3 FULL-LENGTH Hawaii

Aligned to State Standards

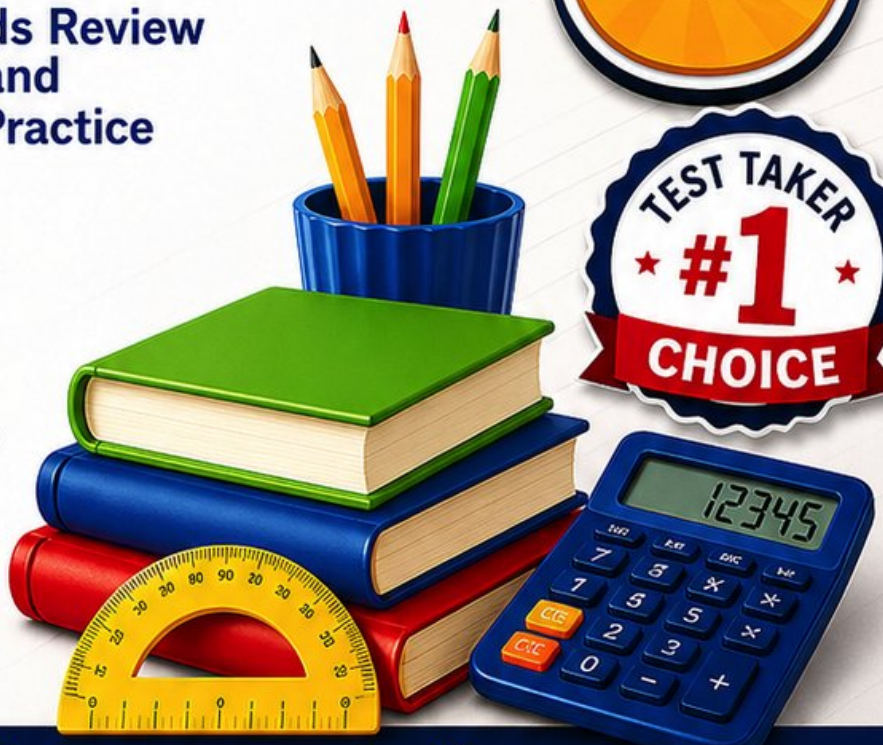
Smarter Balanced

MATH PRACTICE TESTS

Grade 5

Complete State Standards Review with Answer Key and Essential Math Skills Practice

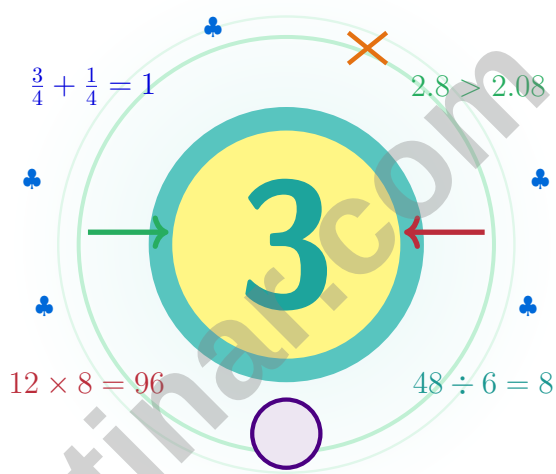
- **3 Full-Length Practice Tests**
  Aligned to State Standards
- **Covers All Grade 5 Math Topics**
  Numbers & Operations, Fractions, Decimals, Geometry, Measurement, Data & Problem Solving
- **Build Confidence**
  Strengthen Skills • Improve Accuracy • Boost Test Readiness
- **Detailed Answer Key**
  Step-by-Step Explanations for All Questions



WRITTEN FOR GRADE 5 STUDENTS | PERFECT FOR TEST PREP & REVIEW | CLASSROOM, HOME, OR SELF-STUDY USE

3 Hawaii Smarter Balanced Grade 5 Math Practice Tests

Aloha math for thinkers who paddle smart



Three full tests, a friendly quick review, smart strategy pages, and student-tested support that help Grade 5 mathematicians from The Aloha State walk in ready to think.

