

# 3

# Hawaii

## Smarter Balanced

GRADE

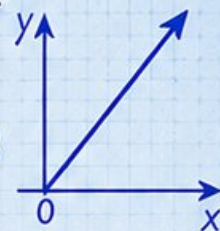
# 6

MATH

# PRACTICE TESTS

Standards Aligned Problem Solving  
For Comprehensive Assessment Programs

$$y = 2x + 3$$



$$\frac{3}{5} + \frac{2}{10} = \frac{8}{10} = \frac{4}{5}$$

$$36\% \text{ of } 150 = ?$$



## 3 | PRINTED TESTS



## 2 | ONLINE TESTS



Build Confidence



Master Key Math Skills



Answer Explanations for Every Question

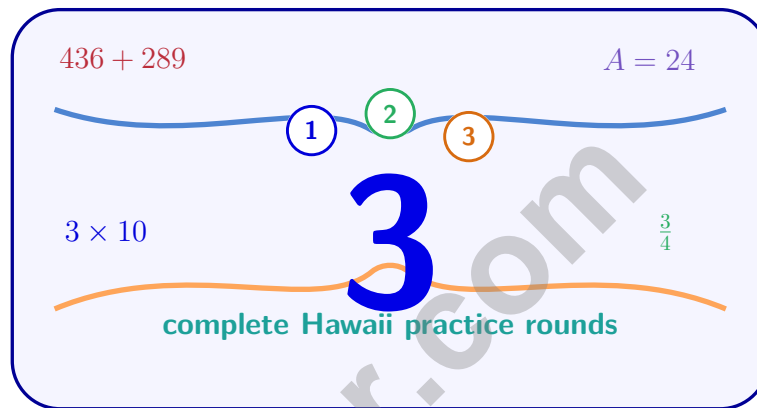


Test-Taking Strategies That Work

USE THESE TWO  
ADDITIONAL ONLINE  
PRACTICE TESTS  
FOR EXTRA REVIEW AFTER  
THE PRINTED TESTS  
IN THIS BOOK.

# 3 Hawaii Smarter Balanced Grade 6 Math Practice Tests

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



Three 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**



# Copyright ©

**Testinar Inc**



Published by Testinar Inc

[Testinar.com](http://Testinar.com)

All rights reserved. No part of this publication may be reproduced, distributed, or transmitted in any form or by any means, including photocopying, recording, or other electronic or mechanical methods, without the prior written permission of the author, except in the case of brief quotations embodied in critical reviews and certain other noncommercial uses permitted by copyright law, including Section 107 or 108 of the 1976 United States Copyright Act.

This publication is independently produced and has no official connection to any state, district, or national testing program.

Test names and organizational names used herein are the property of their respective trademark holders.



*Copyright ©*

# Welcome, Hawaii Math Explorer!

Three focused rounds using island-paced precision

This book gives you three 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 three-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?

Three Smarter Balanced tests, 120 questions, and a full review path

Part	What You Will Practice
Tests 1–2	Foundation rounds for ratios, rational numbers, operations, and careful reading.
Test 3	Final stamina round for expressions, equations, geometry, data, problem models, and mixed review.
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

# Table of Contents

★ Practice Test 1	_____	14
★ Practice Test 2	_____	28
★ Practice Test 3	_____	45
Practice Test Answer Keys	_____	63
Practice Test Answers and Explanations	_____	66

1) Compare two box plots: Dataset A has median 50 and IQR 15; Dataset B has median 45 and IQR 20. Which statement is true?

- A. Dataset A has a higher center and less spread.
- B. Dataset A has a lower center and more spread.
- C. Both datasets have the same center.
- D. Dataset B is more skewed.

2) A city planner is making a scale model of a new neighborhood. The scale is 1 inch = 200 feet. If the actual neighborhood is 1 mile long (5280 feet), how long should the model be in inches?

- A. 26.4 inches
- B. 52.8 inches
- C. 100 inches
- D. 264 inches

3) Which statement correctly compares the two integers  $-6$  and  $-3$ ?

- A.  $-6 > -3$
- B.  $-6 = -3$
- C.  $-6 < -3$
- D.  $-6$  and  $-3$  are opposites

4) Solve for  $x$ :  $x - 7 = 13$

- A.  $x = 6$
- B.  $x = 13$
- C.  $x = 20$
- D.  $x = 91$

5) A graph shows the relationship between gallons of paint and square feet painted. The line passes through  $(2, 500)$  and  $(4, 1000)$ .

Do these points lie on the same proportional relationship? Why or why not?

