

4 Hawaii

Smarter Balanced

GRADE

6

MATH

PRACTICE TESTS

Standards Aligned Problem Solving
For Comprehensive Assessment Programs

4

PRINTED
TESTS



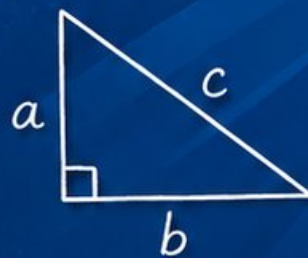
2

ONLINE
TESTS



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

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



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

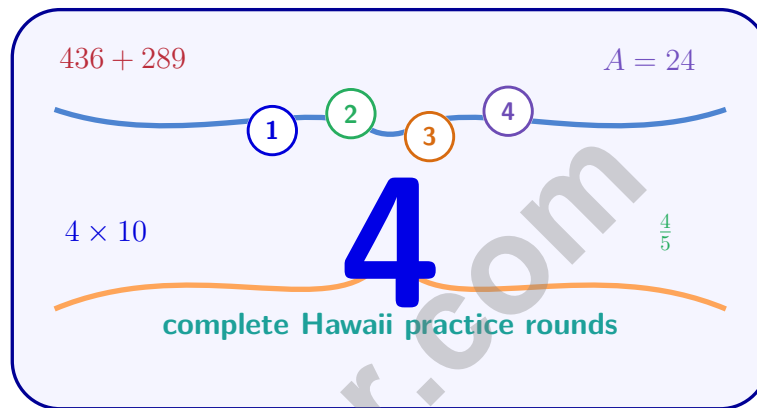


USE THESE TWO
ADDITIONAL ONLINE
PRACTICE TESTS

FOR EXTRA REVIEW AFTER
THE PRINTED TESTS
IN THIS BOOK.

4 Hawaii Smarter Balanced Grade 6 Math Practice Tests

Standards-Aligned Island-Paced Precision for Smarter Balanced Assessment Consortium



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

Jay Daie and Reza Nazari



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Welcome, Hawaii Math Explorer!

Four focused rounds using island-paced precision

This book gives you four full Grade 6 practice tests for Smarter Balanced. Each round uses island routes, ocean patterns, and calm step-by-step 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 Hawaii Practice Promise

Let the problem unfold in order: read, represent, solve, and check the meaning.

Read

Plan

Check

How to Use This Book

A four-session routine for island-paced precision

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

Hawaii review rhythm: Use each round like a wave set: work steadily, review carefully, and return stronger.



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. Island-paced precision 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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1) Find the value of $10 - \frac{x}{2}$ when $x = 6$.

A. 5

C. 8

B. 7

D. 13

2) Which number is located farthest from -1 on a number line?

A. -3.2

C. 0.8

B. -2.1

D. 1.5

3) If you reflect the point $(-7, 5)$ across the y -axis, then across the x -axis, the final point is in which quadrant?

A. Quadrant I

C. Quadrant III

B. Quadrant II

D. Quadrant IV

4) Order from least to greatest:

$\frac{1}{6}, -\frac{1}{6}, \frac{1}{3}, -\frac{1}{3}$

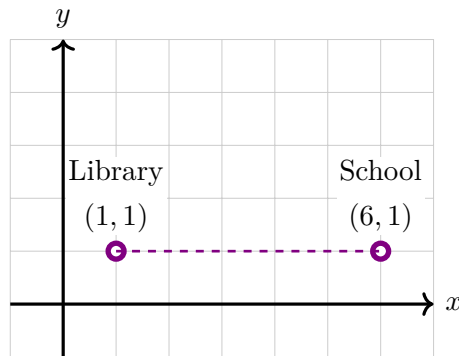
A. $-\frac{1}{3}, -\frac{1}{6}, \frac{1}{6}, \frac{1}{3}$

C. $-\frac{1}{6}, -\frac{1}{3}, \frac{1}{6}, \frac{1}{3}$

B. $\frac{1}{6}, \frac{1}{3}, -\frac{1}{6}, -\frac{1}{3}$

D. $\frac{1}{3}, \frac{1}{6}, -\frac{1}{6}, -\frac{1}{3}$





5)

On a map, the library is at (1, 1) and the school is at (6, 1). If each unit is 200 meters, what is the distance?

- A. 600 m C. 1000 m
 B. 800 m D. 1200 m

6) Using a chip model where red chips represent -1 and blue chips represent $+1$, what is the sum?



3 red chips + 2 blue chips = ?

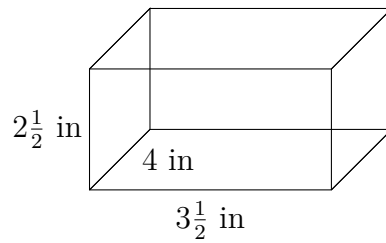
- A. -1 C. 5
 B. 1 D. -5

7) A trapezoid has bases of 15 cm and 9 cm. If the area is 72 cm^2 , what is the height?

