

# 10 COMPLETE

## Connecticut

### Smarter Balanced

# GRADE 5

# MATH

# PRACTICE TESTS

Standards-Based Review with  
Mixed Practice and Detailed Answer Key



#### 10 Complete Practice Tests

Build confidence and test readiness



#### Standards-Based Review

Covers key Grade 5 math standards



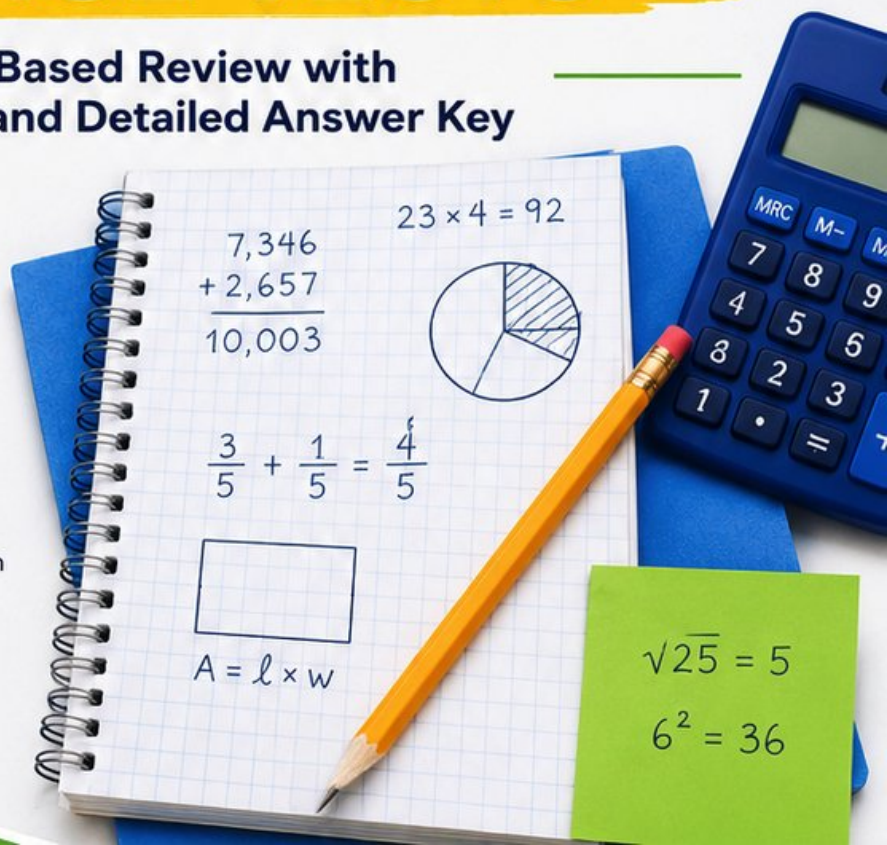
#### Mixed Practice

Variety of question types to strengthen skills



#### Detailed Answer Key

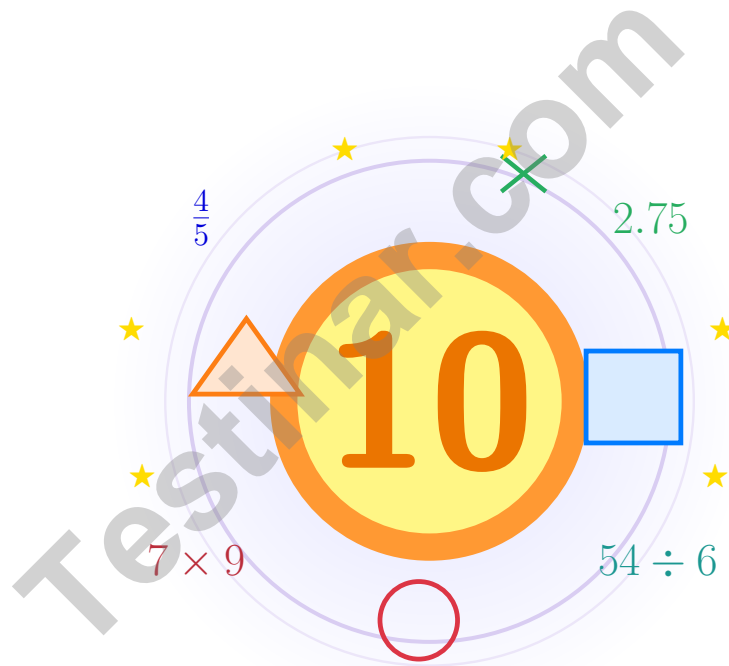
Step-by-step explanations for every question



PREPARE.  
PRACTICE.  
SUCCEED!

