7 Hawaii Smarter Balanced

GRADE 5

MATHEMATICS PRACTICE TESTS

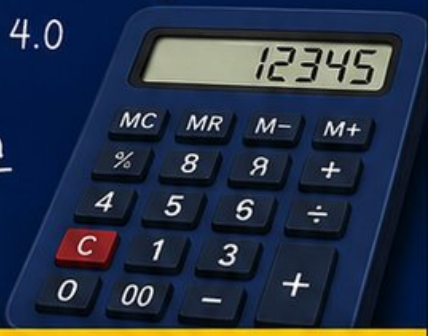
PRACTICE
PREPARE
SUCCEED

Comprehensive Standards-Aligned Review for Strong Grade 5 Math Performance

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

$2.4 + 1.6 = 4.0$

$A = \frac{bh}{2}$



7 FULL-LENGTH PRACTICE TESTS
Realistic style questions

STANDARDS-ALIGNED
Covers all Grade 5 standards

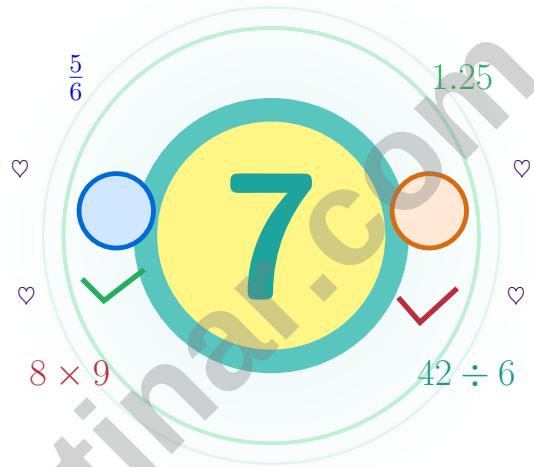
BUILD CONFIDENCE
Target weak areas and improve performance

ACHIEVE SUCCESS
Develop skills, stay prepared, excel on test day

★ PRACTICE TODAY. PERFORM TOMORROW. SUCCEED FOREVER. ★

7 Hawaii Smarter Balanced Grade 5 Math Practice Tests

Seven full tests and a coach's voice on every page



Seven full tests, a concise review, and helpful support that turns Grade 5 practice in The Aloha State into steady, confident growth from page one to the final check.

Jay Daie and Reza Nazari

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Hawaii Math Crew, Welcome to the Path

Seven steps, seven growth checks, one calm routine

To the Grade 5 Mathematician

This practice book is your steady companion for seven tests, not a place to be perfect. Strong math work moves like an outrigger canoe: balanced strokes, steady eyes, and a calm heart on the open ocean.

Use these seven tests like stepping-stones. Take one test at a time, check your answers honestly, and notice which skills need more attention. Small improvements add up across seven rounds.

Notice

Notice the numbers, units, and any tricky words.

Sketch

Sketch a picture, table, or quick number line.

Confirm

Confirm your answer with an estimate or check.

A strong habit for Hawaii mathematicians: read carefully, estimate when it helps, show your steps, and keep going even when a question feels tricky. That is how steady math confidence is built.

How to Get the Most Out

A simple routine that turns practice into progress

Step 1: Plan

Plan a quiet hour for one full test.
Spend a few minutes waking up your memory before the test begins.

Step 2: Practice

Take the test with calm focus.
Work in a calm spot and focus on careful thinking before speed.

Step 3: Inspect

Inspect every answer like a careful builder.
Circle missed questions and notice which topics keep showing up.

Step 4: Adjust

Adjust what needs adjusting for the next test.
Read the explanation, repair the work, and bring that lesson into the next test.

A Good 7-Week Hawaii Rhythm

Week 1	Take Test 1 and find your launch line.
Week 2	Take Test 2 and slow down on word problems.
Week 3	Take Test 3 and lift fraction and decimal work.
Week 4	Take Test 4 and pay close attention to labels and units.
Week 5	Take Test 5 and compare your habits with your first test.
Week 6	Take Test 6 and practice staying calm during tricky questions.
Week 7	Take Test 7 with calm strokes and careful aim.

Table of Contents

Grade 5 Mathematics Reference Materials

PERIMETER AND AREA

Perimeter of Rectangle	$P = 2l + 2w$ or $P = 2(l + w)$
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1 minute (min) = 60 seconds (sec)	1 week = 7 days
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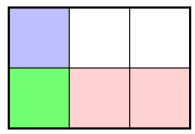
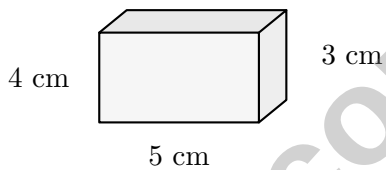
1) An area model can show $\frac{1}{2} \times \frac{1}{3}$. What is the product?