Jay Daie and Reza Nazari

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Hawaii Thinkers, Sharpen Your Pencils

Aloha math for thinkers who paddle smart

Hawaii Mathematicians, Read This First

Strong math work moves like an outrigger canoe: balanced strokes, steady eyes, and a calm heart on the open ocean.

Some questions will feel easy from the very first read. Others will ask you to pause, sketch, estimate, or try again. That is not a problem. That is practice doing exactly what it should do. Every honest attempt grows your math brain a little stronger.

See

See the question fully before you start the math.

Plan

Pick a strategy that fits the numbers in front of you.

Build

Build the answer step by step, no shortcuts.

A Hawaii promise to yourself: I will keep my paddling rhythm: read the wave, choose the line, and stroke through with focus.

From Cover to Cover

A simple game plan that turns practice into real progress

Step 1: Set

Set the table – pencil ready, distractions gone.
Wake up the big Grade 5 ideas before the test starts so your brain is already warmed up.

Step 2: Solve

Take one whole test in one quiet sitting.
Find a calm corner, settle in, and aim for careful, honest choices before quick ones.

Step 3: Look Back

Walk through your answers without rushing.
Circle missed questions, sort out what went sideways, and notice which skills are calling for more attention.

Step 4: Climb

Pick one or two skills to sharpen before next time.
Read the explanation, fix the work, and carry that lesson forward into the next test.

Three-Week Hawaii Game Plan

Week 1	Test 1 sets your baseline. Notice what feels easy and what wobbles.
Week 2	Test 2 is for repair. Slow down on the topics that tripped you up.
Week 3	Test 3 is for proof. Show how steady your thinking has become.

What These Tests Are For

What these practice tests help Grade 5 students build

These three practice tests welcome Grade 5 students in the Aloha State to the calm, steady style the Hawaii Smarter Balanced rewards. The goal is bigger than getting answers right. Students are practicing how to read with care, choose a strategy, solve step by step, and explain their reasoning clearly – the same way mathematicians do every single day.

Selected-Response Questions

Students solve the problem and choose the best answer. Estimating first, ruling out weak choices, and checking for reasonableness can save both time and points.

Constructed-Response Questions

Students show their steps, explain a method, or back up an answer with clear math. Clean reasoning matters because it shows how the answer was actually found.

Grade 5 Ideas That Show Up Again and Again

- place value, comparing numbers, and rounding
- multi-digit addition, subtraction, multiplication, and division
- fractions, mixed numbers, and decimals
- perimeter, area, volume, and measurement conversions
- line plots, tables, numerical patterns, and coordinate points
- geometry and multi-step real-world problems

What strong work looks like on the Smarter Balanced: the math is correct, the steps are readable, the labels and units match the problem, and the final answer truly answers the question being asked.

Table of Contents

Grade 5 Mathematics Reference Materials

PERIMETER AND AREA

Perimeter of Rectangle	$P = 2l + 2w$ or $P = 2(l + w)$
Area of Rectangle	$A = l \times w$
Area of Triangle	$A = \frac{1}{2} \times b \times h$
Volume of Rectangular Prism	$V = l \times w \times h$

