

4 Connecticut Smarter Balanced

GRADE
6
MATH

PRACTICE TESTS

Standards Aligned Problem Solving
For Comprehensive Assessment Programs

4

PRINTED
TESTS



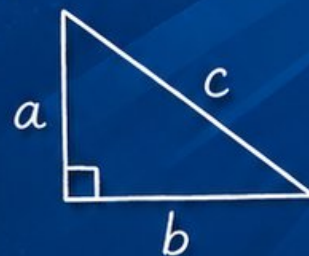
2

ONLINE
TESTS



- ✓ Build Confidence
- ✓ Master Key Math Skills
- ✓ Answer Explanations for Every Question
- ✓ Test-Taking Strategies That Work

$$2x + 5 = 21$$
$$x = 8$$



$$\frac{3}{4} + \frac{1}{2} = \frac{5}{4}$$

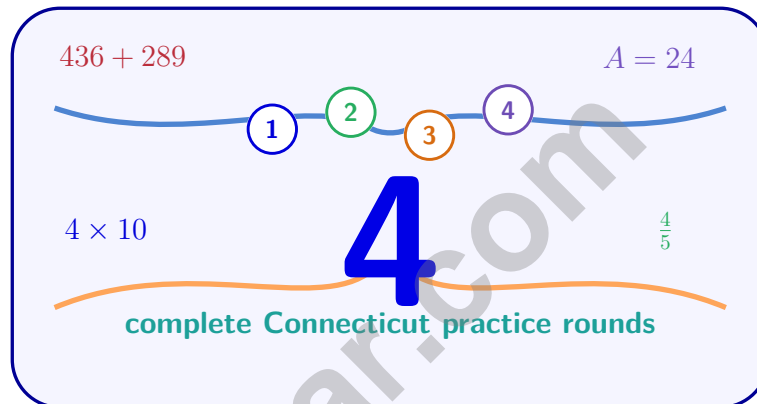


USE THESE TWO
**ADDITIONAL ONLINE
PRACTICE TESTS**

FOR EXTRA REVIEW AFTER
THE PRINTED TESTS
IN THIS BOOK.

4 Connecticut Smarter Balanced Grade 6 Math Practice Tests

Standards-Aligned Careful New England Review for Smarter Balanced Assessment Consortium



Four complete 40-question Grade 6 practice rounds for Smarter Balanced, built for careful New England review with ratios, rational numbers, expressions, equations, geometry, statistics, answer keys, and clear explanations for every item.

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Welcome, Connecticut Math Explorer!

Four focused rounds using careful New England review

This book gives you four full Grade 6 practice tests for Smarter Balanced. Each round uses town greens, shoreline routes, and precise classroom thinking as a fresh mental backdrop while you read closely, choose a smart strategy, show your work, and check whether your answer makes sense.

Your Connecticut Practice Promise

Make every answer earn its place by reading labels, checking scale, and explaining the step.

Read

Plan

Check

How to Use This Book

A four-session routine for careful New England review

1. **Preview the skills.** Scan the quick review pages before beginning the first round.
2. **Work in order.** Take one 40-question test at a time in a quiet place.
3. **Mark confidence.** Put a small star beside problems where your plan felt strong.
4. **Correct actively.** Retry missed items before reading the full explanation.
5. **Plan the next round.** Use the growth log to choose one habit and one skill to practice.

Connecticut review rhythm: Pair each test with a review session so errors become a neat checklist.



What Is Inside?

Four Smarter Balanced tests, 160 questions, and a full review path

Part	What You Will Practice
Tests 1–2	Foundation rounds for ratios, rational numbers, operations, and careful reading.
Tests 3–4	Skill-building and final stamina rounds with expressions, equations, geometry, data, and problem models.
Answer Pages	Compact keys and explanations that show why each answer works.

The tests are mixed on purpose. Careful new england review means recognizing the skill even when the next question changes topic, changes format, or asks for an explanation.



