

$\frac{2}{3}$

# FULL-LENGTH

$\frac{2}{4}$

0,25

# Connecticut

$7 \times 8 =$



★★★★★  
Aligned to State Standards

$7 \times 8$

## Smarter Balanced

$56 \div 7$

# MATH

Grade

# 5

$(a+b)^2$

# PRACTICE TESTS

Complete State Standards Review  
with Answer Key and  
Essential Math Skills Practice



**3 Full-Length Practice Tests**  
Aligned to State Standards



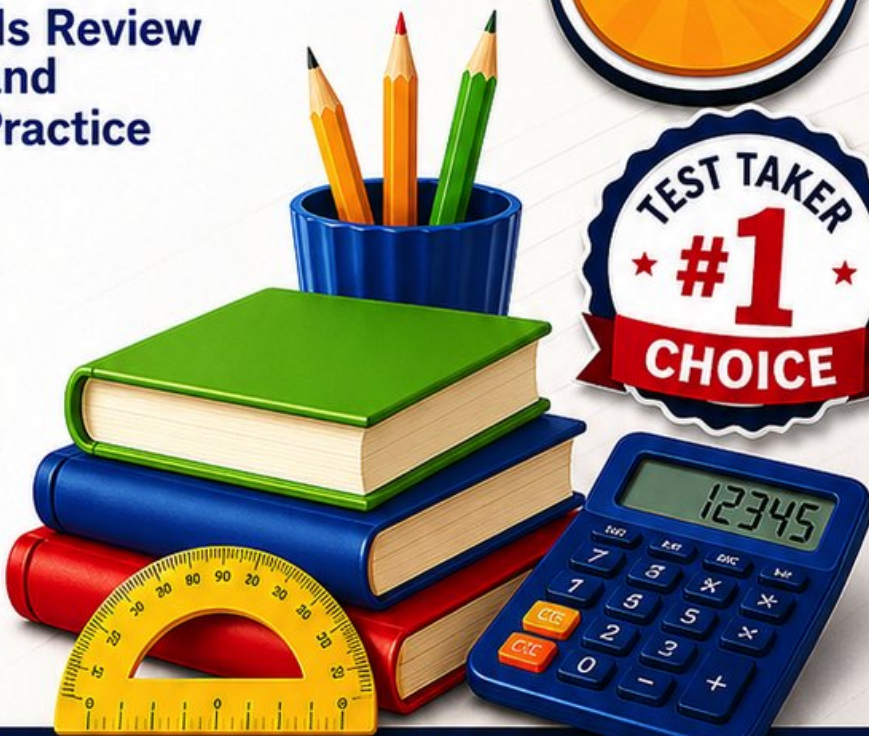
**Covers All Grade 5 Math Topics**  
Numbers & Operations, Fractions,  
Decimals, Geometry, Measurement,  
Data & Problem Solving



**Build Confidence**  
Strengthen Skills • Improve Accuracy  
• Boost Test Readiness



**Detailed Answer Key**  
Step-by-Step Explanations  
for All Questions



WRITTEN FOR  
GRADE 5 STUDENTS



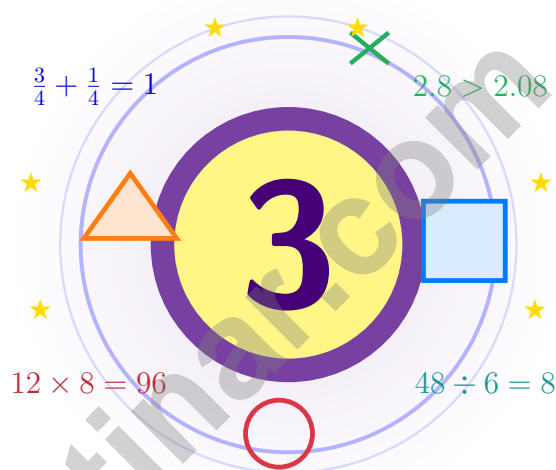
PERFECT FOR  
TEST PREP & REVIEW



CLASSROOM, HOME,  
OR SELF-STUDY USE

# 3 Connecticut Smarter Balanced Grade 5 Math Practice Tests

*Practice with steady harbor focus and sharp coastal eyes*



Three full tests, a friendly quick review, smart strategy pages, and student-tested support that help Grade 5 mathematicians from The Constitution State walk in ready to think.

