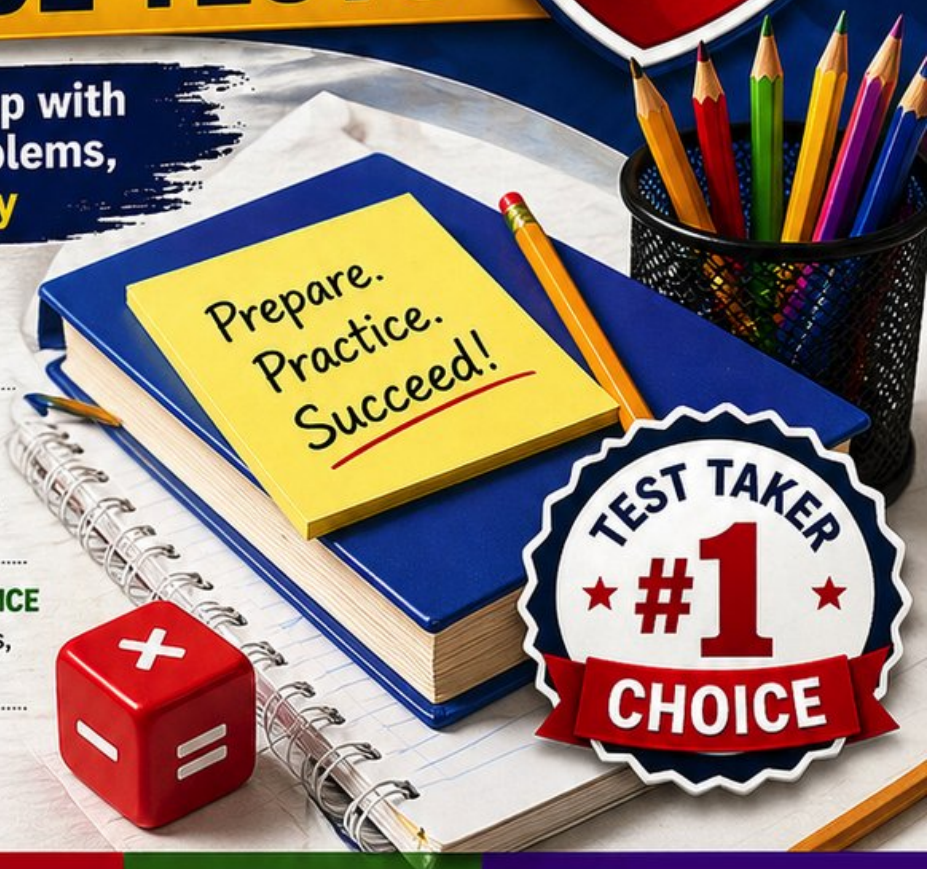
COMPLETE

4 Colorado CMAS Grade MATH 5 PRACTICE TESTS

Standards-Based Test Prep with Mixed Review, Word Problems, and Full Answer Key

- **4 COMPLETE PRACTICE TESTS**
  Built to reflect the test format and rigor
- **COVERS ALL ESSENTIAL TOPICS**
  Numbers & Operations, Fractions, Decimals, Geometry, Measurement, Data & Probability, and more
- **STRENGTHEN SKILLS & CONFIDENCE**
  Mixed review, challenging questions, and strategic practice
- **FULL ANSWER KEY INCLUDED**
  Detailed explanations for every question



BUILD STRONG MATH SKILLS & TEST READINESS

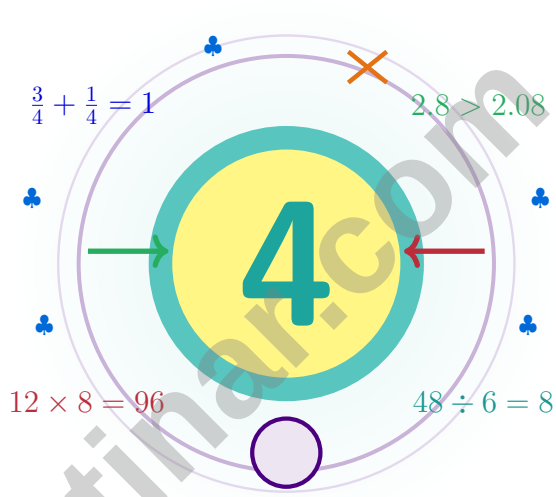
IMPROVE ACCURACY, SPEED, AND PROBLEM SOLVING