Scan me!
For more practice
& answers

Table of Contents

★ Practice Test 1	_____	14
★ Practice Test 2	_____	28
★ Practice Test 3	_____	46
★ Practice Test 4	_____	61
Practice Test Answer Keys	_____	77
Practice Test Answers and Explanations	_____	80

- 1) A dataset has five-number summary: $\min = 0$, $Q_1 = 8$, $\text{median} = 12$, $Q_3 = 18$, $\max = 30$. A student says “The IQR is 18.” Is the student correct?
- A. Yes, IQR is always the maximum minus the minimum. C. Yes, IQR is the third quartile value.
- B. No, IQR is the median, which is 12. D. No, IQR = 10, not 18.
- 2) A city’s elevation is 150 feet. A nearby underground parking garage is at an elevation of -45 feet. What is the total distance between them vertically?
- A. 105 feet C. 195 feet
- B. 150 feet D. 45 feet
- 3) Which pair of absolute values are NOT equal?
- A. $|-2|$ and $|2|$ C. $|-3|$ and $|5|$
- B. $|-4|$ and $|4|$ D. $|-6|$ and $|6|$
- 4) On a number line, the midpoint between two numbers is -0.5 . If one number is -2 , what is the other number?
- A. -3.5 C. 1.5
- B. -1 D. 1
- 5) If the point $(6, -4)$ is reflected across the x -axis and then across the y -axis, what are the final coordinates?
- A. $(6, -4)$ C. $(6, 4)$
- B. $(-6, 4)$ D. $(-6, -4)$



6) Compare -3.5 and -3.75 . Which symbol makes the statement true?

$$-3.5 \square - 3.75$$

A. $<$

C. $=$

B. $>$

D. Cannot determine

7) A 10×10 grid has 52 shaded squares. What percent of the grid is shaded?

8) A worker earns \$15 per hour. Which equation relates total earnings E to hours worked h ?

A. $E = 15 + h$

C. $E = \frac{15}{h}$

B. $E = 15h$

D. $E = h - 15$

9) If a \$200 purchase has a \$30 discount applied, what is the percent discount?

10) Comparing two triangles: Triangle A has base 20 inches and height 3 inches. Triangle B has base 10 inches and height 6 inches. Which has the larger area?

A. Triangle A by 10 in^2

C. They have equal areas.

B. Triangle B by 10 in^2

D. Triangle A by 20 in^2



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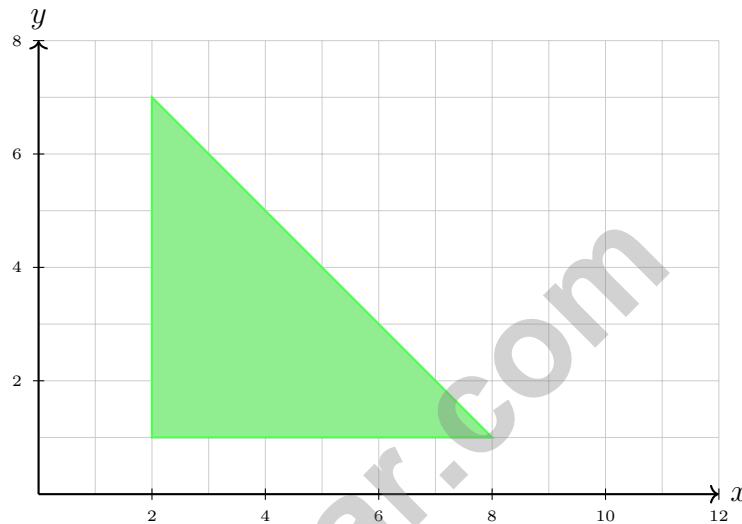
11) A rectangle has vertices at $(3, 2)$, $(8, 2)$, $(8, 6)$, and $(3, 6)$. If a point is at $(8, 2)$, which vertex is diagonally opposite?

A. $(3, 6)$

C. $(8, 6)$

B. $(3, 2)$

D. $(8, 2)$



12)

A right triangle has vertices at $(2, 1)$, $(8, 1)$, and $(2, 7)$. What is its area?

A. 15 square units

C. 21 square units

B. 18 square units

D. 24 square units

13) A cube has an edge length of 4 cm. What is its total surface area?