☐ A. $\frac{2}{3}$
☐ B. $\frac{1}{5}$
☐ C. $\frac{2}{5}$
☐ D. $\frac{1}{6}$

2) A rectangular prism has a length of 5 cm, width of 4 cm, and height of 3 cm. What is the volume?



☐ A. 12 cm^3
☐ B. 30 cm^3
☐ C. 48 cm^3
☐ D. 60 cm^3

3) A museum case has volume 378 cubic feet. Its base is 9 feet by 6 feet. What is its height?

☐ A. 6 feet
☐ B. 8 feet
☐ C. 7 feet
☐ D. 54 feet

4) Convert: 5 pounds = ? ounces.

Record your answer in the space provided.

5) Express $\frac{92}{100}$ as a decimal and word form.

☐ A. 0.92; ninety-two tenths
☐ B. 0.092; ninety-two thousandths
☐ C. 0.92; ninety-two hundredths
☐ D. 9.2; ninety-two tenths

6) The output is 4 more than the input. What is the 5th ordered pair if the inputs start at 1?

☐ A. $(4, 8)$
☐ B. $(5, 9)$
☐ C. $(6, 10)$
☐ D. $(5, 1)$

7) Add: $\frac{4}{9} + \frac{1}{3}$

☐ A. $\frac{5}{12}$
☐ B. $\frac{7}{9}$
☐ C. $\frac{5}{9}$
☐ D. $\frac{4}{9}$

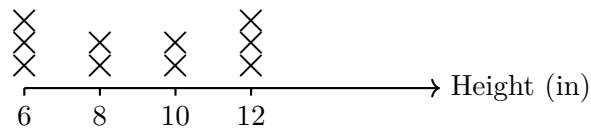
8) A store has 72 apples. $\frac{1}{8}$ of them are green and $\frac{1}{3}$ are red. The rest are yellow. How many apples are yellow?

☐ A. 9 apples
☐ B. 24 apples
☐ C. 39 apples
☐ D. 40 apples

9) A rectangular prism has volume 450 cm^3 and base area 50 cm^2. What is the height?

☐ A. 7 cm
☐ B. 8 cm
☐ C. 10 cm
☐ D. 9 cm

10) The line plot shows the height (in inches) of flowers in a garden:



What is the total height of all flowers?

☐ A. 84 inches
☐ B. 88 inches
☐ C. 90 inches
☐ D. 96 inches

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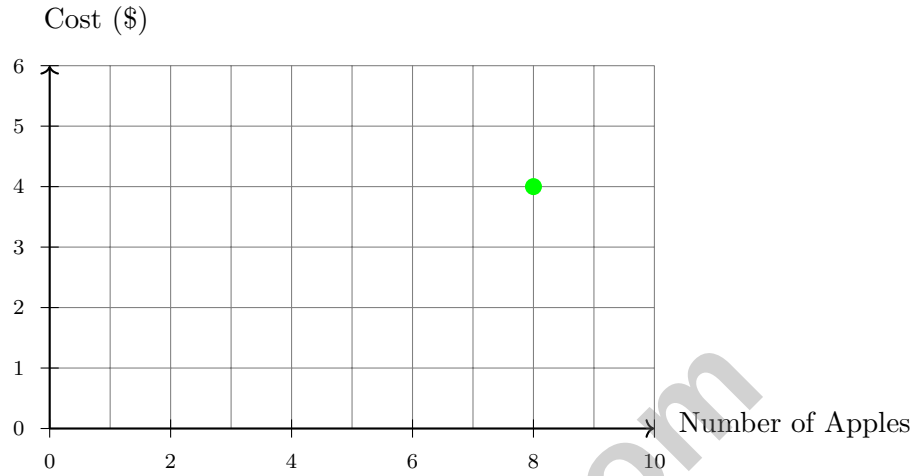
1) A grocery store tracks the cost of apples. The graph shows the relationship between the number of apples bought and the total cost. What does the point $(8, 4)$ mean on this graph?



☐ A. 4 apples cost \$8
☐ B. 8 apples cost \$4
☐ C. 12 apples cost \$8
☐ D. \$4 buys 12 apples

2) Complete the table:

Gallons	Quarts	Pints
1	4	8
2	8	16
?	12	24

☐ A. 2 gallons
☐ B. 3 gallons
☐ C. 4 gallons
☐ D. 6 gallons

3) Which expression equals one-third of $(27 + 18)$?