PERFECT FOR CLASSROOM, HOME, OR SELF-STUDY

ALIGNED TO COLORADO STATE STANDARDS (CMAS)

4 Colorado CMAS Grade 5 Math Practice Tests

A four-test adventure built for steady, brave thinking



Four full tests, a smart quick review, mission-style strategy pages, and student-tested support that help Grade 5 mathematicians from The Centennial State build calm, careful, confident habits.

Jay Daie and Reza Nazari

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Strap In, Colorado – Four-Test Adventure

Four full tests and a coach's voice on every page

Colorado Mathematicians, Read This First

This book gives you four chances to read closely, solve carefully, and level up your math thinking. Math problems are like Rocky Mountain switchbacks – they look steep until you find the trail, then they rise one calm step at a time.

You do not need to feel perfect before you begin. You just need to stay curious, use strategies, and learn from every correction. That is how confident mathematicians are built.

See

See the whole problem before you start the math.

Plan

Plan one careful step before the next.

Reflect

Reflect after each problem to lock the lesson in.

A strong mission habit for Colorado: keep your work neat, estimate when it helps, label units carefully, and never let one hard question decide your mood for the whole page.

From Cover to Final Test

A four-step routine that turns practice into real improvement

Step 1: Set Up

Pencil ready, distractions gone.
Wake up the big Grade 5 ideas before the test starts so your brain is already warmed up.

Step 2: Work the Test

Take a full test like the real day.
Find a calm corner, settle in, and aim for careful, honest choices before quick ones.

Step 3: Look Back

Walk through your answers without rushing.
Circle missed questions, sort out what went sideways, and notice which skills are calling for attention.

Step 4: Climb Higher

Pick one or two skills to sharpen next.
Read the explanation, fix the work, and carry that lesson into the very next test.

A Four-Week Colorado Mission Map

Week	Mission Focus
Week 1	Take Test 1 and notice your starting elevation. Each switchback teaches something.
Week 2	Take Test 2 and put extra focus on word problems and showing every step.
Week 3	Take Test 3 to climb past tricky fractions, decimals, and conversions.
Week 4	Take Test 4 and reach the summit calmly, confidently, and with neat work.

Table of Contents

Grade 5 Mathematics Reference Materials

PERIMETER AND AREA

Perimeter of Rectangle	$P = 2l + 2w$ or $P = 2(l + w)$
Area of Rectangle	$A = l \times w$
Area of Triangle	$A = \frac{1}{2} \times b \times h$
Volume of Rectangular Prism	$V = l \times w \times h$

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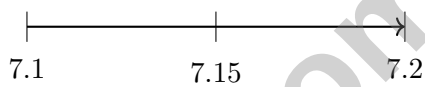
1) Pattern: $2, 4, 8, 16, 32, \ldots$ What is the 8th term?

☐ A. 64
☐ B. 128
☐ C. 256
☐ D. 512

2) A triangle has all angles less than 90 degrees and two sides of equal length. What two terms describe it?

☐ A. Acute and isosceles
☐ B. Acute and scalene
☐ C. Right and isosceles
☐ D. Obtuse and equilateral

3) Which number would round to 7.2 when rounding to the nearest tenth?



☐ A. 7.14
☐ B. 7.19
☐ C. 7.25
☐ D. 7.34

4) Multiply: $\frac{3}{7} \times \frac{2}{9}$

☐ A. $\frac{6}{63}$
☐ B. $\frac{5}{16}$
☐ C. $\frac{3}{9}$
☐ D. $\frac{2}{7}$

5) A rectangular prism has dimensions 8 feet, 6 feet, and 5 feet. Which measurement below is its volume?

☐ A. 200 ft^3
☐ B. 240 ft^3
☐ C. 260 ft^3
☐ D. 280 ft^3

6) What is $10 \div \frac{1}{3}$?

