

5

Hawaii

Smarter Balanced

GRADE 6

MATH

PRACTICE TESTS

Standards Aligned Problem Solving
For Comprehensive Assessment Programs



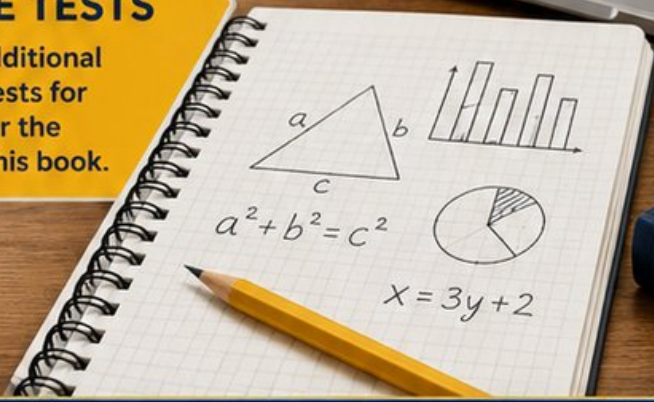
5 PRINTED TESTS

- ✓ Full-Length Practice Tests
- ✓ Realistic Questions
- ✓ Answer Key & Explanations



+ 2 ONLINE TESTS

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



PREPARE • PRACTICE • SUCCEED



5 Hawaii Smarter Balanced Grade 6 Math Practice Tests

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



Five 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

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!

Eight focused rounds using island-paced precision

This book gives you five 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 five-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?

Eight Smarter Balanced tests, 320 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 rounds with expressions, equations, geometry, data, and problem models.
Test 5	Final stamina round 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

Table of Contents

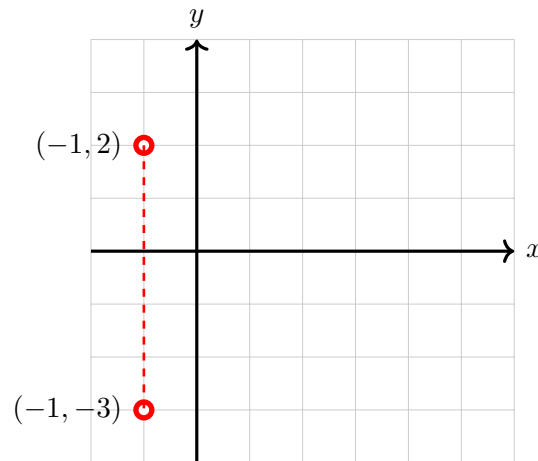
★ Practice Test 1	_____	14
★ Practice Test 2	_____	29
★ Practice Test 3	_____	44
★ Practice Test 4	_____	58
★ Practice Test 5	_____	73
Practice Test Answer Keys	_____	90
Practice Test Answers and Explanations	_____	94

- 1) What is the perimeter of a square with vertices at $(0, 0)$, $(4, 0)$, $(4, 4)$, and $(0, 4)$?
- A. 8 units C. 16 units
 B. 12 units D. 20 units
- 2) A worker's paycheck is \$1500. Taxes take 18%. How much is the take-home after taxes?
- A. \$1080 C. \$1230
 B. \$1200 D. \$1300
- 3) A scale drawing of a garden uses the scale 1 inch = 6 feet. How long is the actual garden if the drawing shows 2.5 inches?
- A. 8.5 feet C. 15 feet
 B. 12 feet D. 18 feet
- 4) A jar contains 7 yellow marbles and 3 red marbles. If one marble is drawn at random, express the probability of drawing a red marble as a fraction in lowest terms.

- 5) Find the sum: $0.75 + 1.4 + 2.1$

- A. 3.15 C. 4.35
 B. 4.25 D. 4.15



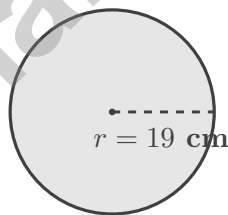


6)

What is the distance between $(-1, 2)$ and $(-1, -3)$?