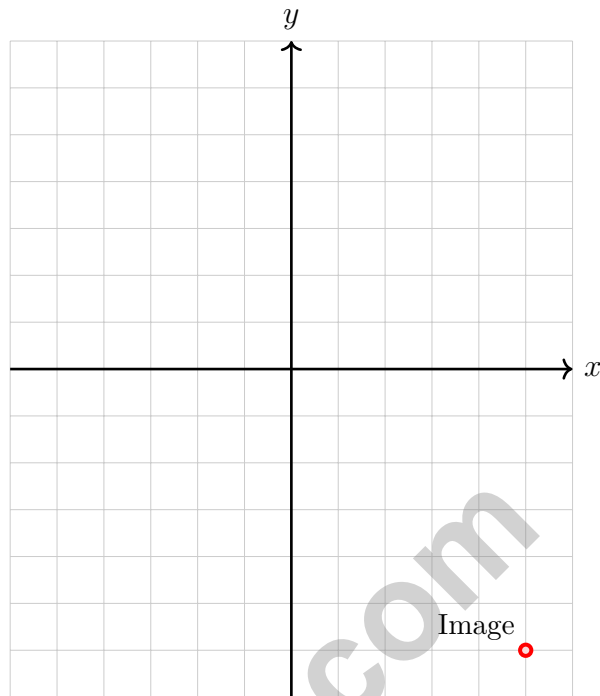
A. 16 cm^2

C. 96 cm^2

B. 64 cm^2

D. 128 cm^2





3)

A point H is reflected over the x -axis. If the image is at $(5, -6)$, where was the original point H located?



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- 1) Which expression correctly translates “the sum of 2 and the quotient of 8 and a number z ”?
- A. $\frac{2+8}{z}$ C. $z + \frac{8}{2}$
 B. $(2+8) \div z$ D. $2 + \frac{8}{z}$
- 2) A map shows two different regions using different scales. Region X has a scale of 1 inch = 2 km and is drawn as 5 inches. Region Y has a scale of 1 inch = 1 km and is drawn as 8 inches. Which region represents a larger actual distance?
- A. Region X (10 km) C. Both are equal
 B. Region Y (8 km) D. Insufficient information
- 3) Compute: $\frac{7}{8} \div \frac{1}{4}$
- A. $\frac{7}{32}$ C. $3\frac{1}{2}$
 B. $\frac{7}{16}$ D. $\frac{11}{8}$
- 4) Divide 7,280 by 35 and express as a mixed number or quotient with remainder.
- A. 208 C. 206 R 10
 B. 208 R 4 D. 210
- 5) Which shows the correct placement of the decimal point?
 $32 \times 15 = 480$ with decimals: $3.2 \times 1.5 = ?$
- A. 48.0 C. 480
 B. 0.480 D. 4.80