LENGTH

Customary	**Metric**
1 foot (ft) = 12 inches (in.)	1 meter (m) = 100 centimeters (cm)
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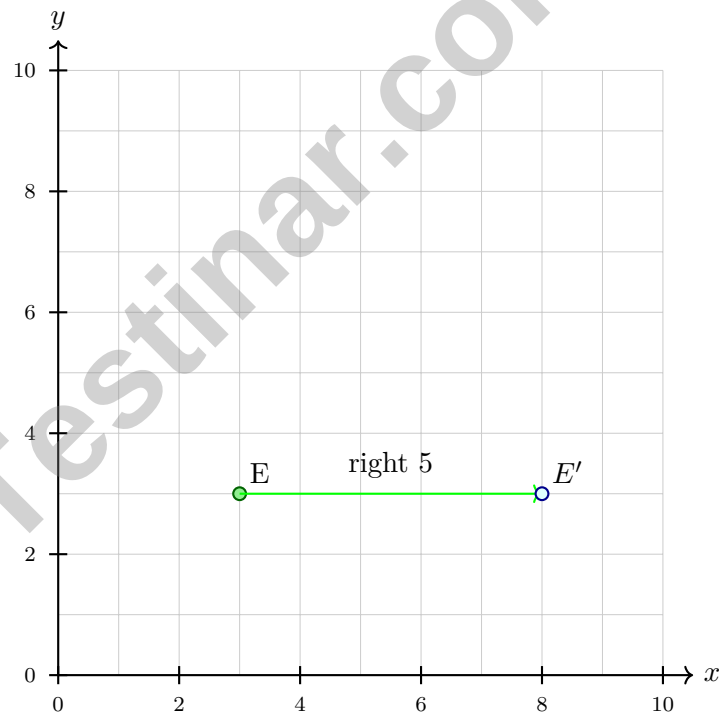
1) Maria had $10\frac{3}{8}$ cups of flour. She used $7\frac{5}{8}$ cups to bake cookies. How much flour does she have left?

☐ A. $2\frac{5}{8}$ cups
☐ B. $3\frac{1}{8}$ cups
☐ C. 3 cups
☐ D. $2\frac{3}{4}$ cups

2) A baker sells 3 dozen cupcakes. A dozen is 12. Which expression best represents total cupcakes?

☐ A. $3 + 12$
☐ B. $12 \div 3$
☐ C. $12 - 3$
☐ D. 3×12

3) Point E is at $(3, 3)$. If it is moved 5 units to the right, what will be its new coordinates?



☐ A. $(3, 8)$
☐ B. $(8, 3)$
☐ C. $(5, 3)$
☐ D. $(3, 5)$

4) Multiply: $\frac{1}{5} \times \frac{2}{7}$

☐ A. $\frac{1}{7}$
☐ B. $\frac{3}{12}$
☐ C. $\frac{2}{12}$
☐ D. $\frac{2}{35}$

5) A rectangular prism has a volume of 360 cm^3. If the length is 10 cm and width is 9 cm, what is the height?

☐ A. 3 cm
☐ B. 4 cm
☐ C. 5 cm
☐ D. 6 cm

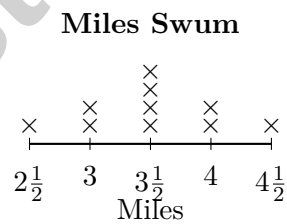
6) What is $\frac{2}{3} \times 6$?

☐ A. $\frac{12}{5}$
☐ B. 4
☐ C. $\frac{2}{18}$
☐ D. $2\frac{2}{3}$

7) Evaluate: $7 + [9 \times (8 - 5)] - 4$

☐ A. 24
☐ B. 28
☐ C. 30
☐ D. 36

8) The line plot displays the distance each swimmer swam in a practice, in miles:



How many swimmers swam at least $3\frac{1}{2}$ miles?

☐ A. 4
☐ B. 5
☐ C. 6
☐ D. 7

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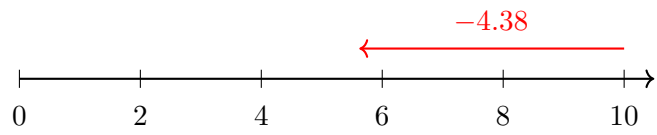
1) Use the number line to subtract. Find $10.00 - 4.38$:



☐ A. 5.72
☐ B. 6.12
☐ C. 5.62
☐ D. 5.52

2) A step-shaped solid is decomposed into three non-overlapping rectangular prisms. The prisms measure 8 centimeters by 3 centimeters by 5 centimeters, 6 centimeters by 2 centimeters by 4 centimeters, and 5 centimeters by 2 centimeters by 1 centimeter. What is the total volume?

