

9

Maine

Through Year Assessment

GRADE 5 MATHEMATICS PRACTICE TESTS

Full-Length Standards-Aligned Practice
for Strong Math Performance

$$A = l \times w$$

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

$$y = 2x + 1$$



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



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

$$7.2 \div 0.8 = 9$$



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



Build Confidence



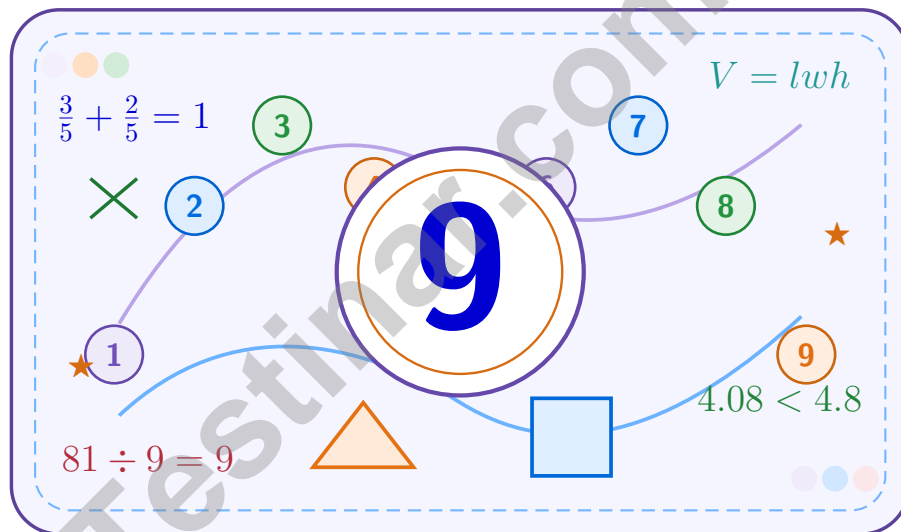
Improve Math Skills



Achieve Success

9 Maine Through Year Assessment 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.



Scan me

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 Maine Through Year Assessment. 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)

Metric

1 liter (L) = 1,000 milliliters (mL)

WEIGHT AND MASS

Customary

1 pound (lb) = 16 ounces (oz)

Metric

1 kilogram (kg) = 1,000 grams (g)

1 gram (g) = 1,000 milligrams (mg)

TIME

1 minute (min) = 60 seconds (sec)

1 week = 7 days

1 hour (hr) = 60 minutes (min)

1 year = 12 months

1 day = 24 hours (hr)

1 year = 52 weeks



Scan me

1) Divide: $735 \div 15$

A. 47

C. 51

B. 49

D. 53

2) What is $13 \div \frac{1}{4}$?

A. 36

C. 52

B. 48

D. 64

3) Which number is greatest: 0.76, 0.9, or 0.84?

Record your answer in the space provided.

4) Which subtraction result is NOT in simplest form?

A. $7\frac{3}{8} - 2\frac{2}{8}$ gives $5\frac{1}{8}$

C. $8\frac{6}{9} - 3\frac{2}{9}$ gives $5\frac{4}{9}$

B. $6\frac{4}{10} - 1\frac{1}{10}$ gives $5\frac{3}{10}$

D. $9\frac{8}{12} - 4\frac{5}{12}$ gives $5\frac{3}{12}$

5) A distance is 15 kilometers. If $1 \text{ km} = 10^3$ meters, how many meters?

A. 150 meters

C. 15000 meters

B. 1500 meters

D. 150000 meters

6) Compare the fractions $\frac{2}{5}$ and $\frac{1}{3}$ by finding a common denominator. Which statement is true?