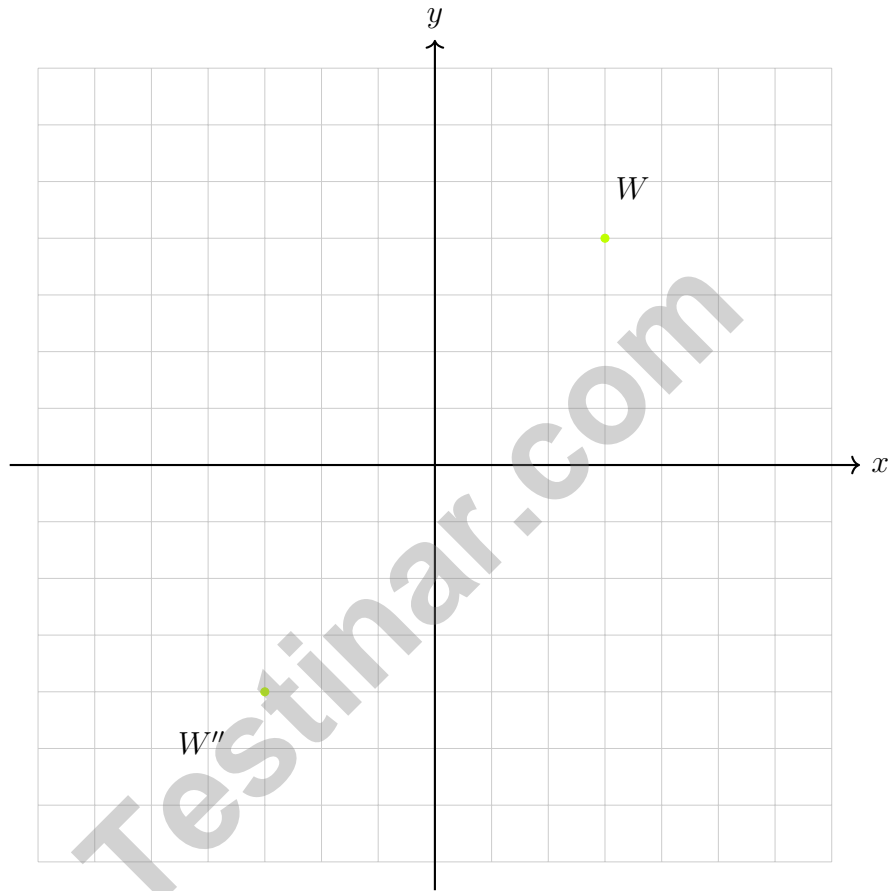


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6) Which number is located at the position labeled as -1.2 on a number line?

- A. $-\frac{6}{5}$
- B. $-\frac{5}{4}$

- C. -1
- D. $-\frac{1}{2}$



7)

If point W is at $(3, 4)$ and point W'' is at $(-3, -4)$, what transformation(s) would move W to W'' ?

- A. Reflection across the x -axis only
- B. Reflection across the y -axis only
- C. Reflection across both axes
- D. Reflection across the origin

Connecticut Smarter Balanced Practice Test Answer Keys

How to use this Connecticut Smarter Balanced 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 careful New England review
3. rework the problem before reading the full explanation, using this reminder: Make every answer earn its place by reading labels, checking scale, and explaining the step.

A calm Connecticut correction routine turns every missed item into useful practice. Pair each test with a review session so errors become a neat checklist.



Scan me!
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Connecticut Practice Test Answers and Explanations

Review the four printed Smarter Balanced tests with precise, calm, and ready for the next assessment day habits.