- A. 4 cm C. 8 cm
 B. 6 cm D. 12 cm



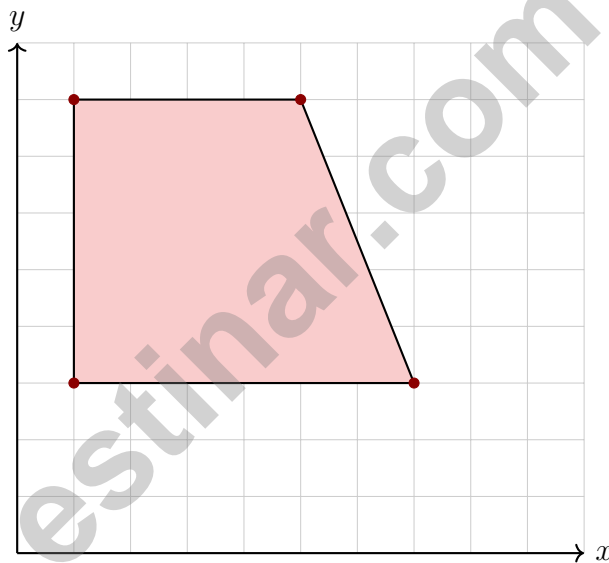
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8)

What is the volume of this rectangular prism?

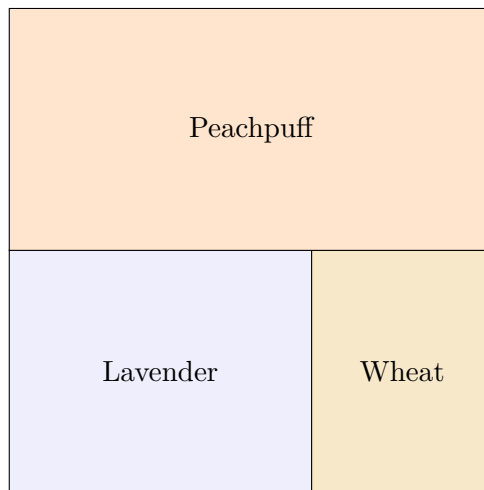
- | | |
|-----------------------------------------------|-----------------------------------------------|
| <input type="checkbox"/> A. 10 in^3 | <input type="checkbox"/> C. 35 in^3 |
| <input type="checkbox"/> B. 28 in^3 | <input type="checkbox"/> D. 42 in^3 |



9)

What is the length of the top side?

- | | |
|-------------------------------------|-------------------------------------|
| <input type="checkbox"/> A. 4 units | <input type="checkbox"/> C. 6 units |
| <input type="checkbox"/> B. 5 units | <input type="checkbox"/> D. 7 units |



4)

A square is chosen at random from the grid. What is the probability that it is wheat-colored?

A. $\frac{3}{32}$

B. $\frac{3}{16}$

C. $\frac{3}{8}$

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

5) A back-to-back stem-and-leaf plot shows:

Class A	Stem	Class B
9, 7, 5	6	1, 3, 4
8, 6, 2	7	0, 5, 7, 9

What is the range for Class A?

A. 13

B. 20

C. 22

D. 25



1) A circular clock face has a diameter of 10 inches. Using $\pi \approx 3.14$, what is the approximate area of the clock face?

A. 31.4 in^2

C. 78.5 in^2

B. 62.8 in^2

D. 314 in^2

2) A water bottle contains $\frac{5}{6}$ liter. How many $\frac{1}{12}$ -liter cups can be filled?

A. 5

C. 10

B. 8

D. 12

3) What is $9,360 \div 48$?

A. 195

C. 205

B. 200

D. 210

4) A recipe uses 2 cups of flour for every 1 cup of sugar. If you want to make a batch using 5 cups of flour, how many cups of sugar do you need? Explain your reasoning using the concept of proportionality.

5) Which expression is NOT equivalent to $28 + 42$?

A. $7(4 + 6)$

C. $2(14 + 21)$

B. $14(2 + 3)$

D. $7(4 + 8)$



6) If $|x| = 9$, which value(s) could x be?

- A. 9 only C. Undefined
 B. -9 only D. Both 9 and -9

7) The point $(5, -3)$ is located in which quadrant?

- A. Quadrant I C. Quadrant III
 B. Quadrant II D. Quadrant IV

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

$$-3.5 \square -3.75$$

- A. $<$ C. $=$
 B. $>$ D. Cannot determine

9) A bank account balance is $-\$50$ (overdrawn). A deposit of $\$120$ is made. What is the new balance?

Balance: $-\$50$

↓ Deposit $+\$120$

New Balance: ?

- A. $-\$170$ C. $\$70$
 B. $-\$70$ D. $\$170$



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& answers

Hawaii Smarter Balanced Practice Test Answer Keys

How to use this Hawaii 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 island-paced precision
3. rework the problem before reading the full explanation, using this reminder:
Let the problem unfold in order: read, represent, solve, and check the meaning.

A calm Hawaii correction routine turns every missed item into useful practice. Use each round like a wave set: work steadily, review carefully, and return stronger.



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Hawaii Practice Test Answers and Explanations

Review the four printed Smarter Balanced tests with calm, clear, and ready for the next wave habits.