☐ A. $(27 + 18) \div 3$
☐ B. $3 \times (27 + 18)$
☐ C. $27 + (18 \div 3)$
☐ D. $(27 \div 3) + 18$

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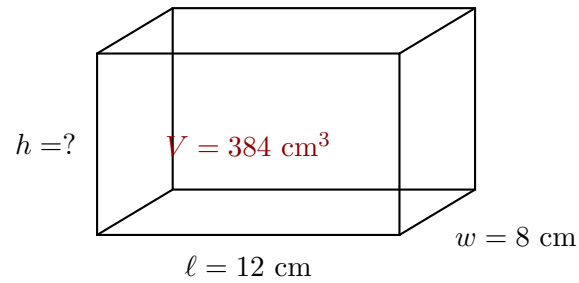
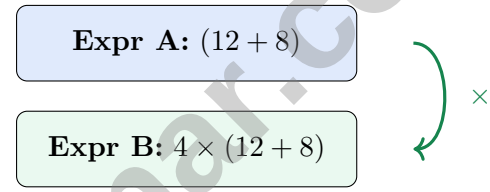
1) Find the height of this rectangular prism.



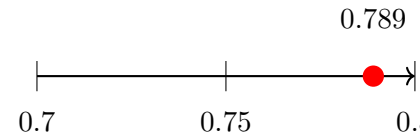
☐ A. 2 cm
☐ B. 3 cm
☐ C. 4 cm
☐ D. 5 cm

2) The diagram compares two expressions. Which description fits Expression B relative to Expression A?



☐ A. 4 more than A
☐ B. 4 times as much as A
☐ C. $\frac{1}{4}$ of A
☐ D. 4 less than A

3) Round 0.789 to the nearest tenth.



☐ A. 0.7
☐ B. 0.78
☐ C. 0.8
☐ D. 0.9

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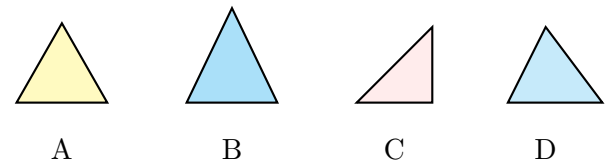
1) Which triangle is equilateral?

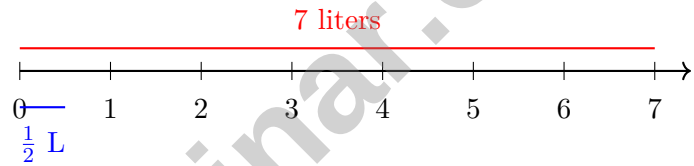


☐ A. A
☐ B. B
☐ C. C
☐ D. D

2) In decimal notation, write three and eight hundredths.

☐ A. 3.8
☐ B. 3.08
☐ C. 3.008
☐ D. 38

3) How many $\frac{1}{2}$-liter bottles are needed to hold 7 liters of juice?



☐ A. 7
☐ B. 10
☐ C. 12
☐ D. 14

4) A recipe uses $\frac{3}{4}$ cup of oats for one batch. How many cups are needed for 6 batches?

☐ A. $4\frac{1}{2}$ cups
☐ B. $3\frac{3}{4}$ cups
☐ C. $2\frac{1}{2}$ cups
☐ D. $\frac{9}{4}$ cups

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.B.4b In an area model, divide one dimension into 2 equal parts (for $\frac{1}{2}$) and the other into 3 equal parts (for $\frac{1}{3}$). The overlapping shaded region is 1 out of 6 total squares, so the product is $\frac{1}{6}$.

2) **Choice D is correct.** 5.MD.C.5a Volume = length × width × height = $5 \times 4 \times 3 = 60$ cm^3.

3) **Choice C is correct.** 5.MD.C.5 The base layer has $9 \times 6 = 54$ square units. Divide the volume by the base area: $378 \div 54 = 7$, so the height is 7 feet.

4) **The correct answer is 80.** 5.MD.A.1 $5 \times 16 = 80$ oz. Each pound has 16 ounces, so 5 pounds has five groups of 16 ounces.

5) **Choice C is correct.** 5.NBT.A.3a $\frac{92}{100}$ is expressed as the decimal 0.92 and read as "ninety-two hundredths".

6) **Choice B is correct.** 5.G.A.2 If the inputs start at 1, the 5th pair uses input 5. The output is $5 + 4 = 9$, so the pair is $(5, 9)$.

7) **Choice B is correct.** 5.NF.A.1 LCM(9,3) = 9. $\frac{1}{3} = \frac{3}{9}$. $\frac{4}{9} + \frac{3}{9} = \frac{7}{9}$.

8) **Choice C is correct.** 5.NF.B.6 Green: $\frac{1}{8} \times 72 = 9$. Red: $\frac{1}{3} \times 72 = 24$. Total green and red: $9 + 24 = 33$. Yellow: $72 - 33 = 39$ apples.