 A. 4 units C. 6 units B. 5 units D. 7 units

Circular Disc



7)

A circular disc has a radius of 19 cm. Using $\pi \approx \frac{22}{7}$, which is closest to the area?

 A. 418 cm² C. 1134 cm² B. 836 cm² D. 2268 cm²

Scan me!
For more practice
& answers

8)

Type	Count
Red marbles	12
Blue marbles	8

What is the ratio of blue marbles to red marbles in simplest form?

- A. 3 : 2 C. 12 : 8
 B. 8 : 12 D. 2 : 3

9) In a school cafeteria, chocolate milk is mixed in a 2 : 3 ratio of chocolate syrup to milk. If 45 fluid ounces of milk are used, how much chocolate syrup is needed?

- A. 30 fl oz C. 24 fl oz
 B. 20 fl oz D. 60 fl oz

10) A water fountain fills 54 cups in 9 minutes. What is the rate in cups per minute?

- A. 5 cups per minute C. 45 cups per minute
 B. 63 cups per minute D. 6 cups per minute

11) Which unit rate is equivalent to \$15 for 6 pounds?

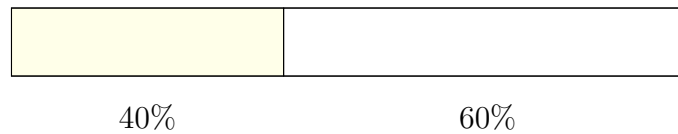
- A. \$2.50 per pound C. \$2.00 per pound
 B. \$3.00 per pound D. \$4.00 per pound

12) A sports team has players on offense and defense in a 11 : 6 ratio. If the team has 22 offensive players, how many defensive players does it have?

Offensive Players	Defensive Players
11	6
22	?

- A. 10 C. 14
 B. 12 D. 16





- 1) Total: 300 votes
- In an election, the shaded portion represents votes for Candidate A. How many votes did Candidate A receive?
- A. 60 C. 180
 B. 100 D. 120
- 2) A histogram displays test scores with a bell-shaped (normal) distribution. Where is the mean approximately located?
- A. At the left edge C. At the right edge
 B. At the center (peak) D. Outside the data range
- 3) A coin is flipped and a die is rolled. How many possible outcomes are in the sample space?
- A. 8 C. 24
 B. 12 D. 36
- 4) A student writes the following from a stem-and-leaf plot: "Stem 3 has leaves 1, 2, 4, 5, so the values are 31, 32, 34, 35." Is this interpretation correct?
- A. Yes, the interpretation is correct C. No; the leaves should represent a
 B. No; the stems should be ordered different place value
first D. No; there is no error

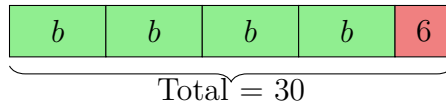


Scan me!
For more practice
& answers

- 1) Which statement correctly identifies the height of a parallelogram?
- A. The height is the length of one of the slanted sides.
- B. The height is the perpendicular distance between two parallel sides.
- C. The height is the same as the longer base.
- D. The height is always equal to one side length.
- 2) A data set has values: 2, 2, 5, 5, 5, 8, 8, 11. Find the range and IQR. Use the median-of-halves method and round the IQR to the nearest whole number.
- A. Range = 9, IQR = 4
- B. Range = 5, IQR = 3
- C. Range = 11, IQR = 5
- D. Range = 9, IQR = 5
- 3) A dataset has a mean of 50 and a median of 48. Which statement is most likely true?
- A. The data is symmetric with no outliers.
- B. There are some large values pulling the mean higher than the median.
- C. There are some small values pulling the mean lower than the median.
- D. The range must be less than 10.
- 4) A number from 1 to 20 is selected at random. What is the probability that the number is even?
- A. $\frac{1}{20}$
- B. $\frac{10}{20}$
- C. $\frac{9}{20}$
- D. $\frac{1}{2}$



Scan me!
For more practice
& answers

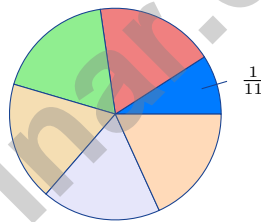


5)

The bar model represents $4b + 6 = 30$. Find b .