- A. No, the ratios are different:  $\frac{500}{2} \neq \frac{1000}{4}$
- B. Yes, the ratios are equal:  $\frac{500}{2} = \frac{1000}{4} = 250$
- C. No, because 1000 is not double 500
- D. Yes, because the x-values are both even



- 6) Which shows the correct order from least to greatest:  $\frac{1}{2}$ , 40%, 0.45?
- A. 40%,  $\frac{1}{2}$ , 0.45
- B. 40%, 0.45,  $\frac{1}{2}$
- C.  $\frac{1}{2}$ , 40%, 0.45
- D. 0.45, 40%,  $\frac{1}{2}$
- 7) A tank holds 200 gallons. It is currently 65% full. How many gallons of water are in the tank?
- A. 65 gallons
- B. 100 gallons
- C. 130 gallons
- D. 150 gallons
- 8) If  $\frac{2}{3} = \frac{8}{x}$ , what is  $x$ ?
- A. 10
- B. 16
- C. 14
- D. 12
- 9) In a student club, the ratio of 6th graders to 7th graders is 4 : 6. If there are 12 sixth graders, how many seventh graders are in the club?
- 
- 10) A student drinks 5 cups of water per day. How many fluid ounces is this? (Use 1 cup = 8 fluid ounces.)
- A. 20 fl oz
- B. 30 fl oz
- C. 50 fl oz
- D. 40 fl oz



Scan me!  
For more practice  
& answers

11) Casey earns \$500 per month. She spends \$200 on rent and \$100 on food, then saves 38% of what is left. How much does she save?

A. \$76

C. \$102

B. \$84

D. \$120

12) A student traveled 45 miles in 3 hours. At this rate, how far will the student travel in 5 hours?

A. 50 miles

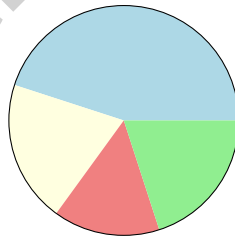
C. 75 miles

B. 60 miles

D. 90 miles

13) A factory packages 480 items in 8 boxes. What is the unit rate in items per box?

14) A budget is divided into: Housing 45%, Food 20%, Transportation 15%, and Savings. What percent is allocated to savings?



A. 10%

C. 20%

B. 15%

D. 25%



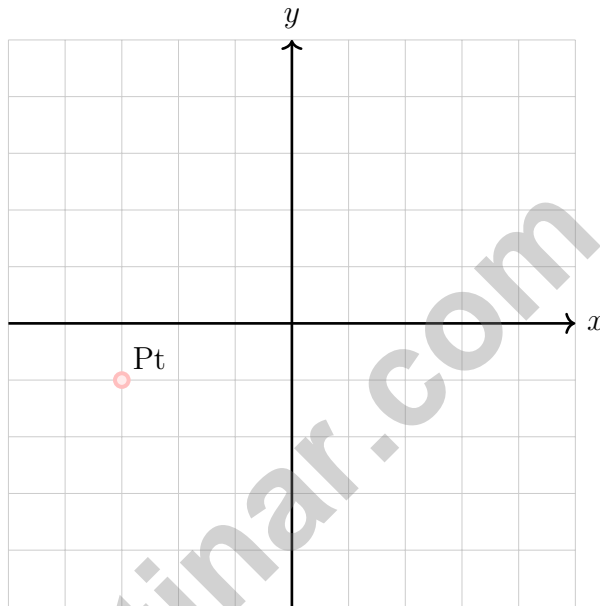
1) Which pair of numbers has a GCF of 5?

A. 15 and 25

C. 12 and 20

B. 10 and 20

D. 14 and 35



2)

If a point at  $(-3, -1)$  is reflected over the  $x$ -axis, which of the following is the image?

A.  $(-3, 1)$

C.  $(3, 1)$

B.  $(-3, -1)$

D.  $(3, -1)$

3) A circular tabletop has a radius of 2 feet. What is its approximate area using  $\pi \approx 3.14$ ?

A.  $6.28 \text{ ft}^2$

C.  $25.12 \text{ ft}^2$

B.  $50.24 \text{ ft}^2$

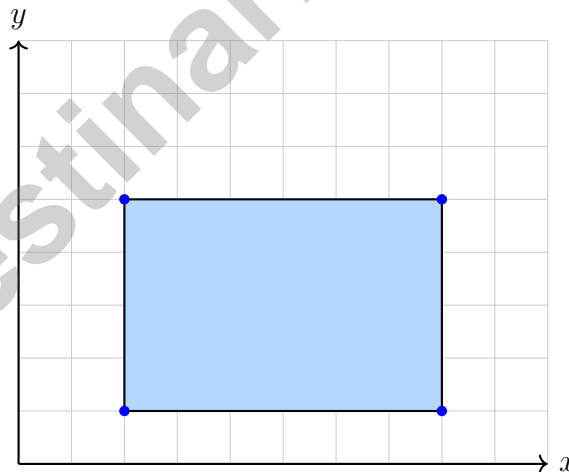
D.  $12.56 \text{ ft}^2$

4) Error Analysis: A student claims, “The question ‘How old is my parent?’ is statistical because I need to ask my parent to find the answer.”