**Jay Daie and Reza Nazari**



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# Connecticut, Welcome to Your Practice Studio

Practice with steady harbor focus and sharp coastal eyes

## Connecticut Grade 5: This Is for You

Strong math practice is like a New England harbor: small, well-kept, and ready for any kind of weather.

Some questions will feel easy from the very first read. Others will ask you to pause, sketch, estimate, or try again. That is not a problem. That is practice doing exactly what it should do. Every honest attempt grows your math brain a little stronger.

### Look

Look at the problem like a detective looks at a clue.

### Test

Test your idea with one careful step at a time.

### Grow

Grow stronger by reviewing exactly what tripped you up.

**A Connecticut promise to yourself:** I will keep my work tidy as a harbor town and turn my mistakes into lighthouses for next time.

# Three Tests, One Routine

A simple game plan that turns practice into real progress

## Step 1: Read

**Read the quick review pages first.**  
Wake up the big Grade 5 ideas before the test starts so your brain is already warmed up.

## Step 2: Try

**Try one test with full attention.**  
Find a calm corner, settle in, and aim for careful, honest choices before quick ones.

## Step 3: Reflect

**Reflect on which skills want more sunlight.**  
Circle missed questions, sort out what went sideways, and notice which skills are calling for more attention.

## Step 4: Lift

**Lift those skills with practice before test 2.**  
Read the explanation, fix the work, and carry that lesson forward into the next test.

## Three-Week Math Boot Camp

<b>Week 1</b>	Use Test 1 to scout the territory.
<b>Week 2</b>	Use Test 2 to repair the trail.
<b>Week 3</b>	Use Test 3 to walk it cleanly from start to finish.



Scan me

# About These Three Tests

## What these practice tests help Grade 5 students build

These three practice tests warm Grade 5 students in the Constitution State up for the steady, careful style the Connecticut Smarter Balanced rewards. The goal is bigger than getting answers right. Students are practicing how to read with care, choose a strategy, solve step by step, and explain their reasoning clearly – the same way mathematicians do every single day.

### Selected-Response Questions

Students solve the problem and choose the best answer. Estimating first, ruling out weak choices, and checking for reasonableness can save both time and points.

### Constructed-Response Questions

Students show their steps, explain a method, or back up an answer with clear math. Clean reasoning matters because it shows how the answer was actually found.

### Grade 5 Ideas That Show Up Again and Again

- place value, comparing numbers, and rounding
- multi-digit addition, subtraction, multiplication, and division
- fractions, mixed numbers, and decimals
- perimeter, area, volume, and measurement conversions
- line plots, tables, numerical patterns, and coordinate points
- geometry and multi-step real-world problems

**What strong work looks like on the Smarter Balanced:** the math is correct, the steps are readable, the labels and units match the problem, and the final answer truly answers the question being asked.



# Table of Contents

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## 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  $V = l \times w \times h$

### LENGTH

#### Customary

1 foot (ft) = 12 inches (in.)

1 yard (yd) = 3 feet (ft)

1 yard (yd) = 36 inches (in.)

#### Metric

1 meter (m) = 100 centimeters (cm)

1 centimeter (cm) = 10 millimeters (mm)

1 kilometer (km) = 1,000 meters (m)

### CAPACITY

#### Customary

1 cup (c) = 8 fluid ounces (fl oz)

1 pint (pt) = 2 cups (c)

1 quart (qt) = 2 pints (pt)

1 gallon (gal) = 4 quarts (qt)

#### Metric

1 liter (L) = 1,000 milliliters (mL)

### WEIGHT AND MASS

#### Customary

1 pound (lb) = 16 ounces (oz)

#### Metric

1 kilogram (kg) = 1,000 grams (g)

1 gram (g) = 1,000 milligrams (mg)

### TIME

1 minute (min) = 60 seconds (sec)    1 week = 7 days

1 hour (hr) = 60 minutes (min)    1 year = 12 months

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1) Two fractions have denominators 9 and 12. What is their least common denominator?

- A. 21                       C. 108  
 B. 36                       D. 27

2) Maria has \$25.00 and spends \$8.65 on a book and \$3.50 on a pen. How much does she have left?

