

9

Washington

Smarter Balanced

GRADE 5 MATHEMATICS PRACTICE TESTS

Full-Length Standards-Aligned Practice
for Strong Math Performance

$$A = l \times w$$

$$x^2 + 3x - 4 = 0$$

$$y = 2x + 1$$



9
FULL-LENGTH
PRACTICE
TESTS

$$2,345 \times 6 = 14,070$$



$$\frac{3}{4} + \frac{1}{8} = \frac{7}{8}$$

$$7.2 \div 0.8 = 9$$



$$(12 + 8) \div 4 = 5$$



Build Confidence



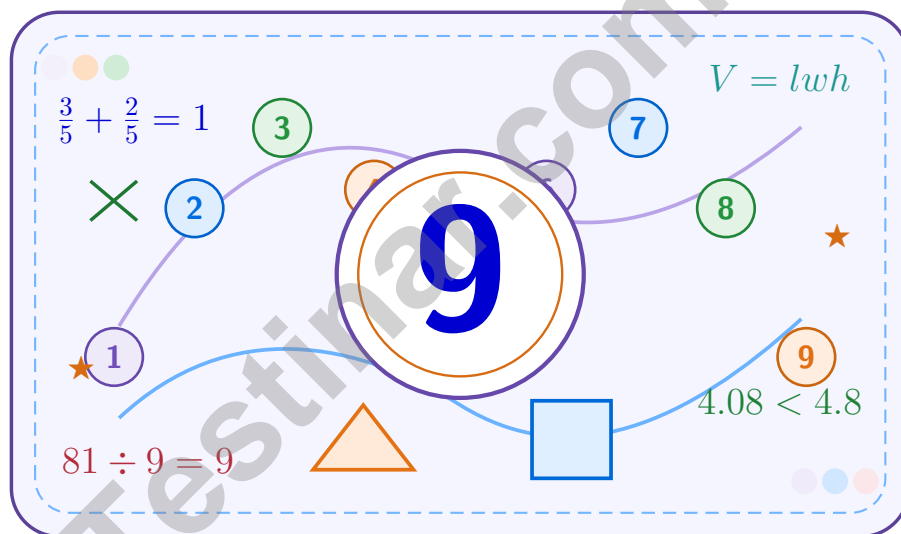
Improve Math Skills



Achieve Success

9 Washington Smarter Balanced Grade 5 Math Practice Tests

A nine-step confidence climb with clear review, smart strategy, and practice that gets stronger every round



Nine full tests, focused skill boosters, and student-friendly support from start to finish for Grade 5 mathematicians who want to climb higher.

Jay Daie and Reza Nazari



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Welcome to the Confidence Climb

This book is here to help you practice with purpose and rise step by step

To the Grade 5 Mathematician

This practice book is a place to think, try, fix, and grow. You do not have to be perfect on the first question or the first test. What matters most is careful effort, clear work, and learning from each round of practice.

Use these nine 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 fast.

Try

Give each problem your best thinking.

Check

Study mistakes and learn what happened.

Rise

Bring that lesson into the next round.

A strong habit for every page: 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 Use This Book

A simple practice routine that turns nine tests into steady growth

A Nine-Session Climb Map

Session	Mission Focus
1	Take Test 1; review place value and operation slips.
2	Take Test 2; keep work neat and easy to read.
3	Take Test 3; give extra time to fractions and decimals.
4	Take Test 4; slow down on word problems and units.
5	Take Test 5; compare scores and habits with earlier rounds.
6	Take Test 6; notice which habits are now automatic.
7	Take Test 7; explain open-ended answers clearly.
8	Take Test 8; review topics that still need attention.
9	Take Test 9; finish with calm, careful, confident work.

Step 1: Warm Up

Start with the quick review.
Spend a few minutes refreshing the ideas before you start a test.

Step 2: Take the Test

Take one full practice test.
Work in a quiet space and let accuracy matter more than speed.

Step 3: Study the Pattern

Check your work honestly.
Circle missed questions and notice patterns in the mistakes.

