

3 Colorado CMAS

GRADE
6
MATH

PRACTICE TESTS

Standards Aligned Problem Solving
For Comprehensive Assessment Programs

$$y = 2x + 3$$



$$\frac{3}{5} + \frac{2}{10} = \frac{8}{10} = \frac{4}{5}$$

$$36\% \text{ of } 150 = ?$$



3 | PRINTED
TESTS



2 | ONLINE
TESTS



Build
Confidence



Master Key
Math Skills



Answer Explanations
for Every Question



Test-Taking
Strategies That Work

3 Colorado CMAS Grade 6 Math Practice Tests

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



Three 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!

Three focused rounds using mountain-ready math thinking

This book gives you three 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 three-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?

Three CMAS tests, 120 questions, and a full review path

Part	What You Will Practice
Tests 1–2	Foundation rounds for ratios, rational numbers, operations, and careful reading.
Test 3	Final stamina round for expressions, equations, geometry, data, problem models, and mixed review.
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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9) Store A sells milk for \$3.20 per gallon. Store B sells milk for \$2.80 per gallon. How much will you save per gallon by shopping at Store B?

- A. \$0.30 C. \$0.50
 B. \$0.40 D. \$0.80

10) A store sells fabric by the yard. The price per yard is \$12. A customer buys 2.5 yards. If the store uses the proportional relationship $p = 12y$, what is the total price?

- A. \$14.50 C. \$29
 B. \$24 D. \$30

11) A family's monthly expenses are: Rent \$800, Utilities \$150, Food \$400, and Transportation \$250. What is their total monthly expense?

Expense	Amount (\$)
Rent	800
Food	400
Transportation	250
Utilities	150
Total	?

- A. \$1400 C. \$1600
 B. \$1550 D. \$1800

12) A clothing store stocks shirts and pants in a 3 : 2 ratio. If the store has 24 shirts, how many pants does it have?



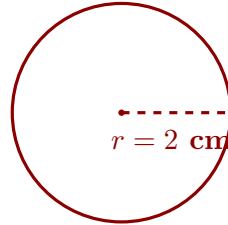
1) The median of 7, 11, x , 15, 18 is 12. What is x ?

A. 10

C. 12

B. 11

D. 13



2)

The radius of this circle is 2 cm. What is the approximate area using $\pi \approx 3.14$?

A. 6.28 cm²

C. 25.12 cm²

B. 12.56 cm²

D. 50.24 cm²

3) A teacher asks: “How many books did each student read last month?”

What is the sample in this scenario?

A. All students in the entire state

C. The number of books

B. The students in the class who

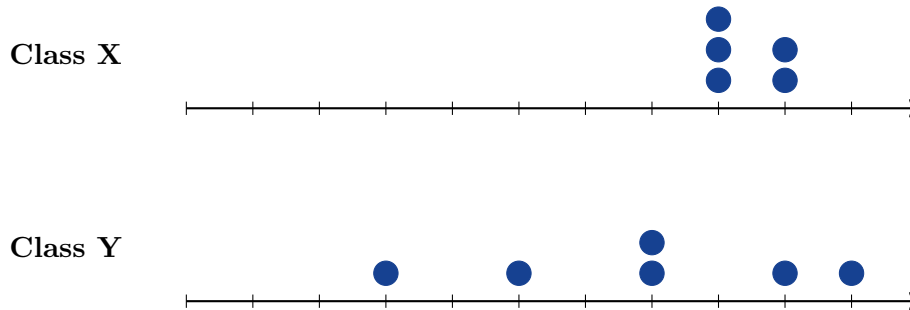
D. All books in the library

answered the question



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4) Two classes compared their quiz scores using dot plots. Class X has dots clustered at 8–9. Class Y has dots spread from 3–10. What can you infer?



- A. Class X has a smaller range (more consistent)
 - B. Class Y has a smaller range (more consistent)
 - C. Both classes have the same range
 - D. You cannot compare ranges from dot plots
- 5) Comparing two data sets: Set P has range 20 and Set Q has range 15. Both have the same mean. What conclusion can you draw?

- A. Set P is more spread out than Set Q.
- B. Set Q is more spread out than Set P.
- C. Both sets have identical distributions.
- D. Range is not useful for comparing data sets.

1) A 15-ounce bottle of juice costs \$3.75. What is the price per ounce?

A. \$0.20

C. \$0.30

B. \$0.25

D. \$0.50

2) A rectangular prism has base dimensions 3.5 ft and 2 ft. If its volume is 28 ft^3 , what is the height?

A. 2 ft

C. 5 ft

B. 3 ft

D. 4 ft

3) Which number is least: -2.5 , $\frac{3}{2}$, -1 , 0 , or $-\frac{1}{2}$?

4) A pentagon has vertices at $(1, 1)$, $(5, 1)$, $(7, 4)$, $(4, 7)$, and $(1, 5)$. How many sides does it have?

A. 4 sides

C. 6 sides

B. 5 sides

D. 7 sides





5)

A trapezoid has bases of 10 units and 8 units, with a height of 5 units. What is its area?

- A. 40 square units C. 50 square units
 B. 45 square units D. 55 square units

6) Which net is NOT a valid net for a rectangular prism?

- A. Cross with 1×4 center and two squares on opposite sides C. Line of 6 squares
 B. Two 2×3 rectangles stacked vertically D. T-shape with 3×2 base and three rectangles attached



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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.