☐ A. 168 cubic centimeters
☐ B. 58 cubic centimeters
☐ C. 130 cubic centimeters
☐ D. 178 cubic centimeters

3) Compare without calculating: $9 \times (18 + 32)$ ☐ $(9 \times 18) + 32$

☐ A. $>$
☐ B. $<$
☐ C. $=$
☐ D. Cannot tell

4) A science experiment measures 7.635 grams. Round to nearest hundredth.

☐ A. 7.6 g
☐ B. 7.63 g
☐ C. 7.64 g
☐ D. 7.7 g

5) Find: $\frac{1}{2} \div 6$.

Record your answer in the space provided.

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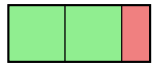
1) Is $4\frac{2}{3} + 5\frac{1}{4}$ closer to 9 or 10?

☐ A. Closer to 8
☐ B. Closer to 9
☐ C. Closer to 10
☐ D. Closer to 11

2)



$2\frac{1}{2}$

$1\frac{3}{4}$

Bar model: $2\frac{1}{2} + 1\frac{3}{4} = ?$

☐ A. $4\frac{1}{4}$
☐ B. $4\frac{1}{2}$
☐ C. $4\frac{3}{4}$
☐ D. 5

3) What is $\frac{1}{2} \div 7$?

$\frac{1}{2}$ split into 7

☐ A. $\frac{1}{14}$
☐ B. $\frac{7}{2}$
☐ C. $\frac{1}{9}$
☐ D. $\frac{2}{5}$

4) Write the fraction $\frac{15}{25}$ in simplest form.

Record your answer in the space provided.

Practice Test Answer Keys

How to use this section:

1. check your answer
2. circle missed questions
3. rework them before reading the explanation

Good correction habits build strong scores.