Step 4: Learn, Then Retry

Read the explanation and try again.
Learning happens after the test too. Fixing mistakes is one of the smartest parts of practice.



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Test Overview

What this practice book helps students do

These practice tests are designed to help Grade 5 students get comfortable with the kind of thinking used on the Washington Smarter Balanced. The goal is bigger than only getting answers right. Students are practicing how to read closely, choose a strategy, solve carefully, and explain their work when needed.

Selected-Response Questions

Students solve the problem and choose the best answer. Estimating first and crossing out weak choices can save time and points.

Constructed-Response Questions

Students show their thinking, steps, models, or explanations. Even when unsure, writing what they know can help organize the problem.

Grade 5 Skills You Will Practice Often

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

What strong work looks like: the answer is correct, the steps are clear, the labels or units are included, and the final result makes sense.



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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

1 foot (ft) = 12 inches (in.)

1 yard (yd) = 3 feet (ft)

1 yard (yd) = 36 inches (in.)

Metric

1 meter (m) = 100 centimeters (cm)

1 centimeter (cm) = 10 millimeters (mm)

1 kilometer (km) = 1,000 meters (m)

CAPACITY

Customary

1 cup (c) = 8 fluid ounces (fl oz)

1 pint (pt) = 2 cups (c)

1 quart (qt) = 2 pints (pt)

1 gallon (gal) = 4 quarts (qt)

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WEIGHT AND MASS

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TIME

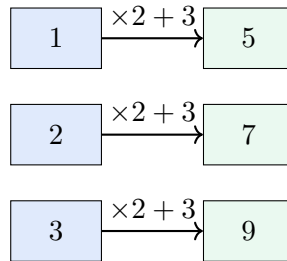
1 minute (min) = 60 seconds (sec) 1 week = 7 days

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1 day = 24 hours (hr) 1 year = 52 weeks

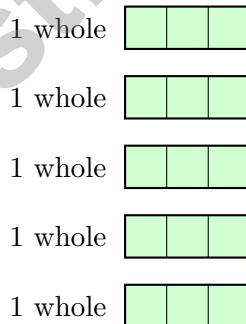


- 1) Use the rule shown in the arrow diagram to find which input gives 13.



Which input would give an output of 13?

- | | |
|-------------------------------|-------------------------------|
| <input type="checkbox"/> A. 4 | <input type="checkbox"/> C. 7 |
| <input type="checkbox"/> B. 5 | <input type="checkbox"/> D. 8 |
- 2) A toy chest measures 7 meters long, 3 meters wide, and 4 meters tall. What is its volume?
- | | |
|---|---|
| <input type="checkbox"/> A. 21 cubic meters | <input type="checkbox"/> C. 12 cubic meters |
| <input type="checkbox"/> B. 28 cubic meters | <input type="checkbox"/> D. 84 cubic meters |
- 3) The model shows 5 wholes, with each whole cut into pieces of size $\frac{1}{3}$. How many pieces of size $\frac{1}{3}$ are there in all?

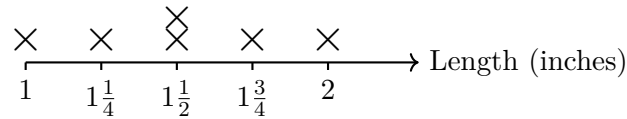


5 wholes, each cut into pieces of size $\frac{1}{3}$

- | | |
|--------------------------------|-------------------------------|
| <input type="checkbox"/> A. 15 | <input type="checkbox"/> C. 3 |
| <input type="checkbox"/> B. 8 | <input type="checkbox"/> D. 5 |



4) The line plot below shows lengths of ribbon pieces, in inches, collected by an art club:



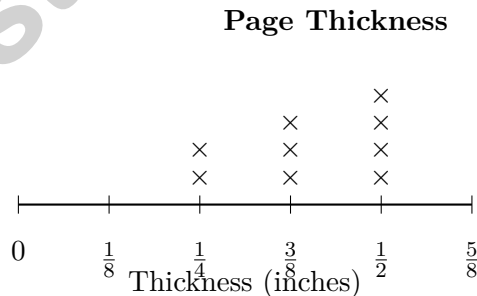
The club uses only the pieces longer than $1\frac{1}{2}$ inches. What is the total length of those pieces?