A. $\frac{2}{5} < \frac{1}{3}$

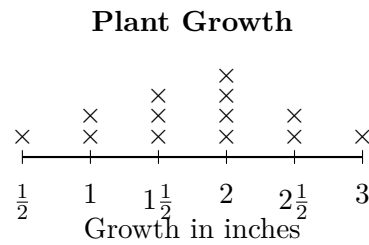
C. $\frac{2}{5} = \frac{1}{3}$

B. $\frac{2}{5} > \frac{1}{3}$

D. Cannot compare

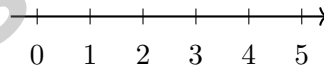


- 7) The line plot shows plant growth measurements, in inches:



How many measurements were 2 inches or longer?

- A. 4
 B. 5
 C. 6
 D. 7
- 8) A composite storage display is made from two non-overlapping rectangular prisms. Prism A is 8 feet long, 2 feet wide, and 3 feet tall. Prism B is 3 feet long, 5 feet wide, and 5 feet tall. What is the total volume?
- A. 48 cubic feet
 B. 75 cubic feet
 C. 123 cubic feet
 D. 139 cubic feet
- 9) Estimate $9.2 \div 4$. Between which two whole numbers does the quotient fall on the number line?



- A. Between 1 and 2
 B. Between 2 and 3
 C. Between 3 and 4
 D. Between 4 and 5
- 10) A recipe uses $\frac{3}{4}$ cup of milk. If you reduce it by $\frac{1}{4}$ cup, how much milk do you use?
- A. $\frac{1}{4}$ cup
 B. $\frac{1}{2}$ cup
 C. $\frac{3}{4}$ cup
 D. 1 cup



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



1) What is 0.45×1000 ?

- A. 45 C. 4500
 B. 450 D. 45000

2) Which statement correctly classifies every square?

- A. A square is both a rectangle and a rhombus.
 B. A square is a pentagon but not a rectangle.
 C. A square is a triangle with four equal sides.
 D. A square has exactly one pair of perpendicular sides.

3) A trip is 2 hours 45 minutes. Express the total time in minutes.

Record your answer in the space provided.

4) Simplify then add: $\frac{4}{12} + \frac{2}{5}$

- A. $\frac{11}{15}$ C. $\frac{4}{20}$
 B. $\frac{6}{17}$ D. $\frac{2}{3}$

5) What is 47×1000 ?

- A. 47000 C. 470
 B. 4700 D. 40700



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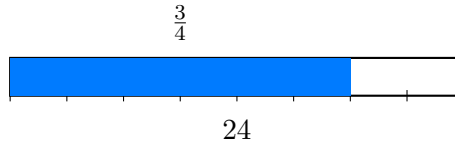
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- 1) A recipe uses $\frac{3}{4}$ cup of oats for each batch. How many cups of oats are needed for 24 batches?



- A. 6
- B. 12
- C. 18
- D. 24
- 2) What is $2.1 \div 10$?
- A. 0.021
- B. 21
- C. 210
- D. 0.21
- 3) What is $7.83 \times 1,000$?
- A. 78.3
- B. 783
- C. 7,830
- D. 78,300
- 4) Three decimals: 1.456, 1.572, 1.654. Which rounds to 1.5 (nearest tenth)?
- A. 1.456
- B. 1.572
- C. 1.654
- D. None of them
- 5) A board is 12 feet long. It is cut into pieces that are each one third of a foot. Which division equation matches the situation?
- A. $\frac{1}{3} \div 12 = n$
- B. $12 \times \frac{1}{3} = n$
- C. $12 \div \frac{1}{3} = n$
- D. $12 + \frac{1}{3} = n$



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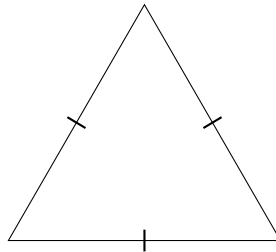
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1) Evan calculates $9 \times \frac{2}{3}$ and gets 18. Is his answer reasonable?

