

9

Hawaii

Smarter Balanced

GRADE

6

MATH

PRACTICE TESTS

Standards-Aligned Review
Mixed Practice & Answer Key



9 PRINTED TESTS

Realistic practice to build confidence and mastery



DETAILED ANSWER EXPLANATIONS

Learn with step-by-step solutions



FOCUSED & EFFECTIVE

Target key math skills with purposeful practice



BUILD CONFIDENCE

Strengthen problem solving and test-taking skills



9 PRINTED TESTS
+2 ONLINE TESTS

Use these two additional online practice tests for extra review after the printed tests in this book.

PRACTICE TODAY.
SUCCEED TOMORROW.



PRACTICE



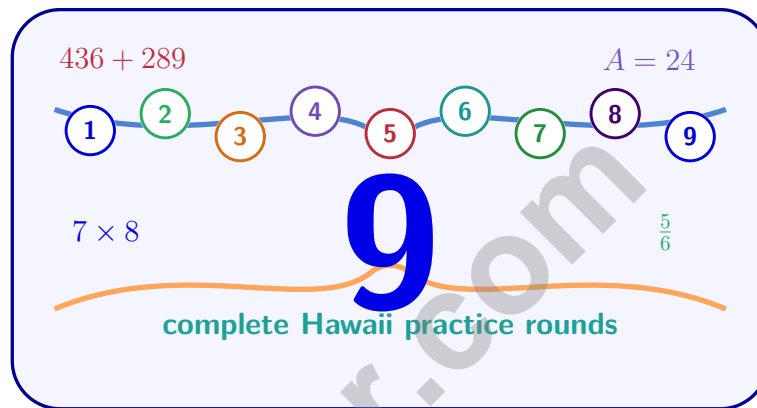
REVIEW



SUCCEED

9 Hawaii Smarter Balanced Grade 6 Math Practice Tests

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



Nine 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!

Nine focused rounds using island-paced precision

This book gives you nine 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 nine-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?

Nine Smarter Balanced tests, 360 questions, and a full review path

Part	What You Will Practice
Tests 1–3	Foundation rounds for ratios, rational numbers, operations, and careful reading.
Tests 4–6	Skill-building rounds with expressions, equations, geometry, data, and problem models.
Tests 7–9	Final stamina rounds for mixed review, neat work, and flexible strategy choices.
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) A thermometer shows -6°F . The temperature rises by 14°F . What is the new temperature?

- A. 8°F C. -20°F
 B. -8°F D. 20°F

2) A library organizes fiction and non-fiction books in a 9 : 11 ratio. The table shows the collection:

Fiction Books	Non-Fiction Books
9	11
18	22
?	33

- A. 25 C. 30
 B. 36 D. 27

3) On a spelling test, 36 out of 40 students passed. What percent passed?

- A. 36% C. 90%
 B. 80% D. 95%

4) A farmer has 5,460 seedlings to plant equally in 28 rows. How many seedlings go in each row?

- A. 195 C. 205
 B. 200 D. 210



5) What is the GCF of 15 and 35?

A. 3

C. 7

B. 5

D. 15

6) A diver starts at sea level (elevation 0). The diver descends 12 meters. What is the diver's elevation?

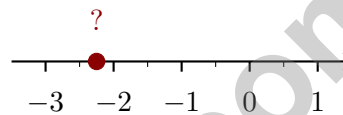
A. 12 meters

C. 0 meters

B. -12 meters

D. 24 meters

7) Which number line correctly shows the position of -2.25 ?



A. Halfway between -3 and -2

C. At -2

B. Halfway between -2.5 and -2

D. Halfway between -2 and -1

8) Which ordered pair is located in Quadrant III?

A. $(2, 5)$

C. $(-4, -2)$

B. $(-1, 3)$

D. $(3, -6)$

9) Order these five numbers from greatest to least:

$0, -1.2, 1.2, -1.5, 0.5$

A. $-1.2, -1.5, 0, 0.5, 1.2$

C. $1.2, 0.5, -1.2, 0, -1.5$

B. $0.5, 1.2, 0, -1.2, -1.5$

D. $1.2, 0.5, 0, -1.2, -1.5$



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Expression: $5(2a + 3)$

Distribute 5:

$$5 \times 2a = 10a$$

$$5 \times 3 = 15$$

Result: $10a + 15$

10)

Use the distributive property diagram above. What is $6(3b - 2)$?