☐ A. 10
☐ B. 20
☐ C. 30
☐ D. 40

7) The output is 5 more than the input. Which input gives an output of 12?

☐ A. 6
☐ B. 7
☐ C. 8
☐ D. 17

8) Two patterns form a multiplicative relationship. Pattern One: 2, 3, 4, 5. Pattern Two: 14, 21, 28, 35. Find the constant multiplier.

☐ A. 6
☐ B. 7
☐ C. 8
☐ D. 12

9) Which of the following equals $\frac{1}{4} \div 3$?

☐ A. $\frac{1}{12}$
☐ B. $\frac{3}{4}$
☐ C. $\frac{1}{1}$
☐ D. $\frac{4}{3}$

10) A composite solid is made from two non-overlapping rectangular prisms. One prism is 8 cm by 5 cm by 3 cm. The other prism is 4 cm by 5 cm by 3 cm. Find the total volume and explain your work.

Record your answer in the space provided.

11) Bookshelf: 5 ft by 3 ft by 6 ft. Volume =?

☐ A. 14 ft^3
☐ B. 15 ft^3
☐ C. 90 ft^3
☐ D. 18 ft^3

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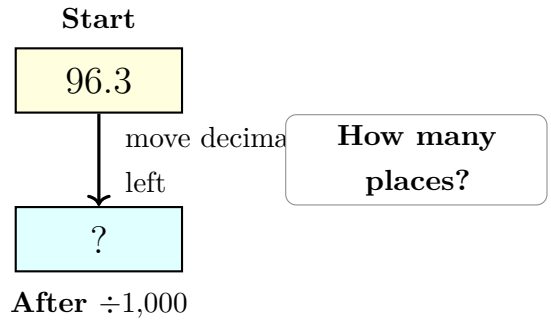
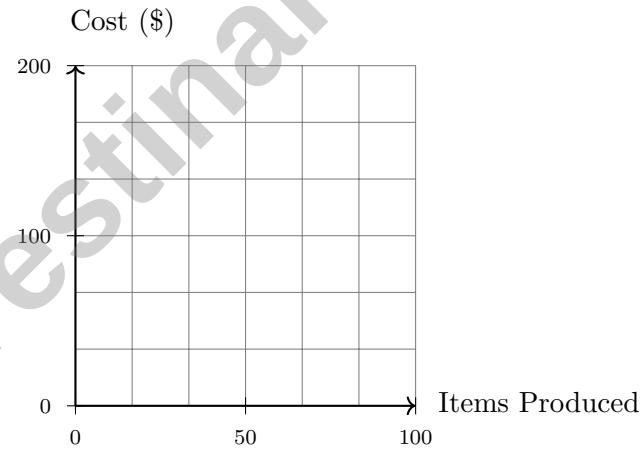


When dividing 96.3 by 1,000, how many places does the decimal move to the left, and what is the result?

☐ A. 1 place; 9.63
☐ B. 2 places; 0.963
☐ C. 3 places; 0.0963
☐ D. 4 places; 0.00963

2) On a graph showing "Items Produced" vs "Cost," where would the point $(50, 100)$ be located if the scale is such that items go 0 to 100 and cost goes \$0 to \$200?



☐ A. 50 items produced and cost is \$100
☐ B. 100 items produced and cost is \$50
☐ C. 50 items produced and cost is \$200
☐ D. 100 items produced and cost is \$100

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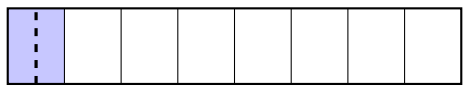
1) The model shows $\frac{1}{8}$ of a whole split into 2 equal parts. What fraction of the whole is each small part?

$\frac{1}{8}$ split into 2



1 whole split into 8 equal parts

☐ A. $\frac{1}{8}$
☐ B. $\frac{1}{16}$
☐ C. $\frac{1}{2}$
☐ D. $\frac{1}{10}$

2) A composite stage platform is made from two non-overlapping rectangular prisms. Prism A is 4 centimeters long, 2 centimeters wide, and 2 centimeters tall. Prism B is 3 centimeters long, 3 centimeters wide, and 1 centimeter tall. What is the total volume?