- A. $3\frac{3}{4}$ inches
- B. $4\frac{1}{2}$ inches
- C. $5\frac{3}{4}$ inches
- D. $6\frac{1}{2}$ inches

5) Compare using $<$, $>$, or $=$: 0.342 ____ 0.386 .

Record your answer in the space provided.

6) The line plot shows the thickness (in inches) of pages in different books:



What is the most common page thickness?

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



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1) Which statement is true?

A. $819 \div 27 = 30 \text{ R}9$

C. $819 \div 27 = 30 \text{ R}0$

B. $819 \div 27 = 30 \text{ R}18$

D. $819 \div 27 = 31 \text{ R}12$

2) Which division problem matches the model? (A bar marked $\frac{1}{4}$ is divided into 4 equal sections.)



$\frac{1}{4}$

A. $\frac{1}{4} \div 4$

C. $4 + \frac{1}{4}$

B. $\frac{1}{4} \times 4$

D. $\frac{4}{1} \div \frac{1}{4}$

3) A rectangular aquarium has dimensions 20 inches, 12 inches, and 15 inches. What is the volume?

Aquarium

20 in \times 12 in \times 15 in

A. 2400 in^3

C. 3600 in^3

B. 3000 in^3

D. 4000 in^3

4) Without multiplying exactly, is $\frac{9}{8} \times \frac{3}{5}$ greater than, less than, or equal to $\frac{3}{5}$? Record $>$, $<$, or $=$.

Record your answer in the space provided.



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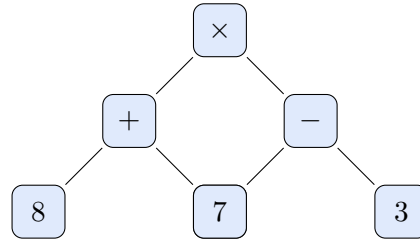
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- 1) The expression tree shows how to evaluate the grouped expression $((8 + 2) \times (7 - 3))$. What is the final value?



- A. 30
- B. 60
- C. 50
- D. 40
- 2) Number line: Start at 1. Back $\frac{1}{4}$, then back $\frac{1}{6}$. Where?
- A. $\frac{2}{10}$
- B. $\frac{5}{12}$
- C. $\frac{8}{12}$
- D. $\frac{7}{12}$
- 3) A bottled water company sells water in packs of 6. Each bottle holds 0.5 liters. How many liters are in one pack?
- A. 2.5 liters
- B. 4.0 liters
- C. 3.5 liters
- D. 3.0 liters
- 4) Convert: 36 inches = ? feet.

Record your answer in the space provided.



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Scan me

1) Simplify before multiplying: $\frac{5}{10} \times \frac{2}{3}$. Which choice shows the product in simplest form?

A. $\frac{10}{30}$

B. $\frac{1}{3}$

C. $\frac{2}{5}$

D. $\frac{5}{6}$

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

A. $3 + 12$

B. $12 \div 3$

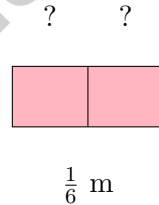
C. $12 - 3$

D. 3×12

3) A triangle has one angle of 95 degrees, one angle of 50 degrees, and one angle of 35 degrees. Classify it based on its angles.

 A. Acute B. Right C. Equilateral D. Obtuse

4) The fraction bar shows $\frac{1}{6}$ of a meter. This length is shared equally among 2 people. How much does each person get?



A. $\frac{1}{3}$ m

B. $\frac{1}{12}$ m

C. $\frac{1}{6}$ m

D. $\frac{1}{4}$ m

5) Which statement is false without calculating?

A. $15 \times 8 = 8 \times 15$

B. $(4 + 7) + 9 = 4 + (7 + 9)$

C. $24 - 10 = 24 + 10$

D. $6 \times (3 + 5) = 6 \times 3 + 6 \times 5$



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 Washington scores.