A. $18b - 12$

C. $18b - 2$

B. $9b - 8$

D. $3b - 12$

11) Solve for x : $\frac{x}{2.5} = 6$

A. $x = 2.4$

C. $x = 15$

B. $x = 8.5$

D. $x = 3.6$

12) A container holds 96 fluid ounces of liquid. How many cups does the container hold?

13) A parking lot is shaped like a parallelogram with a base of 40 m and a height of 15 m. What is the area of the parking lot?

A. 110 m^2

C. 600 m^2

B. 300 m^2

D. 1200 m^2



1) Divide 7,280 by 35 and express as a mixed number or quotient with remainder.

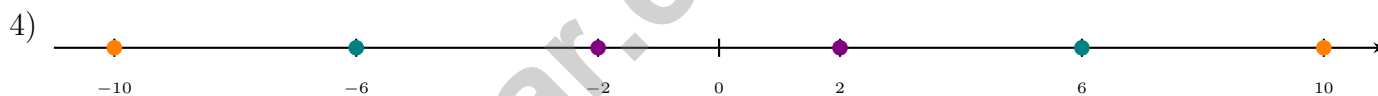
- A. 208
 B. 208 R 4
 C. 206 R 10
 D. 210

2) What is $(-8) \times (-3)$?

- A. -24
 B. 11
 C. 24
 D. -11

3) Expand $7(4 + 6)$.

- A. $28 + 42$
 B. $28 + 6$
 C. $4 + 42$
 D. 11×7



On this number line, mark which pairs have the same absolute value.

- A. -10 and 10; -6 and 6; -2 and 2
 B. Only -2 and 2
 C. Only -6 and 6
 D. Only -10 and 10

5) Which expression equals $2^3 \times 3$?

- A. $2 \times 2 \times 2 \times 3$
 B. $2 + 2 + 2 \times 3$
 C. 6×3
 D. $2 \times 3 \times 3$



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6) A reflection across both axes is equivalent to a rotation around the origin. If you reflect (a, b) across the x -axis and then across the y -axis, the result is:

A. $(-a, b)$

C. $(-a, -b)$

B. $(a, -b)$

D. (b, a)

7) A proportional relationship is shown on a graph. Two points on the line are $(3, 21)$ and $(7, 49)$. Find the constant of proportionality (the unit rate).

8) Which comparison is true?

A. $-2.3 > 0.5$

C. $\frac{3}{4} > 2$

B. $\frac{1}{2} < -\frac{1}{2}$

D. $-0.8 < -0.3$

9) If the distance between points $(0, a)$ and $(0, -5)$ is 8 units, what is a ?

A. $a = 3$ or $a = -13$

C. $a = 2$ or $a = -12$

B. $a = -3$ or $a = 13$

D. $a = 5$ or $a = -8$

10) Which statement is FALSE?

A. $-5 + (-4) = -1$

C. $-3 + 8 = 5$

B. $6 - (-2) = 8$

D. $-7 - (-3) = -4$

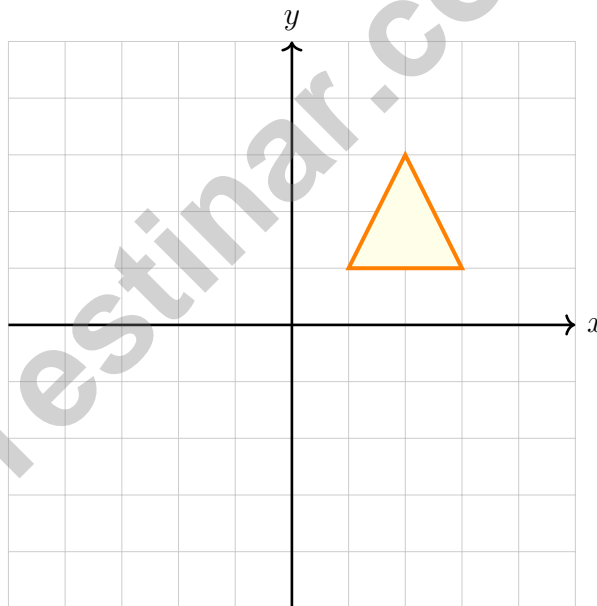


1) Two triangles: Triangle P has base 18 cm and height 4 cm. Triangle Q has base 6 cm and height 12 cm. What is the difference in their areas?

- A. 0 cm^2
- B. 12 cm^2
- C. 24 cm^2
- D. 36 cm^2

2) A scientist records bird counts at different altitudes. The stem-and-leaf plot uses a 2-digit stem (like 15, 16, 17). If stem 16 has leaves 0, 3, 7, what are the data values?