# 10 Connecticut Smarter Balanced Grade 5 Math Practice Tests

*Bright review, thoughtful practice, and steady confidence for Grade 5*



Ten full tests, a focused quick review, and student-friendly support that keeps practice clear and encouraging.

**Jay Daie and Reza Nazari**

**Testinar.com**



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# Welcome!

This book is a place to practice bravely and think clearly

## Dear Grade 5 Mathematician

This book gives you ten chances to read carefully, solve thoughtfully, and build steady math confidence. Some problems will feel friendly right away. Some will take more patience. Both kinds help you grow.

The goal is not to feel perfect before you begin. The goal is to practice honest effort, learn from corrections, and notice how much stronger your thinking becomes over time.

### Read

Slow down and understand the task.

### Solve

Show clear steps and good choices.

### Learn

Use mistakes as clues for what comes next.

**A strong habit from the start:** keep your work neat, estimate when it helps, write units carefully, and do not let one hard problem decide your mood for the whole page.



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# How to Use This Book

A simple routine that turns practice into real progress

## Step 1

**Warm up with the quick review.**

Spend a few minutes refreshing the ideas before the test begins.

## Step 2

**Take one full practice test.**

Work in a calm spot and aim for careful thinking before speed.

## Step 3

**Check your work honestly.**

Circle missed questions and notice which skills need another look.

## Step 4

**Fix and reflect.**

Read the explanation, repair the work, and bring that lesson into the next test.



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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

1 day = 24 hours (hr)    1 year = 52 weeks



1) Compare  $8 \times 1\frac{1}{2}$  to 8. Which statement is correct?

A.  $8 \times 1\frac{1}{2} < 8$

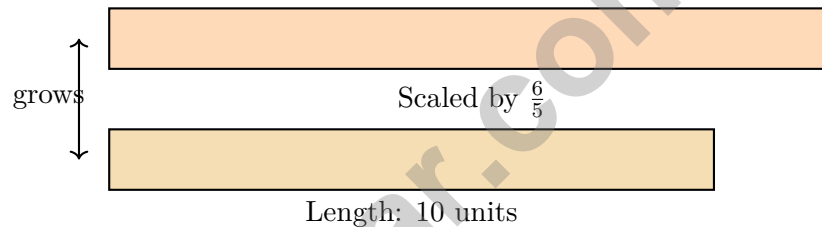
B.  $8 \times 1\frac{1}{2} = 8$

C.  $8 \times 1\frac{1}{2} > 8$

D. They are not comparable

2) A bag holds 2 kg 400 g. How many grams is that?

*Record your answer in the space provided.*



3)

A length of 10 units is scaled by  $\frac{6}{5}$ . What is the result?

A. 8 units

B. 12 units

C. 20 units

D. 10 units

4) Find:  $42 \times 10^6$ .

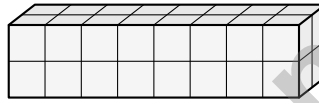
*Record your answer in the space provided.*



5) Find the difference:  $\frac{3}{4} - \frac{1}{6}$ .

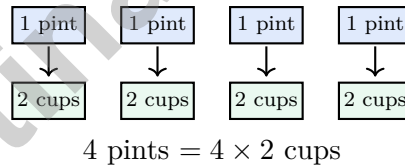
Record your answer in the space provided.

- 6) A rectangular prism has length 8, width 2, and height 2. If you double only the length, what is the new volume?



- A. 32 unit cubes                       C. 64 unit cubes  
 B. 48 unit cubes                       D. 16 unit cubes

- 7) A pitcher holds 4 pints. Use 1 pint = 2 cups to find how many cups the pitcher holds.



- A. 8 cups                                       C. 10 cups  
 B. 6 cups                                       D. 4 cups

- 8) A science class measures the height of plant growth. One plant grows 2.3 cm per week. How much will it grow in 8 weeks?

- A. 16.4 cm                                       C. 18.4 cm  
 B. 17.4 cm                                       D. 19.4 cm



## 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

1 day = 24 hours (hr)

1 year = 52 weeks



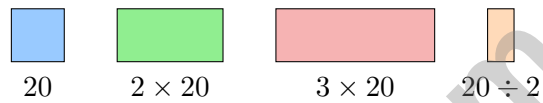
1) Volume  $144 \text{ cm}^3$ , base area  $18 \text{ cm}^2$ . Height =?

- A. 8 cm                       C. 126 cm  
 B. 2592 cm                 D. 162 cm

2) Which triangle cannot exist?