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Practice Test Answers and Explanations

Practice Test 1 Answers and Explanations

- 1) **Choice B is correct.** (5.OA.B.3) Using the rule $\times 2 + 3$: when input is 5, output = $5 \times 2 + 3 = 13$.
- 2) **Choice D is correct.** (5.MD.C.5) Use the rectangular-prism volume formula: $7 \times 3 \times 4 = 84$. So the volume is 84 cubic meters.
- 3) **Choice A is correct.** (5.MD.C.5) Each whole contains 3 pieces of size $\frac{1}{3}$. With 5 wholes, there are $5 \times 3 = 15$ pieces.
- 4) **Choice A is correct.** (5.MD.B.2) The pieces longer than $1\frac{1}{2}$ inches are one piece of $1\frac{3}{4}$ inches and one piece of 2 inches. Their total length is $1\frac{3}{4} + 2 = 3\frac{3}{4}$ inches.
- 5) **The correct answer is <.** (5.NBT.A.3b) Tenths are equal (both 3). Hundredths: 4 vs. 8; since $4 < 8$, $0.342 < 0.386$.
- 6) **Choice C is correct.** (5.NBT.A.3b) $\frac{1}{4}$ has 2 marks, $\frac{3}{8}$ has 3 marks, $\frac{1}{2}$ has 4 marks, and $\frac{5}{8}$ has 0. The most common thickness is $\frac{1}{2}$ inch.
- 7) **Choice D is correct.** (5.NF.B.5b) Multiply the numerators and denominators: $\frac{2}{7} \times \frac{1}{3} = \frac{2 \times 1}{7 \times 3} = \frac{2}{21}$.
- 8) **Choice C is correct.** (5.NF.B.5b) $3.5 \times 10 = 35$ mm (move decimal 1 place right).
- 9) **Choice D is correct.** (5.NBT.A.2) Since $11 \div \frac{1}{2} = 11 \times 2 = 22$, the whole number is 11.
- 10) **Choice D is correct.** (5.NF.B.7c) Multiplying by 10^2 means multiplying by 100, so the value becomes 100 times as large.
- 11) **Choice D is correct.** (5.NBT.A.2) The tenths digit is 7. Since $7 \geq 5$, round ones up: $156 \rightarrow 157$. So 156.78 miles rounds to 157 miles.
- 12) **The correct answer is (4, 20).** (5.NBT.A.4) The 4th term of Pattern A is 4, and the 4th term of Pattern B is 20. So the ordered pair is (4, 20).
- 13) **The correct answer is $\frac{7}{12}$.** (5.G.A.2) LCD = 12. $\frac{4}{12} + \frac{3}{12} = \frac{7}{12}$.
- 14) **Choice D is correct.** (5.NF.A.1) Since 12 inches = 1 foot, divide 36 by 12: $36 \div 12 = 3$ feet.
- 15) **Choice D is correct.** (5.OA.A.2) Both expressions multiply by the same grouped amount, (3 + 2). Since 1,205 is greater than 5, the first product must be greater.
- 16) **Choice D is correct.** (5.OA.A.2) The thousandths place is the third position to the right of the decimal point. In 11.247, the digit 7 is in the thousandths place.
- 17) **Choice D is correct.** (5.NF.B.5b) Two groups of $2\frac{1}{3}$ are $2\frac{1}{3} + 2\frac{1}{3} = 4\frac{2}{3}$. The student's answer $4\frac{1}{3}$ shows they doubled the whole number 2 to 4 but left the $\frac{1}{3}$ unchanged.
- 18) **Choice D is correct.** (5.NF.B.6) Amount cut off: $\frac{1}{4} \times \frac{8}{10} = \frac{8}{40} = \frac{1}{5}$ meter. Remaining: $\frac{8}{10} - \frac{1}{5} = \frac{8}{10} - \frac{2}{10} = \frac{6}{10}$ meter.
- 19) **Choice C is correct.** (5.MD.C.3b) Volume measures the amount of space inside a solid figure, so it is measured in cubic units such as cubic inches.
- 20) **Choice C is correct.** (5.MD.C.4) Volume = $4 \times 2 \times 3 = 24$ unit cubes.
- 21) **Choices A, B are correct.** (5.MD.C.4) The base area is $4 \times 3 = 12$ square units. Then $48 \div 12 = 4$, so the height is 4 units. C and D come from mixing up the height with the volume.
- 22) **Choice B is correct.** (5.NF.A.2) $\frac{8}{11}$ is a little less than $\frac{3}{4}$, and the other addend is $\frac{3}{4}$. Together they are a little less than $1\frac{1}{2}$, so the sum is between 1 and $1\frac{1}{2}$.
- 23) **Choice D is correct.** (5.G.B.4) One 90-degree angle = right; all different sides = scalene. Combined: right scalene.
- 24) **Choice B is correct.** (5.G.B.4) Dividing by 1,000 moves the decimal 3 places left: $64 \rightarrow 6.4 \rightarrow 0.64 \rightarrow 0.064$.
- 25) **Choice D is correct.** (5.NBT.A.2) First write "3 times 12" as 3×12 . Then subtract 8 from that product: $3 \times 12 - 8$.
- 26) **Choice D is correct.** (5.OA.A.2) Total needed: 3 liters = 3,000 mL. Chef has: 2 liters 250 mL = 2,250 mL. Remaining: $3,000 - 2,250 = 750$ mL.
- 27) **Choice A is correct.** (5.G.B.3) A pentagon is a polygon with 5 straight sides and 5 vertices. A quadrilateral has 4 sides, and a rectangle is a type of quadrilateral.
- 28) **Choice C is correct.** (5.OA.A.1) Find the whole divisor before dividing. First $(4 + 2) = 6$, then $6 \times 2 = 12$, and finally $72 \div 12 = 6$.



