepen their understanding of key concepts, and gain the confidence they need to succeed on any test.

With 10 full-length printed tests and 2 online tests, students get the review, practice, and realistic test experience they need to improve accuracy, strengthen problem-solving abilities, and reach their full potential.

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

PERFECT FOR:

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

CONFIDENCE TODAY. SUCCESS TOMORROW!

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.

Deepen Understanding
Reinforce key math concepts aligned with standards.

Test Confidence
Get familiar with test formats and improve accuracy.

Achieve Success
Build confidence and perform your best on test day.

TOPICS COVERED

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

2 ONLINE TESTS

Extra online practice to reinforce learning and build confidence.

MORE PRACTICE. GREATER RESULTS.

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

10 PRINTED PRACTICE TESTS | **2 ONLINE PRACTICE TESTS** | **DETAILED ANSWER EXPLANATIONS**