

7

Maine

Through Year Assessment

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



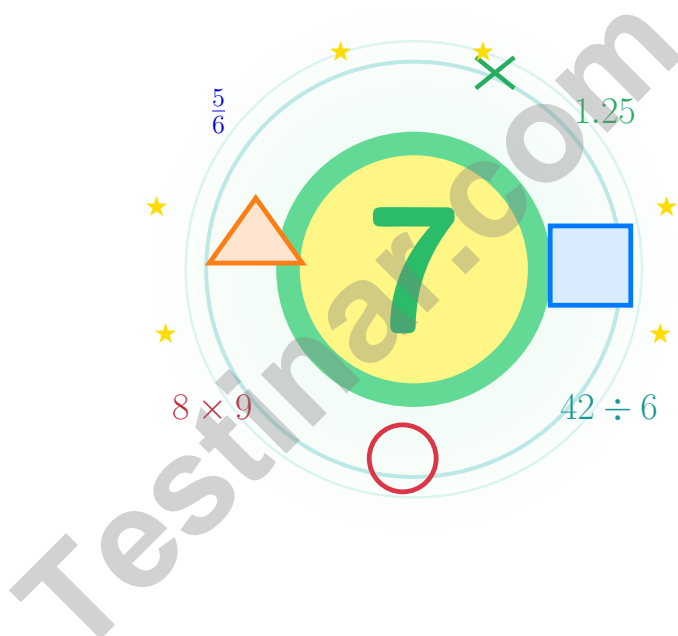
ACHIEVE SUCCESS

Develop skills,
stay prepared,
excel on test day

★ PRACTICE TODAY. PERFORM TOMORROW. **SUCCEED** FOREVER. ★

7 Maine Through Year Assessment Grade 5 Math Practice Tests

Seven full tests, seven lessons, one stronger mathematician



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

Jay Daie and Reza Nazari



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Open the Trail, Maine

Seven practice tests woven into one calm routine

Welcome Letter for Maine Math Trail Crew

This practice book is your steady companion for seven tests, not a place to be perfect. Math is a lot like the rocky Maine coast – it looks tough at first, but careful steps and patient eyes reveal a steady path.

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.

Look

Look at the problem like a detective looks at a clue.

Test

Test your idea with one careful step at a time.

Grow

Grow stronger by reviewing exactly what tripped you up.

A strong habit for Maine 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.

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Scan me



A Map of the Pages

A simple routine that turns practice into progress

Step 1: Read

Read the quick review pages first.
Spend a few minutes waking up your memory before the test begins.

Step 2: Try

Try one full test with full attention.
Work in a calm spot and focus on careful thinking before speed.

Step 3: Reflect

Reflect on which skills want more sunlight.
Circle missed questions and notice which topics keep showing up.

Step 4: Lift

Lift those skills before the next test.
Read the explanation, repair the work, and bring that lesson into the next test.

A Good 7-Week Maine Rhythm

Week 1	Take Test 1 like a careful low-tide morning.
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, careful focus.



Table of Contents

★ Practice Test 1	_____	23
★ Practice Test 2	_____	38
★ Practice Test 3	_____	53
★ Practice Test 4	_____	68
★ Practice Test 5	_____	83
★ Practice Test 6	_____	98
★ Practice Test 7	_____	113
Practice Test Answer Keys	_____	127
Practice Test Answers and Explanations	_____	132

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)

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Metric

1 meter (m) = 100 centimeters (cm)

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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

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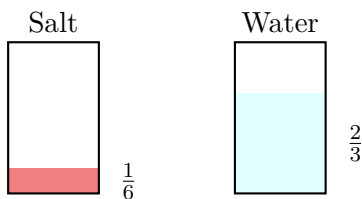


- 6) The area of a square is found by multiplying side length by itself. If each side is $1\frac{1}{2}$ inches, what is the area?

	1	$\frac{1}{2}$
1	1	$\frac{1}{2}$
$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{4}$

Area: $1\frac{1}{2}$ in \times $1\frac{1}{2}$ in gives square inches

- | | |
|---|---|
| <p><input type="checkbox"/> A. $3\frac{1}{4}$ square inches</p> <p><input type="checkbox"/> B. 3 square inches</p> | <p><input type="checkbox"/> C. $2\frac{1}{4}$ square inches</p> <p><input type="checkbox"/> D. $1\frac{1}{2}$ square inches</p> |
|---|---|
- 7) Which sum of fractions with unlike denominators equals 1 whole?
- | | |
|---|---|
| <p><input type="checkbox"/> A. $\frac{1}{2} + \frac{1}{3} + \frac{1}{6}$</p> <p><input type="checkbox"/> B. $\frac{3}{8} + \frac{3}{8}$</p> | <p><input type="checkbox"/> C. $\frac{1}{3} + \frac{1}{6}$</p> <p><input type="checkbox"/> D. $\frac{1}{4} + \frac{1}{3}$</p> |
|---|---|
- 8) Garden bed: $\frac{9}{10}$ planted with vegetables. Wildlife nibbled $\frac{1}{5}$ of the garden bed. Fraction remaining?
- | | |
|---|--|
| <p><input type="checkbox"/> A. $\frac{6}{10}$</p> <p><input type="checkbox"/> B. $\frac{8}{10} = \frac{4}{5}$</p> | <p><input type="checkbox"/> C. $\frac{10}{15}$</p> <p><input type="checkbox"/> D. $\frac{7}{10}$</p> |
|---|--|
- 9) A soup recipe calls for $\frac{1}{6}$ cup of salt and $\frac{2}{3}$ cup of water. Which amount is more?