☐ A. 25 cubic centimeters
☐ B. 16 cubic centimeters
☐ C. 9 cubic centimeters
☐ D. 33 cubic centimeters

3) Which prism has volume 252 in^3?

☐ A. Base 20 in^2, height 12 in
☐ B. Base 42 in^2, height 5 in
☐ C. Base 28 in^2, height 8 in
☐ D. Base 36 in^2, height 7 in

4) A roll has 8 yards of fabric. Each scarf uses one third yard. Which division equation matches the situation?

☐ A. $\frac{1}{3} \div 8 = n$
☐ B. $8 + \frac{1}{3} = n$
☐ C. $8 \times \frac{1}{3} = n$
☐ D. $8 \div \frac{1}{3} = n$

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1) Which expression represents: "Double the difference of 12 and 7, then add 3"?

☐ A. $2 \times (12 - 7) + 3$
☐ B. $2 \times 12 - 7 + 3$
☐ C. $12 - (7 + 3) \times 2$
☐ D. $2 \times (12 + 7) - 3$

2) If $n \times 10^2 = 4600$, what is n?

☐ A. 4.6
☐ B. 46
☐ C. 460
☐ D. 0.46

3) Pattern A starts at 0 and adds 4. Pattern B starts at 0 and adds 1. What ordered pair (A, B) comes after one step?

Record your answer in the space provided.

4) A prism has volume 180 in^3, width 5 in, and height 4 in. Find its length.

Record your answer in the space provided.

5) Two boxes contain the same volume. Box X is 4 cm × 5 cm × 8 cm. Box Y is 2 cm × 10 cm × ? cm. What is the missing dimension?

☐ A. 4 cm
☐ B. 8 cm
☐ C. 16 cm
☐ D. 20 cm

Practice Test Answer Keys

How to use this section:

1. check your answer
2. circle missed questions
3. rework them before reading the explanation

Good correction habits build strong scores.