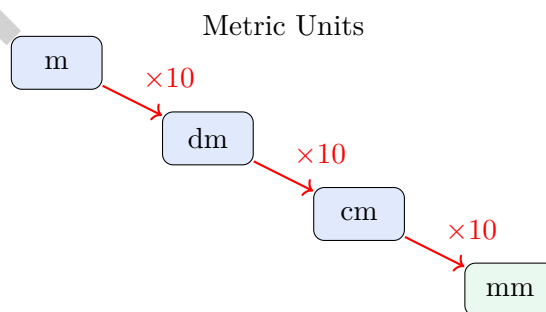
- A. Yes, it is reasonable C. No, it is too small
 B. No, it is too large D. Cannot determine

2) Look at the triangle below. What type of triangle is it based on the marks on its sides?



tick marks show equal sides

- A. Scalene triangle C. Equilateral triangle
 B. Isosceles triangle D. Right triangle
- 3) A wooden crate has volume 150 cubic centimeters. Its base is 5 centimeters by 5 centimeters. What is its height?
- A. 6 centimeters C. 7 centimeters
 B. 5 centimeters D. 25 centimeters
- 4) Convert 6 meters to millimeters. (Use the metric units diagram.)



- A. 600 mm C. 60,000 mm
 B. 6,000 mm D. 600,000 mm



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 Maine scores.

Testinar.com



Practice Test Answers and Explanations

Practice Test 1 Answers and Explanations

- 1) **Choice B is correct.** (5.NBT.B.6) $735 \div 15 = 49$. Check: $15 \times 49 = 735$.
- 2) **Choice C is correct.** (5.NBT.B.6) $13 \div \frac{1}{4} = 13 \times 4 = 52$.
- 3) **The correct answer is 0.9.** (5.NF.B.3) Compare the tenths first: 0.9 has 9 tenths, 0.84 has 8 tenths, and 0.76 has 7 tenths. The greatest is 0.9.
- 4) **Choice D is correct.** (5.NBT.A.3b) D is not in simplest form because $5\frac{3}{12}$ simplifies to $5\frac{1}{4}$. A, B, and C are already in simplest form.
- 5) **Choice C is correct.** (5.NBT.A.2) $15 \times 10^3 = 15 \times 1000 = 15000$ meters.
- 6) **Choice B is correct.** (5.NBT.A.2) Common denominator is 15. $\frac{2}{5} = \frac{6}{15}$ and $\frac{1}{3} = \frac{5}{15}$. Since $6 > 5$, $\frac{2}{5} > \frac{1}{3}$.
- 7) **Choice D is correct.** (5.MD.B.2) Count X marks at 2, $2\frac{1}{2}$, and 3 inches: $4 + 2 + 1 = 7$ measurements.
- 8) **Choice C is correct.** (5.MD.C.5c) Find each part first: Prism A is $8 \times 2 \times 3 = 48$ cubic feet, and Prism B is $3 \times 5 \times 5 = 75$ cubic feet. Because the parts do not overlap, add them: $48 + 75 = 123$ cubic feet.
- 9) **Choice B is correct.** (5.NBT.B.7) $9.2 \div 4 = 2.3$. Since $2 < 2.3 < 3$, the quotient lies between 2 and 3 on the number line.
- 10) **Choice B is correct.** (5.NF.A.2) $\frac{3}{4} - \frac{1}{4} = \frac{2}{4} = \frac{1}{2}$ cup.
- 11) **Choice D is correct.** (5.NF.A.2) The base area is $10 \times 9 = 90$ square inches. Since $360 \div 90 = 4$, the height is 4 inches.
- 12) **Choice D is correct.** (5.MD.C.5b) The nonzero parts make $8 \times 9 = 72$, which has no trailing zero. The four zeros from 800 and 900 give 720,000, so the product has 4 zeros.
- 13) **Choice B is correct.** (5.NBT.A.2) Plus-3 at step 5: $1 + 3(4) = 13$. Plus-5 at step 5: $1 + 5(4) = 21$. Difference: $21 - 13 = 8$.
- 14) **The correct answer is 3.** (5.MD.A.1) $36 \div 12 = 3$ feet. Since 12 inches make 1 foot, 36 inches makes 3 full feet.
- 15) **Choice A is correct.** (5.MD.A.1) A cubic unit is a cube where each edge measures exactly 1 unit. It has volume of 1 cubic unit.
- 16) **Choice D is correct.** (5.NF.B.5a) $\frac{2}{4} = \frac{1}{2}$, so both products are equal.
- 17) **Choice C is correct.** (5.NF.B.5a) $\frac{1}{4} = \frac{3}{12} \cdot \frac{11}{12} - \frac{3}{12} = \frac{8}{12} = \frac{2}{3}$.
- 18) **Choice A is correct.** (5.NF.A.2) Convert 3 kg to grams: $3 \times 1000 = 3000$ g. Add: $3000 + 250 = 3250$ g.