- A. 160, 163, 167
- B. 16, 16, 16
- C. 1603, 1663, 1673
- D. Cannot determine without the full plot



3)

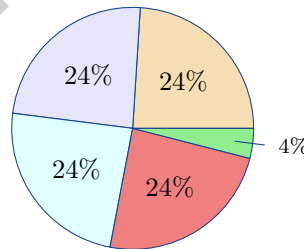
A triangle with vertices at (1, 1), (3, 1), and (2, 3) is reflected over the y -axis. Which will be the image of the vertex at (3, 1)?

- A. (3, -1)
- B. (-3, 1)
- C. (3, 1)
- D. (-3, -1)

4) Consider: “What is the average age of people in my city?”

Why is this a statistical question?

- A. Because it asks about a large group of people.
- B. Because people have different ages and data must be collected.
- C. Because it uses the word “average.”
- D. Because age is a number.
- 5) A teacher reports that the mean test score is 75 and the median is 82. What does this suggest?
- A. The distribution is symmetric
- B. Most students scored above 75
- C. Some very low scores pulled the mean down
- D. The data has no outliers
- 6) A teacher reports: “Most students scored between 75–85. A few students scored in the 60s, and one scored 95.” Which shape best describes this distribution?
- A. Symmetric
- B. Bimodal
- C. Skewed left
- D. Skewed right



7)

The circle graph shows data from 500 items. How many items are represented by the 4% section?

- A. 20
- B. 15
- C. 10
- D. 25



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For more practice
& 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.



Hawaii Practice Test Answers and Explanations

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

Practice Test 1 Answers and Explanations

- 1) **Choice A is correct.** **(6.NS.B.3)** $-6 + 14 = 8^\circ\text{F}$.
- 2) **Choice D is correct.** **(6.RP.A.3)** The ratio is 9 : 11. When non-fiction is 33 (multiply by 3), fiction is $9 \times 3 = 27$.
- 3) **Choice C is correct.** **(6.RP.A.3c)** $\frac{36}{40} = \frac{9}{10} = \frac{90}{100} = 90\%$ (simplify, then write with denominator 100).
- 4) **Choice A is correct.** **(6.NS.B.2)** $5,460 \div 28 = 195$ exactly. Check: $28 \times 195 = 5,460$.
- 5) **Choice B is correct.** **(6.NS.B.4)** Factors of 15: 1, 3, 5, 15. Factors of 35: 1, 5, 7, 35. Common factors: 1, 5. GCF is 5. Distractors: 3 divides 15 only; 7 divides 35 only; 15 is the largest number but not the GCF.
- 6) **Choice B is correct.** **(6.NS.C.5)** Descent below sea level is represented by a negative elevation. A descent of 12 meters is an elevation of -12 meters.
- 7) **Choice B is correct.** **(6.NS.C.6c)** -2.25 is exactly halfway between -2.5 and -2 , found by: $\frac{-2.5 + (-2)}{2} = -2.25$.
- 8) **Choice C is correct.** **(6.NS.C.8)** Quadrant III contains points where both coordinates are negative. The point $(-4, -2)$ has negative x and negative y , so it is in Quadrant III.
- 9) **Choice D is correct.** **(6.NS.C.7d)** From greatest to least: positive values first ($1.2 > 0.5$), then zero, then negative values ($-1.2 > -1.5$).
- 10) **Choice A is correct.** **(6.EE.A.3)** Following the diagram: $6 \times 3b = 18b$ and $6 \times 2 = 12$ (subtract because of the minus). Result: $18b - 12$.
- 11) **Choice C is correct.** **(6.EE.B.5)** Multiply both sides by 2.5: $x = 6 \times 2.5 = 15$.
- 12) **The correct answer is 12.** **(6.RP.A.3d)** Divide: $96 \text{ fl oz} \div 8 \text{ fl oz/cup} = 12$ cups.
- 13) **Choice C is correct.** **(6.G.A.1)** Area of the parallelogram = $40 \times 15 = 600 \text{ m}^2$.
- 14) **Choice C is correct.** **(6.G.A.4)** Lateral SA = $2(12)(4) + 2(8)(4) = 96 + 64 = 160 \text{ cm}^2$.
- 15) **Choice C is correct.** **(6.RP.A.1)** Area = $\pi r^2 \approx \frac{22}{7} \times 7^2 = \frac{22}{7} \times 49 = 22 \times 7 = 154 \text{ m}^2$.
- 16) **Choice C is correct.** **(6.SP.A.2)** Puppies in a litter have different weights, requiring data collection. This is correctly labeled as statistical. Option A is incorrectly labeled because February has a fixed number of days. Option B is incorrect because apple prices can vary. Option D is incorrect because backpack colors in a class can vary, so it is statistical.
- 17) **Choice C is correct.** **(6.SP.B.5c)** Range depends solely on the maximum and minimum, ignoring all middle values. It is found by subtracting the minimum from the maximum, not by adding them.
- 18) **The correct answer is B and C are consistent.** **(6.RP.A.3)** B: $3 \times 5 = 15 \text{ km}$ (correct). C: $4 \times 5 = 20 \text{ km}$ (correct). A: $2 \times 5 = 10 \text{ km}$, not 8 (incorrect). D: $5 \times 5 = 25 \text{ km}$, not 30 (incorrect). E: $6 \times 5 = 30 \text{ km}$, not 35 (incorrect).
- 19) **The correct answer is 800.** **(6.NS.C.7d)** Total spent: $50\% + 20\% + 10\% = 80\%$ of $\$4000 = \3200 . Remaining: $\$4000 - \$3200 = \$800$.
- 20) **Choice B is correct.** **(6.SP.B.4)** Add the frequencies for the 5–10 and 10–15 ranges: $16 + 18 = 34$ teenagers.
- 21) **Choice D is correct.** **(6.RP.A.1)** The maximum is shown by the right whisker endpoint of the box plot.
- 22) **Choice A is correct.** **(6.SP.B.5)** The values are evenly spaced with equal intervals (2 inches apart), centered around the median (32). This is a perfectly symmetric distribution.
- 23) **Choice B is correct.** **(6.NS.B.4)** GCF of 14 and 21 is 7. So $14 + 21 = 7(2 + 3)$. Only Choice B uses the GCF with whole numbers.
- 24) **Choice C is correct.** **(6.NS.C.7c)** Computing: $|-11| = 11$, $|-7| = 7$, $|4| = 4$, $|-9| = 9$. The smallest is 4.
- 25) **Choice A is correct.** **(6.EE.A.3)** Moving down from floor 5: $5 - 7 = -2$, which is floor -2 (basement level).
- 26) **The correct answer is 50.** **(6.EE.C.9)** Entertainment percentage: $100\% - 40\% - 35\% = 25\%$ of $\$200 = 0.25 \times 200 = \50 .
- 27) **Choice B is correct.** **(6.EE.A.1)** Following PEMDAS, exponents come before multiplication and addition. The diagram shows Step 1 is evaluating $3^2 = 9$.