- A. Acute isosceles                       C. Acute equilateral  
 B. Right scalene                         D. Obtuse equilateral

3) Without calculating, which is greatest?



- A. 20                                       C.  $3 \times 20$   
 B.  $2 \times 20$                                D.  $20 \div 2$



40) **Reasoning:** Two rectangular prisms have the same volume of  $240 \text{ cm}^3$ . Prism A has dimensions 10 cm by 8 cm by ?. Prism B has dimensions 12 cm by 10 cm by ?. Which prism has the greater height?

A. Prism A

B. Prism B

C. Same height

D. Cannot determine

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### End of Practice Test

Nice work. Pause, breathe, and check your answers with care.



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Grade 5 Mathematics

10

Questions: 40 Duration: No time limit

Calculator Policy: Calculators are not allowed



## 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

- 1) **Choice C is correct.** (5.NF.B.5a)  $1\frac{1}{2} = \frac{3}{2} > 1$ , so the product is greater than 8.
- 2) **The correct answer is 2400.** (5.MD.A.1) Each kilogram has 1,000 grams. Two kilograms is 2,000 grams, and  $2,000 + 400 = 2,400$  grams.
- 3) **Choice B is correct.** (5.NF.B.5a)  $10 \times \frac{6}{5} = 12$  units. Since  $\frac{6}{5} > 1$ , the scaled length is larger than 10 units.
- 4) **The correct answer is 42000000.** (5.NBT.A.2) Multiplying by a power of 10 shifts the value to a larger place. Attach six zeros to 42: 42,000,000. This confirms the answer.
- 5) **The correct answer is  $\frac{7}{12}$ .** (5.NF.A.2) LCD = 12.  $\frac{9}{12} - \frac{2}{12} = \frac{7}{12}$ .
- 6) **Choice C is correct.** (5.MD.C.4) Original:  $8 \times 2 \times 2 = 32$  cubes. Double the length to 16:  $16 \times 2 \times 2 = 64$  unit cubes.
- 7) **Choice A is correct.** (5.MD.A.1) Since 1 pint = 2 cups, multiply 4 by 2:  $4 \times 2 = 8$  cups.
- 8) **Choice C is correct.** (5.MD.C.5) Choose the operation from the story, then keep the unit with the answer. Multiply:  $2.3 \times 8 = 18.4$  centimeters. This confirms the answer.
- 9) **Choice D is correct.** (5.NBT.A.3b)  $3.25 > 3.2$  because 25 hundredths  $>$  20 hundredths.
- 10) **Choice C is correct.** (5.OA.A.2) Each group has  $(6 + 3) = 9$  boxes; 4 groups total  $4 \times 9 = 36$  boxes.
- 11) **Choice A is correct.** (5.NBT.B.7)  $4.5 \div 5 = 0.9$ , which is between 0 and 1.
- 12) **Choice B is correct.** (5.NF.B.5b) Check by multiplying:  $3 \times 3\frac{1}{2} = 3\frac{1}{2} + 3\frac{1}{2} + 3\frac{1}{2} = 10\frac{1}{2}$ . So the missing factor is 3.
- 13) **Choice B is correct.** (5.NF.A.1) LCM(2,5) = 10.  $\frac{1}{2} = \frac{5}{10}$  and  $\frac{1}{5} = \frac{2}{10}$ .  $\frac{5}{10} + \frac{2}{10} = \frac{7}{10}$  mile.
- 14) **Choice D is correct.** (5.G.A.2) For input 4,  $4 \times 4 - 2 = 14$ , not 15. The correct pair would be (4, 14).
- 15) **Choice C is correct.** (5.OA.B.3) Term 1: 1. Term 2:  $1 \times 10 - 2 = 8$ . Term 3:  $8 \times 10 - 2 = 78$ .
- 16) **Choice B is correct.** (5.NF.A.1) Borrow 1:  $5\frac{2}{8} = 4\frac{10}{8}$ . Then  $4\frac{10}{8} - 4\frac{5}{8} = \frac{5}{8}$  ft.
- 17) **Choice C is correct.** (5.MD.C.5a) One box:  $7 \times 6 \times 4 = 168$  cubic inches. Three boxes:  $168 \times 3 = 504$  cubic inches.
- 18) **Choice C is correct.** (5.MD.C.5c) Find each part first: Prism A is  $8 \times 2 \times 4 = 64$  cubic feet, and Prism B is  $3 \times 5 \times 4 = 60$  cubic feet. Because the parts do not overlap, add them:  $64 + 60 = 124$  cubic feet.
- 19) **Choice B is correct.** (5.NF.B.4) Five copies of  $\frac{1}{6}$  make  $\frac{5}{6}$ . The denominator stays 6 because the size of each piece is still sixths.
- 20) **Choice B is correct.** (5.MD.C.5) The known length and height make groups of  $14 \times 5 = 70$  cubic inches. Since  $210 \div 70 = 3$ , the width is 3 in.
- 21) **Choice C is correct.** (5.G.A.2) The x-coordinate (4) is the number of hours, and the y-coordinate (32) is the number of cupcakes sold. So 32 cupcakes were sold.
- 22) **Choices A, B are correct.** (5.NBT.B.5)  $345 \times 12 = 4,140$ , so the product has 4 digits. C is false because 4,140 is greater than 3,000, and D miscalculates.
- 23) **Choice D is correct.** (5.MD.B.2) There are 3 plants that got  $\frac{3}{4}$  cup. The total is  $3 \times \frac{3}{4} = 2\frac{1}{4}$  cups.
- 24) **Choice C is correct.** (5.G.B.3) A triangle with one angle wider than a right angle is an obtuse triangle.
- 25) **Choice D is correct.** (5.NBT.A.2) The pattern shows that each time the multiplier gains a zero, the product gains one zero.  $11 \times 10,000 = 110,000$  has 4 zeros.
- 26) **Choice B is correct.** (5.NF.B.7c) The model counts sixth-size jumps across 4 whole units. So the matching division equation is  $4 \div \frac{1}{6} = ?$ .
- 27) **The correct answer is 4.** (5.G.B.4) A square is a quadrilateral, a rectangle, a rhombus, and a parallelogram.
- 28) **Choice C is correct.** (5.OA.A.1) The flow chart has already handled the parentheses and multiplication. The last box is the final addition:  $2 + 12 = 14$ .
- 29) **The correct answer is 24.** (5.NF.A.2) The least common multiple of 12 and 8 is 24.
- 30) **Choice D is correct.** (5.NF.B.5b)  $\frac{2}{5} \times \frac{3}{7} = \frac{6}{35}$ . The other products do not equal  $\frac{6}{35}$ .
- 31) **Choice D is correct.** (5.OA.B.3) Game A inventory is always 5 times Game B:  $10 \times 5 = 50$ ,  $20 \times 5 = 100$ ,  $30 \times 5 = 150$ ,  $40 \times 5 = 200$ .