Practice Test Answers and Explanations

Practice Test 1 Answers and Explanations

1) **Choice C is correct.** 5.OA.B.3 Starting with 2, double each term: $2, 4, 8, 16, 32, 64, 128, 256$. The 8th term is 256.
2) **Choice A is correct.** 5.G.B.3 All angles less than 90 degrees = acute; two equal sides = isosceles.
3) **Choice B is correct.** 5.NBT.A.4 7.19 has a tenths digit of 1 and hundredths digit of 9. Since $9 \geq 5$, round the tenths up from 1 to 2, giving 7.2.
4) **Choice A is correct.** 5.NF.B.4 $\frac{3}{7} \times \frac{2}{9} = \frac{6}{63} = \frac{2}{21}$ (divide by 3).
5) **Choice B is correct.** 5.MD.C.4 Volume $= 8 \times 6 \times 5 = 48 \times 5 = 240$ ft^3.
6) **Choice C is correct.** 5.NF.B.7 $10 \div \frac{1}{3} = 10 \times 3 = 30$.
7) **Choice B is correct.** 5.G.A.2 We need a number that becomes 12 after adding 5. Since $7 + 5 = 12$, the missing x-value is 7.
8) **Choice B is correct.** 5.OA.B.3 Pattern Two is 7 times Pattern One: $2 \times 7 = 14$, $3 \times 7 = 21$, $4 \times 7 = 28$, $5 \times 7 = 35$.
9) **Choice A is correct.** 5.NF.B.7 $\frac{1}{4} \div 3 = \frac{1}{4} \times \frac{1}{3} = \frac{1}{12}$.
10) **The correct answer is 180 cm^3.** 5.MD.C.3 The first prism has volume $8 \times 5 \times 3 = 120$ cubic centimeters. The second has volume $4 \times 5 \times 3 = 60$ cubic centimeters. Add them to get 180 cubic centimeters.
11) **Choice C is correct.** 5.MD.C.4 $V = 5 \times 3 \times 6 = 90$ ft^3.
12) **Choice B is correct.** 5.NBT.B.7 Both decimals have 4 tenths. Compare the hundredths: 6 hundredths is greater than 2 hundredths, so $0.46 > 0.42$.
13) **The correct answer is 4.** 5.G.A.2 Each Y value is 4 times the matching X value: $4 \div 1 = 4$, $8 \div 2 = 4$, and so on.
14) **Choice A is correct.** 5.OA.A.2 Bar A has one 2-unit length. Bar B has four copies of that same 2-unit length, so B is 4 times A.
15) **Choice A is correct.** 5.OA.A.1 Multiplication comes before addition, so do 3×4 first. That gives 12, and then $8 + 12 = 20$.
16) **Choice C is correct.** 5.NBT.A.3 0.72 has two decimal places, so it represents hundredths. The correct word form is "seventy-two hundredths".
17) **Choice C is correct.** 5.NBT.A.2 $5.6 \div 10 = 0.56$ and $56 \div 100 = 0.56$. Both equal 0.56.
18) **Choice A is correct.** 5.NBT.B.6 $2,340 \div 36 = 65$. Check: $36 \times 65 = 2,340$.
19) **Choice D is correct.** 5.NF.B.6 The model counts sixths inside 3 wholes. So the matching equation is $3 \div \frac{1}{6} = n$.
20) **Choices A, B are correct.** 5.G.A.2 The x-coordinate is read first, so 2 matches hours. The y-coordinate is read second, so 40 matches pages.
21) **Choice D is correct.** 5.NF.B.5 $6 \times \frac{1}{2} = 3$ cups. Since $\frac{1}{2} < 1$, you use less sugar.
22) **Choice A is correct.** 5.NF.B.6 Use $\frac{3}{4}$ of the full-trip amount: $\frac{3}{4} \times \frac{1}{2} = \frac{3}{8}$ tank.
23) **The correct answer is $3\frac{1}{3}$.** 5.NF.B.4 Five copies of $\frac{2}{3}$ give $\frac{10}{3}$. Three thirds make each whole, so $\frac{10}{3} = 3\frac{1}{3}$.
24) **Choice C is correct.** 5.MD.A.1 Since 1 quart = 32 fl oz, multiply 2 by 32: $2 \times 32 = 64$ fl oz.
25) **Choice B is correct.** 5.G.A.2 The bottom side connects $(1, 2)$ and $(5, 2)$, which are on the same horizontal line. The length is $5 - 1 = 4$ units.
26) **Choice C is correct.** 5.NBT.A.1 In 15.375, the decimal digits are: 3 (tenths), 7 (hundredths), 5 (thousandths). The digit in the hundredths place is 7.
27) **The correct answer is 6.78.** 5.NBT.B.7 Subtracting with borrowing: $15.05 - 8.27 = 6.78$.
28) **Choice B is correct.** 5.NF.A.1 LCM(9,6) = 18. $\frac{1}{9} = \frac{2}{18}$ and $\frac{1}{6} = \frac{3}{18}$. $\frac{2}{18} + \frac{3}{18} = \frac{5}{18}$.
29) **Choice B is correct.** 5.G.A.1 Look at the y-coordinates. Point $(6, 4)$ has y-coordinate 4, and point $(3, 8)$ has y-coordinate 8. Since 8 is greater than 4, $(3, 8)$ is farther up from the x-axis.
30) **Choice C is correct.** 5.NBT.B.5 Multiply: $51 \times 8 = (50 \times 8) + (1 \times 8) = 400 + 8 = 408$.
31) **Choice B is correct.** 5.MD.C.5 The base layer has $8 \times 4 = 32$ square units. Divide the volume by the base area: $128 \div 32 = 4$, so the height is 4 inches.

Authors' Notes

From Your Math Family

Dear Member of the Math Family,

◇ Welcome to a special note from your math family. You finished 4 full practice tests, and that hard work matters more than any single score. We see you. We're proud of you. ◇

⋆ **What our math family knows:** math is a journey, not a one-time event. You've taken many steps already. The test is just one stop on a much longer path. Every skill you've built is yours forever. ⋆

What Your Math Family Sees

- **Effort:** STRONG! You showed up again and again.
- **Growth:** REAL! You can solve problems today you couldn't before.
- **Courage:** BRIGHT! You faced hard problems with brave thinking.
- **Future:** BIG! Your math journey is just beginning.