6) The median of a dataset shown in a stem-and-leaf plot is 58. If there are 9 data points, which value must be the 5th when arranged in order?

- | | |
|--|--------------------------------|
| <input type="checkbox"/> A. 50 | <input type="checkbox"/> C. 65 |
| <input type="checkbox"/> B. Cannot determine | <input type="checkbox"/> D. 58 |



7)

A movie theater has 550 patrons. The circle graph shows $\frac{1}{11}$ bought popcorn. How many bought popcorn?

- | | |
|--------------------------------|--------------------------------|
| <input type="checkbox"/> A. 50 | <input type="checkbox"/> C. 60 |
| <input type="checkbox"/> B. 40 | <input type="checkbox"/> D. 70 |

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

Practice Test 1 Answers and Explanations

- 1) **Choice C is correct.** (6.G.A.3) Side length = 4 units. Perimeter = $4 \times 4 = 16$ units.
- 2) **Choice C is correct.** (6.EE.C.9) Take-home: $100\% - 18\% = 82\%$ of $\$1500 = 0.82 \times 1500 = \1230 .
- 3) **Choice C is correct.** (6.RP.A.3) Multiply: $2.5 \times 6 = 15$ feet.
- 4) **The correct answer is $\frac{3}{10}$.** (6.NS.B.3) Total marbles = $7 + 3 = 10$. Red marbles = 3. Probability = $\frac{3}{10}$. This fraction is already in lowest terms.
- 5) **Choice B is correct.** (6.NS.B.3) Add: $0.75 + 1.40 + 2.10 = 4.25$. Align all decimal points first.
- 6) **Choice B is correct.** (6.NS.C.8) Same x -coordinate (-1) : $|2 - (-3)| = |2 + 3| = 5$ units.
- 7) **Choice C is correct.** (6.RP.A.1) Area = $\pi r^2 \approx \frac{22}{7} \times 19^2 = \frac{22}{7} \times 361 = \frac{7942}{7} \approx 1134.57 \approx 1134$ cm².
- 8) **Choice D is correct.** (6.RP.A.1) The order is blue to red, so start with 8 : 12. Divide both parts by 4 to simplify the ratio to 2 : 3.
- 9) **Choice A is correct.** (6.RP.A.3) Milk is the 3-part amount. Since $45 \div 3 = 15$, each part is 15 fl oz, and chocolate syrup is 2 parts: $2 \times 15 = 30$ fl oz.
- 10) **Choice D is correct.** (6.RP.A.3d) Divide cups by minutes: $54 \div 9 = 6$ cups per minute.
- 11) **Choice A is correct.** (6.RP.A.3b) $\$15 \div 6 = \2.50 per pound. This is the unit rate.
- 12) **Choice B is correct.** (6.RP.A.3) The ratio is 11 : 6. When offensive is 22 (multiply by 2), defensive is $6 \times 2 = 12$.
- 13) **Choice B is correct.** (6.RP.A.3a) If lawns mowed is on the x -axis and dollars earned is on the y -axis, the unit rate is $\frac{45}{3} = 15$ dollars per lawn.
- 14) **Choice B is correct.** (6.RP.A.3c) Since the total is 100, the percent equals the number: 23 out of 100 = 23%.
- 15) **Choice A is correct.** (6.RP.A.3c) Shaded portion is 75% of the total. If 75% equals 75 students, then $100\% = \frac{75}{0.75} = 100$ students.
- 16) **Choice C is correct.** (6.RP.A.3) Ratio 1 : 3 with 2 cups sugar: multiply by 2, so flour is $3 \times 2 = 6$ cups.
- 17) **The correct answer is 43.** (6.SP.B.4) In order: 32, 35, 38, 41, 43, 46, 49, 50, 54. With 9 values (odd), the median is the 5th value: 43.
- 18) **Choice B is correct.** (6.RP.A.3d) The table shows 1 hour = 60 minutes. For 2.5 hours: $2.5 \times 60 = 150$ minutes.
- 19) **Choice B is correct.** (6.NS.C.7d) Account 1: $I = \$500 \times 0.03 \times 3 = \45 . Account 2: $I = \$500 \times 0.04 \times 2 = \40 . Difference: $\$45 - \$40 = \$5$, with Account 1 earning more.
- 20) **Choice C is correct.** (6.NS.C.7d) Solution A: mass/volume = $50/10 = 5$. Solution B: mass/volume = $75/15 = 5$. Both solutions have the same constant ratio of 5 grams per mL.
- 21) **The correct answer is 112.** (6.NS.A.1) 28% of 400 is $0.28 \times 400 = 112$ students.
- 22) **The correct answer is Right-skewed distribution with high outliers.** (6.SP.B.5) When mean (60) > median (55), the tail points right, pulled by high values. (A) A right-skewed distribution matches. (C) High values pull mean up. (B) is wrong—left skew would give mean < median. (D) is wrong—low values would pull mean down. (E) is wrong—symmetric means mean = median.
- 23) **Choice B is correct.** (6.NS.A.1) You are counting how many $\frac{1}{4}$ -cup servings fit inside 2 cups—that's a division problem: $2 \div \frac{1}{4}$. Rewrite as 2×4 , which equals 8 servings.
- 24) **Choice A is correct.** (6.NS.B.2) Verification: $15 \times 374 = 5,610$. The worker's answer is correct with no error.
- 25) **Choice A is correct.** (6.NS.B.4) $9(5 + 2) = 9 \cdot 5 + 9 \cdot 2 = 45 + 18 = 63$. Choice A shows the correct expanded form.
- 26) **Choice C is correct.** (6.NS.C.7c) $|-3| = 3$ and $|3| = 3$, so they are equal. Option C is the only true statement.
- 27) **Choice D is correct.** (6.NS.C.6c) Statement D is false. -1.5 is actually LESS than -1.4 (further to the left on the number line). The others are all true.