*Record your answer in the space provided.*

3) Which expression does NOT equal 0.73?

- A.  $73 \div 100$                        C.  $730 \div 1000$   
 B.  $7.3 \div 10$                        D.  $73 \div 10$

4) Convert: 36 inches = ? feet.

*Record your answer in the space provided.*

5) How many more unit cubes are needed to complete a  $4 \times 3 \times 2$  rectangular prism if 15 unit cubes are already placed?

- A. 9 unit cubes                       C. 15 unit cubes  
 B. 10 unit cubes                       D. 24 unit cubes



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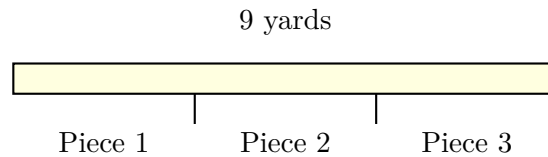
1 hour (hr) = 60 minutes (min)    1 year = 12 months

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- 1) A tailor is cutting a piece of fabric 9 yards long into equal pieces. If the fabric is cut into 3 pieces, how long is each piece in feet?

Use: 1 yard = 3 feet



- A. 3 feet                       C. 9 feet
- B. 6 feet                       D. 18 feet
- 2) Find the difference:  $\frac{11}{12} - \frac{2}{3}$ .

Record your answer in the space provided.

- 3) Convert: 750 cm = ? m.

Record your answer in the space provided.



## 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.**

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## Practice Test Answers and Explanations