Hi, Math Inventor!

◇ 9 practice tests. 9 chances to invent new ways to think. You tried things. You changed them. You made your math brain stronger! ◇

★ **Inventors know:** the first try isn't always the best try. Sometimes you fix it. Sometimes you start over. You did all of that! ★

Inventor's Workshop

- **Sketch Pad:** Full of ideas!
- **Toolbox:** Lots of math strategies.
- **Workbench:** Neat and organized.
- **Brave Mind:** You try new things.

Inventor tip: on test day, if your first try doesn't work, switch tools. Inventors don't get stuck on one tool. Pick the right one for the job!

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

Jay Daie

Your Math Inventor

PRACTICE MORE. ACHIEVE MORE.

This **Grade 6 Math Practice Tests** book is designed to help students strengthen their math skills, master important concepts, and build the confidence they need to excel on any test.

With 9 full-length printed tests and 2 online tests, students get the review, practice, and realistic test experience they need to improve accuracy, develop problem-solving abilities, and reach their full potential.

Perfect for classroom use, homework, test preparation, and extra practice at home.

PERFECT FOR:

- ✓ Classroom Practice
- ✓ Homework & Review
- ✓ Independent Learning
- ✓ Test Preparation
- ✓ Skill Reinforcement
- ✓ Building Confidence

★ PRACTICE TODAY.
SUCCEED TOMORROW.

WHAT STUDENTS WILL 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 math concepts aligned with standards.



Test Confidence

Get familiar with test formats and improve accuracy.



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

Extra online practice to reinforce learning and build confidence.

MORE PRACTICE. GREATER RESULTS.

Give your child the tools needed to develop strong math skills, confidence, and a positive attitude toward learning.



9 PRINTED
PRACTICE TESTS



2 ONLINE
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DETAILED ANSWER
EXPLANATIONS