Practice Test Answers and Explanations

Practice Test 1 Answers and Explanations

1) **Choice D is correct.** 5.NF.A.1 $10\frac{3}{8} - 7\frac{5}{8}$: borrow 1 to get $9\frac{11}{8} - 7\frac{5}{8} = 2\frac{6}{8} = 2\frac{3}{4}$ cups.
2) **Choice D is correct.** 5.OA.A.2 A dozen means 12. Three dozen cupcakes means 3 groups of 12, represented by 3×12.
3) **Choice B is correct.** 5.G.A.2 Moving 5 units to the right adds 5 to the x-coordinate: $3 + 5 = 8$. The y-coordinate stays the same, so the new coordinates are $(8, 3)$.
4) **Choice D is correct.** 5.NF.B.5b $\frac{1}{5} \times \frac{2}{7} = \frac{1\times2}{5\times7} = \frac{2}{35}$.
5) **Choice B is correct.** 5.MD.C.5a Base area $= 10 \times 9 = 90$ cm^2. Height $= 360 \div 90 = 4$ cm.
6) **Choice B is correct.** 5.NF.B.4 $\frac{2}{3} \times 6 = \frac{12}{3} = 4$.
7) **Choice C is correct.** 5.OA.A.1 The parentheses give $8 - 5 = 3$. Then $9 \times 3 = 27$, and $7 + 27 - 4 = 30$.
8) **Choice D is correct.** 5.MD.B.2 Count X marks at $3\frac{1}{2}$, 4, and $4\frac{1}{2}$ miles. That is $4 + 2 + 1 = 7$ swimmers.
9) **Choice A is correct.** 5.NF.B.5b Student X correctly broke $1\frac{1}{2}$ into $1 + \frac{1}{2}$ and distributed: $(1 + \frac{1}{2}) \times 2 = 2 + 1 = 3$. Student Y duplicated the whole number.
10) **Choice C is correct.** 5.NF.B.5a Multiplying by 1 always gives the same number. So $16 \times 1 = 16$.
11) **Choice C is correct.** 5.NF.B.7c The student found $4 \times \frac{1}{2} = 2$. But $4 \div \frac{1}{2}$ asks how many halves are in 4 wholes. There are 2 halves in each whole, so 4 wholes contain $4 \times 2 = 8$ halves.
12) **The correct answer is 8.2.** 5.NBT.A.2 Move the decimal point two places right: $0.082 \rightarrow 8.2$.
13) **Choice C is correct.** 5.MD.C.5 Large pizzas: $2 \times 16.50 = 33.00$ dollars. Small pizzas: $3 \times 11.25 = 33.75$ dollars. Total: $33.00 + 33.75 = 66.75$ dollars.
14) **Choice C is correct.** 5.G.B.4 Using this definition, a quadrilateral with exactly one pair of parallel sides is a trapezoid. Rectangles, rhombuses, and squares have two pairs of parallel sides.
15) **Choice B is correct.** 5.NF.A.2 $7\frac{1}{12} \approx 7$ and $2\frac{11}{12} \approx 3$. So $7\frac{1}{12} + 2\frac{11}{12} \approx 7 + 3 = 10$.
16) **The correct answer is > 8; $9\frac{1}{3}$.** 5.NF.B.5a A complete response should explain that $\frac{7}{6} > 1$, so the product is greater than 8. Then compute $\frac{7}{6} \times 8 = \frac{56}{6} = \frac{28}{3} = 9\frac{1}{3}$.
17) **Choice D is correct.** 5.NBT.B.7 Add: $5.04 + 2.93 = 7.97$ (hundredths: $4 + 3 = 7$; tenths: $0 + 9 = 9$; ones: $5 + 2 = 7$).
18) **Choices A, C are correct.** 5.NBT.B.6 $576 \div 24 = 24$ and $720 \div 30 = 24$. The other quotients are $960 \div 48 = 20$ and $1{,}050 \div 50 = 21$.
19) **Choice C is correct.** 5.MD.C.5 Use the rectangular-prism volume formula: $8 \times 5 \times 5 = 200$. So the volume is 200 cubic feet.
20) **Choice B is correct.** 5.MD.A.1 Available: 3 yards = 9 feet, and $9 + 1 = 10$ feet. Needed: 15 feet. More needed: $15 - 10 = 5$ feet.
21) **Choice A is correct.** 5.NF.B.6 Area $= \frac{7}{8} \times \frac{3}{5} = \frac{21}{40}$ m^2.
22) **Choice D is correct.** 5.NBT.A.2 A power of 10 tells how many factors of 10 to use. $36 \div 10 = 3.6$. This confirms the answer.
23) **Choice B is correct.** 5.G.A.2 The x-coordinate (20) represents minutes, and the y-coordinate (50) represents pages read. So 20 minutes of reading resulted in 50 pages.
24) **Choice D is correct.** 5.OA.A.2 A quotient is a division result, so start with $36 \div 4$. The phrase "increased by 9" means add 9 to that quotient.
25) **Choice A is correct.** 5.NF.B.7c Each gallon fills 2 half-gallon containers. $8 \div \frac{1}{2} = 16$ containers.
26) **Choice C is correct.** 5.OA.B.3 The block counts are 2, 4, 6, and so on, so Figure number n has $2n$ blocks. Figure 12 has $2 \times 12 = 24$ blocks.
27) **The correct answer is 40.** 5.MD.C.4 Multiply length, width, and height to count the unit cubes. $2 \times 4 \times 5 = 40$ cubic units.
28) **Choice D is correct.** 5.NF.B.7c Each whole contains 3 pieces of size $\frac{1}{3}$. With 1 whole, there are $1 \times 3 = 3$ pieces.
29) **Choice C is correct.** 5.NF.A.1 LCM(10,4) = 20. $\frac{7}{10} = \frac{14}{20}$ and $\frac{1}{4} = \frac{5}{20}$. $\frac{14}{20} + \frac{5}{20} = \frac{19}{20}$.

Authors' Notes

From a Friend Who Believes in You

Hi, Brilliant Friend!