9) **Choice D is correct.** 5.MD.C.5 Divide the volume by the base area: $450 \div 50 = 9$, so the height is 9 cm.

10) **Choice C is correct.** 5.MD.B.2 Add the flower heights shown by the line plot: $(6 \times 3) + (8 \times 2) + (10 \times 2) + (12 \times 3) = 18 + 16 + 20 + 36 = 90$ inches.

11) **Choice A is correct.** 5.NF.B.7c Each liter has four quarter-liter servings. $6 \div \frac{1}{4} = 6 \times 4 = 24$ families.

12) **Choice D is correct.** 5.NBT.A.2 Each term is one-tenth of the term before it: $500 \to 50 \to 5 \to 0.5$. The rule is divide by 10 each time.

13) **Choice B is correct.** 5.NBT.B.6 Check each row. A should be 24, not 23. B is correct because $17 \times 35 = 595$. C should be 23, not 24. D should be 27, not 28.

14) **Choice B is correct.** 5.MD.C.5c Find each part first: Prism A is $5 \times 4 \times 6 = 120$ cubic inches, and Prism B is $6 \times 4 \times 2 = 48$ cubic inches. Because the parts do not overlap, add them: $120 + 48 = 168$ cubic inches.

15) **Choice A is correct.** 5.NBT.A.2 The basic fact is $3 \times 4 = 12$. The factors 300 and 400 have four zeros total, making 120,000, which has 4 trailing zeros.

16) **Choice B is correct.** 5.G.B.3 By definition, a parallelogram has 2 pairs of parallel sides. This includes rectangles, rhombuses, and general parallelograms.

17) **The correct answer is 0.07.** 5.NBT.A.1 The digit 7 is in the hundredths place, so it represents $7 \times 0.01 = 0.07$.

18) **Choice D is correct.** 5.NBT.B.7 Align decimals: $3.40 + 0.27$. Hundredths: $0 + 7 = 7$; tenths: $4 + 2 = 6$; ones: $3 + 0 = 3$. Sum is 3.67.

19) **Choice B is correct.** 5.G.A.2 The first coordinate, 8, matches the x-axis label: minutes. The second coordinate, 2, matches the y-axis label: miles completed. So the point means miles completed is 2 when minutes is 8.

20) **Choice D is correct.** 5.MD.C.3b The arrangement has 3 cubes in one direction, 5 in another, and 2 layers. Multiplying gives $3 \times 5 \times 2 = 30$ unit cubes.

21) **Choices A, B are correct.** 5.OA.A.2 A is true because 3 copies of $(6 + 4)$ can be written as 2 copies plus 1 more copy. B is true because 10 groups of 7 are greater than 10 groups of $7 - 1$. C adds an extra 9, and D leaves out one group of 5.

22) **Choice C is correct.** 5.NF.B.7c The unit fraction is the amount being shared, so divide $\frac{1}{5}$ by 4. The equation is $\frac{1}{5} \div 4 = n$.

23) **Choice C is correct.** 5.NF.B.7c Each whole contains 4 pieces of size $\frac{1}{4}$. With 2 wholes, there are $2 \times 4 = 8$ pieces.

24) **Choice A is correct.** 5.MD.B.2 Count the X marks above each height. The height $2\frac{1}{4}$ cm has only 1 mark, so it is the least common.

25) **Choice B is correct.** 5.MD.C.5a Original: $V = 8 \times 5 \times 3 = 120$ in^3. New height = 6 in. New volume = $8 \times 5 \times 6 = 240$ in^3.

26) **Choice B is correct.** 5.NF.A.2 LCD = 30. $\frac{6}{10} = \frac{18}{30}$ and $\frac{1}{3} = \frac{10}{30}$. Then $\frac{18}{30} - \frac{10}{30} = \frac{8}{30}$, which simplifies to $\frac{4}{15}$.

Dear Student,

⋆ Word problems get easier when you know what to look for. Completing seven tests means you practiced turning stories into math. That is a powerful skill. ⋆

◇ **A smart move:** slow down and translate. Circle the question. Underline the facts. Then choose an operation. ◇

Word-Problem Steps

- **What is asked?** write it in your own words.
- **What is given?** list the important numbers.
- **What operation?** decide and write a quick plan.
- **Does it make sense?** estimate and check.

You've practiced this skill many times—use it confidently on test day.

Email me at reza@testinar.com.

Reza Nazari & Jay Daie

Your Math Coaches (Translate and Solve)

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Timed practice helps improve speed and accuracy.

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- ✓ Homework Help
- ✓ Test Preparation
- ✓ Summer Learning
- ✓ On-the-Go Practice

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