## Champion in Training!

◇ What a season! You've completed 10 full practice tests, and that's the kind of training that builds real champions. Every test was a workout, and your math muscles are stronger today than they were before. Your stamina, focus, and accuracy have all leveled up. ◇

★ **Here's what every great coach knows:** the team that practices the most plays the best. You've put in the practice. You know the plays. You've handled the drills. Now it's almost game day, and you are ready. ★

### Your Training Camp Stats

- **Math Stamina:** HIGH! You can stay focused for a full test.
- **Strategy Playbook:** LOADED! You have multiple ways to attack a problem.
- **Mistake Recovery:** STRONG! You can pick yourself up and keep going.
- **Game Day Mindset:** READY! You know how to stay calm under pressure.

**Pre-game tip:** the night before test day, get a great sleep. Eat a good breakfast. Bring a sharp pencil and a positive attitude. And remember—you have already trained for this. Trust your training.

If you want to share a proud moment or ask a question, please email me at [jay@testinar.com](mailto:jay@testinar.com). I'd love to hear from you!

**Jay Daie**

Your Math Coaches (Game On!)

# PRACTICE TODAY. MASTER TOMORROW.

Give your child the confidence to excel in **Grade 5 Math!**  
This book includes **10 complete practice tests** designed to build strong skills, improve test readiness, and achieve success.



# 10

COMPLETE  
PRACTICE  
TESTS

- ✓ Realistic. Rigorous.
- ✓ Results-Driven.

More practice today for a **stronger** tomorrow.

## THIS BOOK HELPS YOUR CHILD:



### Build Confidence

Familiar, focused practice reduces anxiety and boosts self-belief.



### Strengthen Skills

Reinforces key math concepts through high-quality, standards-aligned questions.



### Improve Test Readiness

Full-length tests help students understand test format, pacing, and question types.



### Track Progress

Identify strengths and target areas with purposeful practice.



### Achieve Success

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## COVERS ALL ESSENTIAL TOPICS

- ✓ Whole Numbers & Operations
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- ✓ Algebraic Thinking
- ✓ Geometry
- ✓ Measurement & Data
- ✓ Graphing & Data Analysis
- ✓ Number Patterns
- ✓ Word Problems
- ✓ Ratio & Proportion
- ✓ Perimeter, Area & Volume
- ✓ And More!



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