Family tip: on test day, picture us standing behind you, smiling and rooting for you. You're not alone. Your math family is with you. Now go show what you've learned.

If you'd like to share your experience or have questions, please email me at reza@testinar.com. I'd love to hear from you!

Reza Nazari & Jay Daie

Your Math Family (Always With You)

4 COMPLETE TESTS. CONFIDENCE. SUCCESS.

PREPARE TODAY ★★★ SUCCEED TOMORROW

Give your child the practice and confidence they need to excel in **Grade 5 Math.** This book includes **4 full-length** practice tests designed to build skills, improve test readiness, and help students reach their full potential.

WHAT'S INSIDE:

4 COMPLETE PRACTICE TESTS
Full-length tests that reflect real test format and rigor.

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Build problem-solving skills with mixed review questions and real-world word problems.

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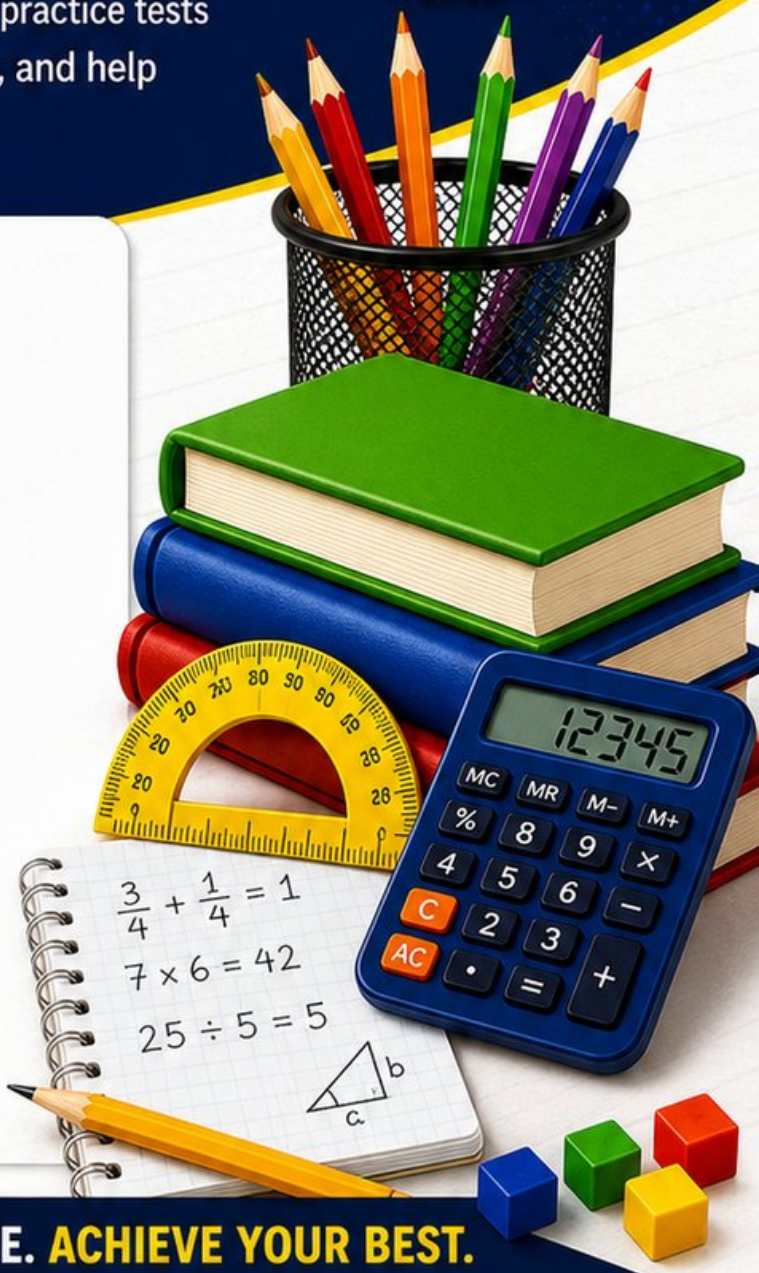
Practice consistently, reduce test anxiety, and achieve your best score!



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