### Practice Test 1 Answers and Explanations

- Choice C is correct.** (5.G.A.2) The point is 3 units right on the  $x$ -axis and 6 units up on the  $y$ -axis, so the coordinates are (3, 6).
- Choice C is correct.** (5.NF.B.7c) Think of half-gallon groups. Each gallon fills 2 bottles, so  $3 \div \frac{1}{2} = 3 \times 2 = 6$  bottles.
- Choice B is correct.** (5.NF.A.2) Divide both numerator and denominator by 25:  $\frac{25}{100} = \frac{1}{4}$ .
- Choice D is correct.** (5.MD.C.5c) Find each part first: Prism A is  $5 \times 4 \times 5 = 100$  cubic meters, and Prism B is  $6 \times 2 \times 3 = 36$  cubic meters. Because the parts do not overlap, add them:  $100 + 36 = 136$  cubic meters.
- Choice D is correct.** (5.NF.A.2)  $\frac{7}{8} - \frac{3}{8} = \frac{4}{8} = \frac{1}{2}$  of the tank.
- Choice A is correct.** (5.G.A.2) Rule A: 3, 5, 7, 9. Rule B: 5, 8, 11, 14. Fourth pair is (9, 14).
- Choice B is correct.** (5.MD.C.5) Use the rectangular-prism volume formula:  $11 \times 5 \times 7 = 385$ . So the volume is 385 cubic inches.
- The correct answer is (2, 6).** (5.G.A.2) The first pair is (0, 0). After one step, A is 2 and B is 6, giving (2, 6).
- Choice D is correct.** (5.MD.B.2) There are  $2+3+2+1 = 8$  students. The total time is  $(2 \times 2) + (4 \times 3) + (6 \times 2) + (8 \times 1) = 4 + 12 + 12 + 8 = 36$  hours.
- Choice B is correct.** (5.OA.A.2) The first expression divides 50 by the larger divisor (5 + 5). The second expression divides by 5 and then adds 5 more, so the second expression is greater.
- Choice C is correct.** (5.NBT.A.2) Dividing by  $10^3 = 1000$  shifts the decimal 3 places left.
- Choice C is correct.** (5.NBT.B.6)  $624 \div 24 = 26$ . Area model:  $624 = 24 \times 26$ . Check:  $24 \times 26 = 624$ .
- Choice A is correct.** (5.MD.C.5a)  $V = 14 \times 3 \times 6 = 42 \times 6 = 252 \text{ in}^3$ .
- Choice C is correct.** (5.NF.A.2) LCD = 20.  $\frac{7}{10} = \frac{14}{20}$ ;  $\frac{1}{4} = \frac{5}{20}$ ;  $\frac{14}{20} - \frac{5}{20} = \frac{9}{20}$ .
- Choice C is correct.** (5.NBT.A.3b) This addresses the misconception that more digits means a bigger number. Both equal 8 tenths or 80 hundredths.
- Choice C is correct.** (5.MD.C.5a) Multiply the three dimensions:  $9 \times 4 \times 3 = 36 \times 3 = 108$ . The volume is  $108 \text{ cm}^3$ .
- Choice B is correct.** (5.NBT.B.5) Multiply:  $12 \times 24 = 12 \times (20 + 4) = (12 \times 20) + (12 \times 4) = 240 + 48 = 288$  pencils.
- Choice C is correct.** (5.NF.A.1)  $8\frac{5}{6} - 3\frac{2}{6}$ : subtract whole numbers  $8 - 3 = 5$  and fractions  $\frac{5}{6} - \frac{2}{6} = \frac{3}{6}$ . Combine to get  $5\frac{3}{6}$ , which simplifies to  $5\frac{1}{2}$  yd.
- Choices A, B are correct.** (5.G.A.1) A and B each have two coordinates greater than 0. Choices C and D each include 0, so they do not match the prompt.
- Choice A is correct.** (5.NBT.A.2)  $25 \times 40$  makes 1,000, which ends with 3 zeros. The other products end with fewer zeros.
- Choice A is correct.** (5.NF.B.5b)  $3\frac{3}{4} \times 3 = \frac{15}{4} \times 3 = \frac{45}{4} = 11\frac{1}{4}$  feet.
- Choice D is correct.** (5.MD.A.1) Breakfast is 1 cup 2 fluid ounces, or 10 fluid ounces. Dinner is 1 cup 6 fluid ounces, or 14 fluid ounces, so the total is  $10 + 14 = 24$  fluid ounces.
- Choice D is correct.** (5.NF.B.7c) Start with one unit fraction,  $\frac{1}{6}$ , and share it into 5 equal parts. Each part is  $\frac{1}{6} \div 5 = \frac{1}{30}$  of the whole.
- Choice A is correct.** (5.NBT.A.2)  $56 \times 1,000 = 56,000$ . Multiplying by 1,000 shifts the value three places greater.
- Choice A is correct.** (5.NF.B.4b) The overlap region has 2 shaded squares out of 20 total squares, giving  $\frac{1}{4} \times \frac{2}{5} = \frac{2}{20} = \frac{1}{10}$ .
- The correct answer is 2 pairs.** (5.G.B.4) A parallelogram has opposite sides that are parallel. That makes 2 pairs of parallel sides.
- Choice A is correct.** (5.OA.A.1) Multiply first:  $4 \times 5 = 20$ . Then move left to right through the subtraction and addition:  $100 - 20 + 2 = 82$ .
- Choice C is correct.** (5.NF.B.7c) Dividing by  $\frac{1}{3}$  asks how many one-third pieces are in 5 wholes. Each whole has 3 thirds, so  $5 \div \frac{1}{3} = 5 \times 3 = 15$ .



## Authors' Notes

### From Your Math Family

#### Dear Member of the Math Family,

◇ Welcome to a special note from your math family. You finished 3 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](mailto:reza@testinar.com). I'd love to hear from you!

**Reza Nazari & Jay Daie**  
Your Math Family (Always With You)

# Build Skills. Boost Confidence. Excel on the Grade 5 Math Test.

Help your child succeed with confidence! This book includes **3 full-length Grade 5 Math practice tests** aligned to state standards. With a focus on essential skills, problem solving, and test readiness, it's the perfect resource for classroom, home, or on-the-go practice.



## WHAT'S INSIDE:



### 3 Full-Length Grade 5 Math Practice Tests

Realistic test format to build familiarity and confidence.



### Covers All Essential Math Topics

Fractions, decimals, geometry, measurement, data, number operations, and more.



### Build Strong Math Skills

Strengthen understanding and problem-solving through varied question types.



### Detailed Answer Key

Step-by-step explanations to help your child learn from mistakes and improve.



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Use score trackers to identify strengths and focus on areas that need more practice.



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- ✓ Improve accuracy and speed
- ✓ Reduce test anxiety
- ✓ Achieve your best score!



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