- 19) **Choice C is correct.** (5.G.B.4) The side marks show all three sides are equal. The angle marks also match. A triangle with all sides equal is equilateral.
- 20) **Choices A, C are correct.** (5.OA.A.2) A is true because $20 + 1$ creates one extra group of 5. C is true because $100 - 1$ creates one fewer group of 9 than 100 groups. B changes the grouping, and D is equal rather than greater.
- 21) **Choice B is correct.** (5.NF.A.2) The denominator 5 is multiplied by 4 to make 20, so multiply the numerator by 4: $\frac{1}{5} = \frac{4}{20}$.
- 22) **Choice A is correct.** (5.NF.A.2) The product part is 2×6 . Since 5 is added to that product, the phrase is "five more than the product of 2 and 6."
- 23) **Choice D is correct.** (5.OA.A.2) Use the rectangular-prism volume formula: $4 \times 3 \times 7 = 84$. So the volume is 84 cubic feet.
- 24) **Choice B is correct.** (5.MD.C.5) Convert to sixths: $3\frac{3}{6} + 1\frac{4}{6} = 4\frac{7}{6} = 5\frac{1}{6}$.
- 25) **Choice C is correct.** (5.NBT.A.2) Multiplying by 1,000 moves the decimal three places to the right: $2.8 \times 1,000 = 2,800$.
- 26) **Choice A is correct.** (5.NBT.A.2) Both J at (2, 4) and K at (7, 4) have y-coordinate 4, so they share the same y-coordinate.
- 27) **The correct answer is 29.40.** (5.MD.C.5) Choose the operation from the story, then keep the unit with the answer. $2.45 \times 12 = 29.40$. This confirms the answer.
- 28) **Choice D is correct.** (5.MD.C.5) $3\frac{1}{4} \times 2 = \frac{13}{4} \times 2 = \frac{26}{4} = 6\frac{1}{2}$.
- 29) **The correct answer is 12.** (5.NBT.A.2) Dividing by 100 removes two zeros: $1,200 \rightarrow 12$.
- 30) **The correct answer is $5 \div \frac{1}{4} = n$.** (5.NBT.A.2) The total is 5 cups and each serving is one fourth cup, so divide total by serving size.



Workshop Notes for an Inventor

Dear Math Inventor,

◇ 9 practice tests. 9 chances to invent new ways of thinking. You tried strategies, broke them, fixed them, and built them stronger. That's what inventors do. That's what you do. ◇

★ **What inventors know:** the first idea isn't always the best one. Sometimes you have to try, fail, learn, and try again. You've practiced that exact loop on every test. That practice is why your problem-solving brain is so flexible now. ★

Inventor's Workshop Inventory

- **Sketch Pad:** FULL of ideas! You can imagine multiple ways to solve.
- **Toolbox:** STOCKED! You have many strategies to draw on.
- **Workbench:** ORGANIZED! Your work is clear and step-by-step.
- **Invention Mindset:** STRONG! You're not afraid to try something new.

Inventor's tip: on test day, if your first idea doesn't work, switch tools. Try a different strategy. Inventors don't get stuck on one tool—they pick the right one for the job. Same on a math test.

If you want to share a proud moment or ask a question, please email me at jay@testinar.com. I'd love to hear from you!

Jay Daie

Your Math Inventor (Build Big Things)

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.



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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
- ✓ And More!



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