◇ I have to tell you something important: I am proud of you. You completed 3 full practice tests. That takes time, focus, and heart. Many students never push themselves like that. You did. That tells me everything about your work ethic. ◇

⋆ **Here's a friendly reminder:** a test does not measure your worth. It measures one slice of your skills on one day. You are much more than a score. The work you put in to grow—that is the real win. ⋆

Things I Want You to Remember

- **You are capable.** Every test you finished proves it.
- **You are resilient.** You worked through hard problems.
- **You are growing.** Every mistake taught you something new.
- **You are ready.** The skills are inside you.

One last thing: when you sit down on test day, take a deep breath, smile a tiny smile, and remember that someone (me!) believes in you. You've got this.

If you'd like to share your experience or have questions, please email me at reza@testinar.com. I'd love to hear from you!

Reza Nazari & Jay Daie

Your Math Friend (Always in Your Corner)

Build Skills. Boost Confidence. Excel on the Grade 5 Math Test.

Help your child succeed with confidence! This book includes **3 full-length Grade 5 Math practice tests** aligned to state standards. With a focus on essential skills, problem solving, and test readiness, it's the perfect resource for classroom, home, or on-the-go practice.

WHAT'S INSIDE:

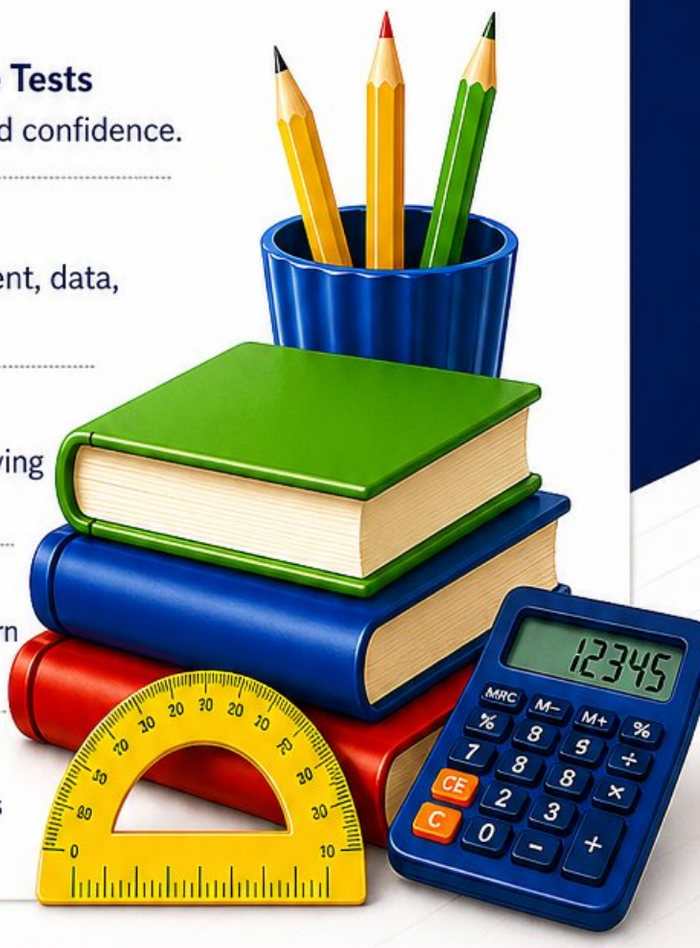
3 Full-Length Grade 5 Math Practice Tests
Realistic test format to build familiarity and confidence.

Covers All Essential Math Topics
Fractions, decimals, geometry, measurement, data, number operations, and more.

Build Strong Math Skills
Strengthen understanding and problem-solving through varied question types.

Detailed Answer Key
Step-by-step explanations to help your child learn from mistakes and improve.

Track Progress & Improve
Use score trackers to identify strengths and focus on areas that need more practice.



The Smarter Way to Prepare!

Consistent practice builds stronger skills, sharper thinking, and test-day success.

- ✓ Reinforce classroom learning
- ✓ Improve accuracy and speed
- ✓ Reduce test anxiety
- ✓ Achieve your best score!

Visit **testinar.com/math5** for more Grade 5 math resources and practice materials!