What is the error in this reasoning?

- A. Parents don't like to share their age.
  B. Statistical questions are always asked in school.
  C. Your parent will not give an accurate answer.
  D. Asking someone a question does not make it statistical.

5) A toy box has a rectangular base with area 15 square inches. If the volume is 75 cubic inches, what is the height of the box in inches?



6)

What is the area of the rectangle shown above?



Scan me!  
For more practice  
& answers

1) Divide:  $0.84 \div 0.7$

A. 1.2

C. 12

B. 0.12

D. 1.54

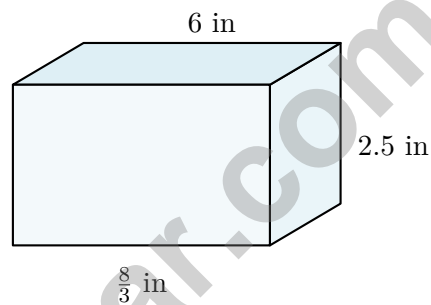
2) A parallelogram has an area of  $75 \text{ cm}^2$  and a height of 5 cm. What is the base length?

A. 10 cm

C. 20 cm

B. 25 cm

D. 15 cm



3)

Find the volume of the prism.

A.  $20 \text{ in}^3$

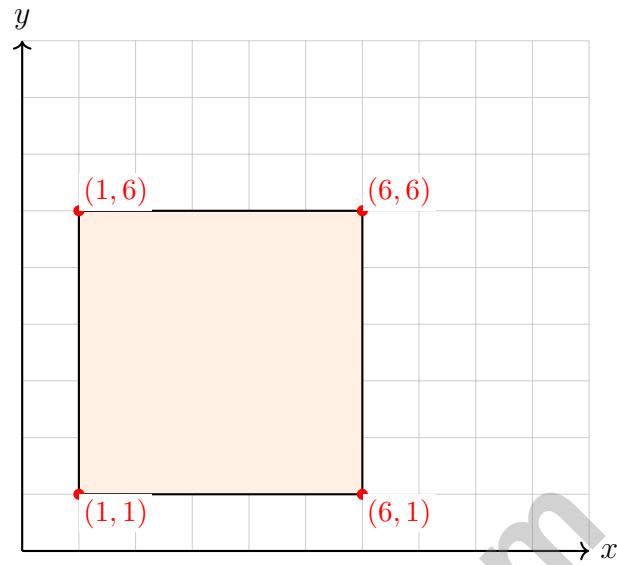
C.  $40 \text{ in}^3$

B.  $30 \text{ in}^3$

D.  $60 \text{ in}^3$



Scan me!  
For more practice  
& answers



4)

Is this a square or a rectangle?

- A. Square                       C. Trapezoid  
 B. Rectangle but not a square       D. Parallelogram