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Colorado Practice Test Answers and Explanations

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

Practice Test 1 Answers and Explanations

- 1) **Choice B is correct.** **(6.EE.A.3)** Substitute $s = 5$: $P = 4(5) = 20$ units.
- 2) **Choice B is correct.** **(6.SP.A.3)** From least to most: $-100 < -15 < 250$.
- 3) **Choice B is correct.** **(6.EE.C.9)** Pages read depends on time spent reading at a constant rate. Time is independent; pages is dependent.
- 4) **Choice A is correct.** **(6.RP.A.3)** The correct point is $(5, 7)$. Student A plotted $(7, 5)$, which is the coordinates swapped (reversed). Student B plotted $(5, 5)$, which is a different error.
- 5) **Choice B is correct.** **(6.RP.A.3)** $\frac{20}{80} = \frac{1}{4} = \frac{25}{100} = 25\%$.
- 6) **Choice D is correct.** **(6.RP.A.3)** 150% of $3 = 1.50 \times 3 = 4.5$ cups.
- 7) **Choice C is correct.** **(6.RP.A.3)** Time = Distance \div Rate = $60 \div 15 = 4$ hours.
- 8) **Choice C is correct.** **(6.RP.A.3)** Reading the double number line: 3 miles corresponds to 15840 feet.
- 9) **Choice B is correct.** **(6.SP.B.4)** $\$3.20 - \$2.80 = \$0.40$ per gallon.
- 10) **Choice D is correct.** **(6.EE.C.9)** Using $p = 12y$ with $y = 2.5$: $p = 12 \times 2.5 = 30$ dollars.
- 11) **Choice C is correct.** **(6.EE.C.9)** Sum all expenses: $800 + 150 + 400 + 250 = \1600 .
- 12) **The correct answer is 16.** **(6.RP.A.3)** Shirts are the 3-part amount. Since $24 \div 3 = 8$, each part is 8, and pants are 2 parts: $2 \times 8 = 16$.
- 13) **Choice C is correct.** **(6.RP.A.3)** Multiply the model height by the scale: $10 \text{ cm} \times 0.8 \text{ m/cm} = 8 \text{ m}$.
- 14) **Choice D is correct.** **(6.NS.A.1)** If $\frac{2}{5}$ lap takes $\frac{1}{3}$ minute, one lap takes $\frac{1}{3} \div \frac{2}{5} = \frac{1}{3} \times \frac{5}{2} = \frac{5}{6}$ minute.
- 15) **Choice A is correct.** **(6.NS.B.2)** $3,744 \div 16 = 234$. The restaurant received 234 boxes.
- 16) **Choice A is correct.** **(6.NS.B.3)** Multiply both by 10: $72 \div 8 = 9$.
- 17) **Choice B is correct.** **(6.NS.B.4)** Common factors shared by 32 and 48 are 1, 2, 4, 8, and 16; the greatest is 16. (You can also peel out matching prime factors: both have four factors of 2 in common.)
- 18) **Choice D is correct.** **(6.NS.B.4)** The student only multiplied $5 \times 3 = 15$ instead of distributing to both terms. The correct solution is $5(3 + 8) = 5 \cdot 3 + 5 \cdot 8 = 15 + 40 = 55$. The area model shows both parts, confirming both must be distributed to.
- 19) **Choice A is correct.** **(6.NS.C.5)** Opposites are two numbers that are the same distance from zero but on opposite sides of zero. 3 is 3 units right of zero, and -3 is 3 units left of zero.
- 20) **Choice A is correct.** **(6.SP.B.4)** Computing: $|-2| = 2$, $|-5| = 5$, $|6| = 6$, $|-9| = 9$. In order: $2 < 5 < 6 < 9$.
- 21) **Choice C is correct.** **(6.SP.B.4)** Point V is located 0.7 units to the right of 1, placing it at 1.7.
- 22) **The correct answer is $4 : 6 = 2 : 3$ (dividing by 2) and $4 : 6 = 8 : 12$ (multiplying by 2).** **(6.RP.A.1)** Nice checking: Choice A works because $4 : 6$ simplifies to $2 : 3$, and Choice B works because multiplying both parts of $4 : 6$ by 2 gives $8 : 12$. The other choices change the relationship.
- 23) **The correct answer is 60 items per box.** **(6.RP.A.1)** Divide total items by number of boxes: $480 \div 8 = 60$ items per box.
- 24) **Choice A is correct.** **(6.NS.C.8)** Point M is at $(-4, 3)$ and M' is at $(-4, -3)$. They have the same x -coordinate but opposite y -coordinates, indicating reflection across the x -axis.
- 25) **The correct answer is \$405.** **(6.NS.A.1)** Unit rate: $\$360 \div 40 = \9 per hour. Total hours: $40 + 5 = 45$ hours. Total earnings: $45 \times \$9 = \405 .
- 26) **Choice D is correct.** **(6.NS.C.8)** Same x -coordinate (-2) : $|2 - (-1)| = |2 + 1| = 3$ units.
- 27) **The correct answer is 10.** **(6.RP.A.3)** The ratio is $2.5 : 1$. For 4 batches: $2.5 \times 4 = 10$ cups of flour.
- 28) **Choice A is correct.** **(6.NS.B.3)** $-4 + 6$: use 4 red and 6 blue chips. Pair and remove red-blue pairs. Result: 2 blue chips remaining, so $-4 + 6 = 2$.



Hi, Math Pilot!

◇ 3 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.

Jay Daie

Your Math Pilot

PRACTICE TODAY. SUCCEED TOMORROW!

This book includes 3 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:

- 3 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
- ✓ The Number System
- ✓ Expressions & Equations
- ✓ Geometry
- ✓ Fractions & Decimals
- ✓ Percents
- ✓ Statistics & Probability
- ✓ Data Analysis
- ✓ Measurement & Conversions
- ✓ 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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AND LEARNING RESOURCES



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BRIGHTLY

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