Practice Test 1 Answers and Explanations

- Choice D is correct.** **(6.RP.A.1)** IQR is $Q_3 - Q_1 = 18 - 8 = 10$. The student may have confused IQR with Q_3 or the range (30).
- Choice C is correct.** **(6.NS.C.5)** The vertical distance is the difference: $150 - (-45) = 150 + 45 = 195$ feet.
- Choice C is correct.** **(6.NS.C.7c)** Check each: A: $2 = 2$ (equal). B: $4 = 4$ (equal). C: $3 \neq 5$ (NOT equal). D: $6 = 6$ (equal).
- Choice D is correct.** **(6.NS.C.6c)** Using midpoint formula: $\frac{-2+x}{2} = -0.5 \Rightarrow -2+x = -1 \Rightarrow x = 1$.
- Choice B is correct.** **(6.NS.C.8)** Reflect $(6, -4)$ across the x -axis: $(6, 4)$. Then reflect across the y -axis: $(-6, 4)$.
- Choice B is correct.** **(6.NS.C.7d)** -3.5 is closer to zero than -3.75 , so -3.5 is greater. More negative means smaller.
- The correct answer is 52%.** **(6.RP.A.3c)** A 10×10 grid has 100 squares total. If 52 are shaded, the percent is $\frac{52}{100} = 52\%$.
- Choice B is correct.** **(6.EE.C.9)** Earnings equal hourly rate multiplied by hours worked: $E = 15h$.
- The correct answer is 15%.** **(6.RP.A.3c)** Percent discount is $\frac{30}{200} = 0.15 = 15\%$.
- Choice C is correct.** **(6.G.A.1)** Triangle A: $A = \frac{1}{2} \times 20 \times 3 = 30 \text{ in}^2$. Triangle B: $A = \frac{1}{2} \times 10 \times 6 = 30 \text{ in}^2$.
- Choice A is correct.** **(6.G.A.3)** Diagonal corners of a rectangle are $(3, 2)$ with $(8, 6)$, and $(8, 2)$ with $(3, 6)$. The diagonally opposite vertex to $(8, 2)$ is $(3, 6)$.
- Choice B is correct.** **(6.G.A.1)** Base: $8 - 2 = 6$ units. Height: $7 - 1 = 6$ units. Area = $\frac{1}{2} \times 6 \times 6 = 18$ square units.
- Choice C is correct.** **(6.G.A.4)** A cube has 6 equal square faces. Each face has area $4 \times 4 = 16 \text{ cm}^2$. Total surface area = $6 \times 16 = 96 \text{ cm}^2$.
- Choice A is correct.** **(6.NS.C.8)** Same x -coordinate (-7) : $|4 - (-3)| = |4 + 3| = 7$ units.
- The correct answer is 4.** **(6.RP.A.3)** Ratio 2 : 5 with flour = 10 cups: each part is $10 \div 5 = 2$ cups. Sugar: $2 \times 2 = 4$ cups.
- Choice B is correct.** **(6.G.A.1)** Area = $6.5 \times 2.5 = 16.25 \text{ in}^2$.
- Choice B is correct.** **(6.G.A.2)** $V = 2.25 \times 2 \times 3 = 4.5 \times 3 = 13.5 \text{ in}^3$.
- Choice C is correct.** **(6.RP.A.1)** Radius $r = \frac{10}{2} = 5$ in. Area = $\pi r^2 \approx 3.14 \times 5^2 = 3.14 \times 25 = 78.5 \text{ in}^2$.
- Choice A is correct.** **(6.SP.B.4)** Stem 9 has all 10 leaves (all digits 0-9), while stem 8 is empty. This clearly shows most scores are in the 90s.
- Choice D is correct.** **(6.NS.C.7d)** After first discount: $\$100 - 0.20 \times 100 = \80 . After second discount: $\$80 - 0.10 \times 80 = \72 .
- The correct answer is The unit rate is 25 items per hour, and the y-value when $x = 1$ is 25.** **(6.RP.A.3a)** A is correct because $50 \div 2 = 25$ items per hour. D is correct because when $x = 1$, $y = 25$. Choice B is false for a proportional relationship, Choice C should be $y = 25x$, and Choice E is false.
- Choice A is correct.** **(6.NS.C.7d)** For a proportional relationship, when hours = 0, pay must = 0. Here, when hours = 0, pay = \$5 (a fixed fee), so the relationship is not proportional. The equation is $p = 5h + 5$, which includes a non-zero constant term.
- Choice C is correct.** **(6.EE.C.9)** One year has 12 months: $\$50 \times 12 = \600 .
- Choice C is correct.** **(6.RP.A.3)** Actual dimensions: $4 \times 10 = 40 \text{ km}$ and $6 \times 10 = 60 \text{ km}$. Area: $40 \times 60 = 2400 \text{ km}^2$.
- Choice B is correct.** **(6.NS.A.1)** The first fraction stays the same; flip (invert) the second fraction and change divide to multiply.



Hi, Math Champion!

◇ Look what you did! 4 full practice tests. That's hundreds of math problems. You started as a learner. You are now a math athlete. ◇

★ **Champions know:** hard work pays off. You did the hard work. Your math skills are strong because you practiced. ★

Champion's Stats

- **Focus:** HIGH! You stay on task.
- **Speed:** STRONG! You move at the right pace.
- **Accuracy:** SHARP! You catch your own mistakes.
- **Mindset:** CHAMPION! You believe in yourself.

Champion tip: on test day, walk in proud. You trained for this. You are ready!

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

Jay Daie

Your Math Coach

PRACTICE TODAY. SUCCEED TOMORROW!

This book includes 4 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:

4 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.



VISIT [TESTINAR.COM/MATH6](https://www.testinar.com/math6)
FOR MORE PRACTICE TESTS
AND LEARNING RESOURCES



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