## 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.**



Scan me!  
For more practice  
& answers

## Hawaii Practice Test Answers and Explanations

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

### Practice Test 1 Answers and Explanations

- Choice A is correct.** **(6.RP.A.1)** Median measures center; IQR measures spread. Dataset A's median is higher and IQR is smaller (less spread).
- Choice A is correct.** **(6.RP.A.3)** Divide:  $5280 \text{ feet} \div 200 \text{ feet/inch} = 26.4 \text{ inches}$ .
- Choice C is correct.** **(6.NS.C.5)** On a number line,  $-6$  is to the left of  $-3$ , so  $-6$  is less than  $-3$ . The farther left a number is, the smaller it is.
- Choice C is correct.** **(6.EE.B.5)** Add 7 to both sides:  $x = 13 + 7 = 20$ .
- Choice B is correct.** **(6.RP.A.3a)** Both points yield the same unit rate of 250 square feet per gallon:  $\frac{500}{2} = 250$  and  $\frac{1000}{4} = 250$ . Proportional points maintain a constant ratio.
- Choice B is correct.** **(6.RP.A.3c)** Convert all to percents:  $\frac{1}{2} = 50\%$ ,  $40\% = 40\%$ ,  $0.45 = 45\%$ . Order:  $40\% < 45\% < 50\%$ .
- Choice C is correct.** **(6.RP.A.3c)**  $65\%$  of  $200 = 0.65 \times 200 = 130$  gallons.
- Choice D is correct.** **(6.RP.A.3)** Cross-multiply:  $2 \times x = 3 \times 8$ , so  $2x = 24$ , thus  $x = 12$ .
- The correct answer is 18.** **(6.RP.A.3)** The ratio of sixth graders to seventh graders is  $4 : 6$ , which simplifies to  $2 : 3$ . If 2 parts are 12 students, each part is 6, so seventh graders are  $3 \times 6 = 18$ .
- Choice D is correct.** **(6.RP.A.3d)** Multiply:  $5 \times 8 = 40 \text{ fl oz}$ .
- Choice A is correct.** **(6.NS.C.7d)** Remainder after rent and food:  $\$500 - \$200 - \$100 = \$200$ . Savings:  $38\%$  of  $\$200 = 0.38 \times 200 = \$76$ .
- Choice C is correct.** **(6.NS.C.7d)** The constant speed is  $\frac{45 \text{ miles}}{3 \text{ hours}} = 15 \text{ mph}$ . In 5 hours: distance =  $15 \times 5 = 75$  miles.
- The correct answer is 60 items per box.** **(6.RP.A.3d)** Divide total items by number of boxes:  $480 \div 8 = 60$  items per box.
- Choice C is correct.** **(6.EE.C.9)** Savings:  $100\% - 45\% - 20\% - 15\% = 20\%$ .
- Choice B is correct.** **(6.NS.A.1)**  $\frac{1}{2} \div 8 = \frac{1}{2} \times \frac{1}{8} = \frac{1}{16}$  cup per serving.
- Choice A is correct.** **(6.NS.B.2)** Following the long division steps:  $7,524 \div 44 = 171$  with no remainder. Verify:  $44 \times 171 = 7,524$ .
- Choice A is correct.** **(6.NS.B.3)** Align the decimal points. In the tenths place, 6 is smaller than 8, so regroup one whole as ten tenths: the 5 becomes 4 and the tenths become 16. Then  $16 - 8 = 8$  tenths,  $4 - 3 = 1$  one, and  $2 - 1 = 1$  ten, so the result is 11.8.
- The correct answer is 0.25 cup.** **(6.RP.A.3b)**  $8 \div 32 = 0.25$  cups (or  $\frac{1}{4}$  cup) per serving.
- Choice D is correct.** **(6.NS.B.4)** This is an LCM problem. Multiples of 8: 8, 16, 24, ... Multiples of 12: 12, 24, ... Both buses are at the station together at 24 minutes.
- The correct answer is 10.** **(6.RP.A.3)** The ratio is  $2.5 : 1$ . For 4 batches:  $2.5 \times 4 = 10$  cups of flour.
- Choice A is correct.** **(6.NS.B.4)** Distributive property:  $8(6 + 2) = 8 \cdot 6 + 8 \cdot 2 = 48 + 16 = 64$ . Choice A shows the expanded form.
- The correct answer is Girls to boys is 10 : 15 = 2 : 3 (Choice A is correct). Boys to total is 15 : 25 = 3 : 5 (Choice B is correct).** **(6.RP.A.1)** Choice A is correct because girls to boys is  $10 : 15$ , which simplifies to  $2 : 3$ . Choice B is correct because boys to total is  $15 : 25$ , which simplifies to  $3 : 5$ . The other choices either flip the order, swap which group is named first, or use the wrong total (10 girls out of 25 students is  $2 : 5$ , not  $1 : 3$ ).
- Choice C is correct.** **(6.NS.C.7c)** Both numbers are 4.5 units from zero (one on each side).  $|4.5| = 4.5$  and  $|-4.5| = 4.5$ .
- Choice B is correct.** **(6.NS.C.6c)** The midpoint between  $-2$  and  $2$  is found by taking the average:  $\frac{-2+2}{2} = 0$ .
- Choice D is correct.** **(6.NS.C.8)** Points on an axis must have at least one coordinate equal to zero. The point  $(2, -4)$  has both non-zero coordinates, so it is not on an axis.



---

## Author's Note

### From a Friend Who Believes in You

---

#### Hi, Friend!

◇ I just want to say something important: I am proud of you. You did 3 full practice tests. That takes time, hard work, and heart. ◇

★ **Friendly truth:** a test is just one part of your math journey. You are SO much more than a score. The work you did is the real win! ★

#### What I Want You to Know

- **You are smart.** Every test you finished proves it.
- **You are brave.** You tried hard problems.
- **You are growing.** Mistakes taught you new things.
- **You are ready.** The skills are inside you.

**One more thing:** on test day, take a deep breath. Smile. Remember that someone (me!) believes in you. You can do this!

If you want to share something or ask a question, please email me at [jay@testinar.com](mailto:jay@testinar.com).

**Jay Daie**

Your Math Friend

---

# PRACTICE TODAY. SUCCEED TOMORROW!

This book includes 3 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:

- 3 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



PRACTICE  
REGULARLY



STAY  
FOCUSED



SOLVE  
CONFIDENTLY



SUCCEED  
BRIGHTLY

PREPARE TODAY. **SUCCEED TOMORROW!**