Notes From the Math Gardener

Hi, Math Gardener!

◇ Look at how much you grew! 5 tests is like 5 weeks of taking care of your math garden. Every problem was a seed. Every try was water. ◇

★ **Gardeners say:** growth takes time. You can't see roots, but they are there. You can't always feel smarter, but you are. Your math garden is full! ★

Garden Check-Up

- **Roots:** STRONG! Your basic math is solid.
- **Stems:** STURDY! You can do step-by-step problems.
- **Leaves:** GREEN! You have lots of math tools.
- **Flowers:** BRIGHT! You feel proud of your work.

Gardener tip: keep watering your math garden long after the test. Every habit you built will grow with you for years!

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

Jay Daie

Your Math Gardener

PRACTICE MORE. ACHIEVE MORE.

This book provides **5 full-length Math practice tests** designed to help Grade 6 students strengthen their skills, build confidence, and excel on standardized assessments.

Each test is carefully crafted to reflect the latest standards and covers a wide range of math topics with realistic questions and detailed answer explanations.



BUILD CONFIDENCE

Practice builds familiarity and reduces test anxiety.



IMPROVE ACCURACY

Sharpen skills and avoid common mistakes.



ACHIEVE SUCCESS

Consistent practice leads to greater results.

WHAT'S INSIDE?



5 Full-Length Practice Tests

Realistic tests designed to mirror actual exam conditions.



Realistic Questions

A variety of question types to strengthen problem-solving skills.



Answer Keys & Explanations

Detailed solutions to help students learn and improve.



Performance Tracking

Track progress and identify areas that need improvement.



Comprehensive Coverage

All essential topics aligned with Grade 6 math standards.



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!**