Practice Test 1 Answers and Explanations

- Choice B is correct.** **(6.EE.A.2c)** Substitute $x = 6$: $10 - \frac{6}{2} = 10 - 3 = 7$.
- Choice A is correct.** **(6.NS.C.6c)** Distance from -1 : $|-3.2 - (-1)| = |-2.2| = 2.2$, which is greater than all other distances.
- Choice D is correct.** **(6.NS.C.8)** Start with $(-7, 5)$. Reflect across the y -axis: $(7, 5)$. Reflect across the x -axis: $(7, -5)$, which is in Quadrant IV.
- Choice A is correct.** **(6.NS.C.7d)** Negatives come before positives. $-\frac{1}{3} < -\frac{1}{6}$ and $\frac{1}{6} < \frac{1}{3}$.
- Choice C is correct.** **(6.NS.C.8)** Distance on map: $|6 - 1| = 5$ units. Actual distance: $5 \times 200 = 1000$ meters.
- Choice A is correct.** **(6.NS.B.3)** Red chips = negative. Blue chips = positive. Three red chips = -3 . Two blue chips = $+2$. Total: $-3 + 2 = -1$.
- Choice B is correct.** **(6.G.A.1)** Using $72 = \frac{1}{2}(15 + 9) \times h = 12h$, so $h = 6$ cm.
- Choice C is correct.** **(6.G.A.2)** $V = 3.5 \times 2.5 \times 4 = 8.75 \times 4 = 35 \text{ in}^3$.
- Choice A is correct.** **(6.G.A.3)** The top goes from $(1, 8)$ to $(5, 8)$. Length = $5 - 1 = 4$ units.
- Choice A is correct.** **(6.G.A.1)** Area of a triangle = $\frac{1}{2} \times \text{base} \times \text{height} = \frac{1}{2} \times 10 \times 8 = 40$ square units.
- 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 C is correct.** **(6.G.A.4)** The surface area of a rectangular prism is $SA = 2LW + 2LH + 2WH$. This accounts for all 6 faces: two $L \times W$ faces, two $L \times H$ faces, and two $W \times H$ faces. Choice C is the correct formula.
- Choice B is correct.** **(6.RP.A.3)** The pattern is $1'' = 8$ ft, so $3'' = 3 \times 8 = 24$ ft.
- Choice B is correct.** **(6.NS.B.4)** Factors of 24: 1, 2, 3, 4, 6, 8, 12, 24. Factors of 60: 1, 2, 3, 4, 5, 6, 10, 12, 15, 20, 30, 60. Common factors: 1, 2, 3, 4, 6, 12. GCF is 12.
- Choice B is correct.** **(6.NS.C.5)** Moving left means subtracting. The number is $-2 - 5 = -7$.
- Choice D is correct.** **(6.EE.B.5)** Add 9 to both sides to isolate x : $x = 5 + 9 = 14$.
- Choice D is correct.** **(6.RP.A.1)** The region from the minimum to Q_1 (the lower whisker) contains exactly 25% of the data.
- Choice A is correct.** **(6.NS.C.7d)** Alex: $\frac{\$100}{\$500} = 0.20 = 20\%$. Jordan: $\frac{\$75}{\$400} = 0.1875 = 18.75\%$. Alex saves a higher percentage.
- The correct answer is 120.** **(6.RP.A.3c)** 25% of $480 = 0.25 \times 480 = 120$ products were sold online.
- 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 C is correct.** **(6.NS.C.7d)** The flour amount doubled from 3 cups to 6 cups. Keep the same ratio by doubling the eggs too: $2 \times 2 = 4$ eggs.
- Choice B is correct.** **(6.EE.C.9)** Shortfall is Expenses minus Budgeted Amount: $\$1700 - \$1500 = \$200$.
- Choice C is correct.** **(6.NS.A.1)** $4\frac{1}{2} = \frac{9}{2}$, so $\frac{9}{2} \div \frac{3}{8} = \frac{9}{2} \times \frac{8}{3} = \frac{72}{6} = 12$.
- Choice A is correct.** **(6.NS.B.2)** Use long division or estimation: $24 \times 50 = 1,200$, leaving 48. Then $48 \div 24 = 2$, so $1,248 \div 24 = 52$.
- Choice C is correct.** **(6.NS.B.4)** Factors of 32: 1, 2, 4, 8, 16, 32. Factors of 48: 1, 2, 3, 4, 6, 8, 12, 16, 24, 48. Common factors: 1, 2, 4, 8, 16. GCF is 16.
- 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 D is correct.** **(6.NS.C.7c)** $|-1| = 1$ and $|1| = 1$, so $1 + 1 = 2$.



From Your Math Family

Hi, Math Family Member,

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

★ **Our math family knows:** math is a journey. You have taken many steps already. The test is just one stop. Every skill you built is yours forever. ★

What Your Math Family Sees

- **Hard Work:** You keep showing up.
- **Real Growth:** You can do problems today you couldn't before.
- **Brave Heart:** You face hard problems with brave thinking.
- **Bright Future:** Your math journey is just beginning.

Family tip: on test day, picture us standing behind you, smiling and rooting for you. You are not alone. Your math family is with you!

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

Jay Daie

Your Math Family

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



PRACTICE
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