Authors' Notes

From Your Math Family

Dear Member of the Math Family,

◇ Welcome to a special note from your math family. You finished 9 full practice tests, and that hard work matters more than any single score. We see you. We're proud of you. ◇

★ **What our math family knows:** math is a journey, not a one-time event. You've taken many steps already. The test is just one stop on a much longer path. Every skill you've built is yours forever. ★

What Your Math Family Sees

- **Effort:** STRONG! You showed up again and again.
- **Growth:** REAL! You can solve problems today you couldn't before.
- **Courage:** BRIGHT! You faced hard problems with brave thinking.
- **Future:** BIG! Your math journey is just beginning.

Family tip: on test day, picture us standing behind you, smiling and rooting for you. You're not alone. Your math family is with you. Now go show what you've learned.

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 Family (Always With You)

PRACTICE MORE. ACHIEVE MORE.

Give your child the edge they need to excel in **Grade 5 Math!** This book includes **9 full-length** practice tests designed to build confidence, sharpen skills, and improve test performance.

9

**FULL-LENGTH
PRACTICE
TESTS**

- ✓ Realistic.
- ✓ Rigorous.
- ✓ Results-Driven.

More practice today for a **stronger** tomorrow.



THIS BOOK HELPS YOUR CHILD:



Build Confidence

Familiar, focused practice reduces anxiety and boosts self-belief.



Strengthen Skills

Reinforces key math concepts through high-quality, standards-aligned questions.



Improve Test Readiness

Full-length tests help students understand test format, pacing, and question types.



Track Progress

Identify strengths and target areas with purposeful practice.



Achieve Success

Better preparation leads to higher scores and bright futures.

COVERS ALL ESSENTIAL TOPICS

- ✓ Whole Numbers & Operations
- ✓ Fractions & Decimals
- ✓ Algebraic Thinking
- ✓ Geometry
- ✓ Measurement & Data
- ✓ Graphing & Data Analysis
- ✓ Number Patterns
- ✓ Word Problems
- ✓ Ratio & Proportion
- ✓ Perimeter, Area & Volume
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