- | | |
|---|--|
| <p><input type="checkbox"/> A. Salt is more</p> <p><input type="checkbox"/> B. Cannot determine</p> | <p><input type="checkbox"/> C. They are equal</p> <p><input type="checkbox"/> D. Water is more</p> |
|---|--|



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CAPACITY

Customary	Metric
1 cup (c) = 8 fluid ounces (fl oz)	1 liter (L) = 1,000 milliliters (mL)
1 pint (pt) = 2 cups (c)	
1 quart (qt) = 2 pints (pt)	
1 gallon (gal) = 4 quarts (qt)	

WEIGHT AND MASS

Customary	Metric
1 pound (lb) = 16 ounces (oz)	1 kilogram (kg) = 1,000 grams (g)
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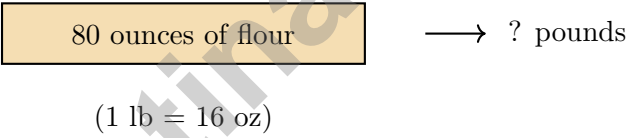
1 minute (min) = 60 seconds (sec)	1 week = 7 days
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1) Multiply: $1\frac{3}{5} \times 2\frac{1}{2}$

	1	$\frac{3}{5}$
2	1×2	$\frac{3}{5} \times 2$
$\frac{1}{2}$	$1 \times \frac{1}{2}$	$\frac{3}{5} \times \frac{1}{2}$
	$1\frac{3}{5} \times 2\frac{1}{2}$	

- | | |
|---|---|
| <p><input type="checkbox"/> A. 4</p> <p><input type="checkbox"/> B. $3\frac{3}{4}$</p> | <p><input type="checkbox"/> C. $3\frac{3}{10}$</p> <p><input type="checkbox"/> D. $4\frac{1}{10}$</p> |
|---|---|
- 2) Add: $3\frac{2}{9} + 2\frac{5}{9}$
- | | |
|---|---|
| <p><input type="checkbox"/> A. $5\frac{7}{9}$</p> <p><input type="checkbox"/> B. $5\frac{8}{9}$</p> | <p><input type="checkbox"/> C. $6\frac{1}{9}$</p> <p><input type="checkbox"/> D. $6\frac{2}{9}$</p> |
|---|---|
- 3) A baker needs 80 ounces of flour for a recipe. How many pounds is that? (Use: 1 pound = 16 ounces)



- | | |
|---|---|
| <p><input type="checkbox"/> A. 4 pounds</p> <p><input type="checkbox"/> B. 5 pounds</p> | <p><input type="checkbox"/> C. 6 pounds</p> <p><input type="checkbox"/> D. 8 pounds</p> |
|---|---|
- 4) A delivery company charges \$3.50 per package. A business ships 42 packages per week. How much does it cost per week?
- | | |
|---|---|
| <p><input type="checkbox"/> A. \$147.00</p> <p><input type="checkbox"/> B. \$140.00</p> | <p><input type="checkbox"/> C. \$145.00</p> <p><input type="checkbox"/> D. \$135.00</p> |
|---|---|



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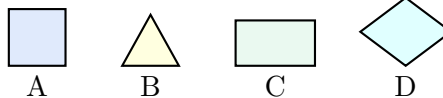
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- 1) After multiplying $76 \times 1,000$, the product is 76,000. Which original digit from 76 is in the thousands place?
- A. 6
 B. 7
 C. 0
 D. Both 7 and 6
- 2) Which shows the correct decimal shift for $73.2 \div 100$?
- A. $73.2 \rightarrow 7.32$ (1 place)
 B. $73.2 \rightarrow 732$ (right)
 C. $73.2 \rightarrow 73.2$ (no shift)
 D. $73.2 \rightarrow 0.732$ (2 places)
- 3) Which shows the correct first step to compute $6\frac{1}{5} - 3\frac{4}{5}$ using borrowing?
- A. $5\frac{6}{5} - 3\frac{4}{5}$
 B. $6\frac{5}{5} - 3\frac{4}{5}$
 C. $7\frac{0}{5} - 3\frac{4}{5}$
 D. Cannot subtract; minuend fraction is too small
- 4) Which number is a common denominator for $\frac{2}{5}$ and $\frac{3}{4}$?
- A. 20
 B. 9
 C. 15
 D. 10
- 5) A construction team needs to deliver 1,134 bricks to 21 job sites equally. How many bricks per site?
- A. 52
 B. 58
 C. 56
 D. 54
- 6) The figures below are labeled A-D. Which figure is a parallelogram but not a rectangle?



- A. Figure A
 B. Figure B
 C. Figure C
 D. Figure D



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1) A step-shaped solid is decomposed into three non-overlapping rectangular prisms. The prisms measure 10 feet by 5 feet by 3 feet, 8 feet by 4 feet by 3 feet, and 7 feet by 4 feet by 3 feet. What is the total volume?

- A. 246 cubic feet
- B. 330 cubic feet
- C. 180 cubic feet
- D. 234 cubic feet

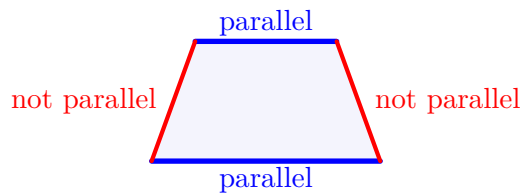
2) Make a line plot for these measurements: $\frac{1}{8}, \frac{1}{4}, \frac{1}{4}, \frac{3}{8}, \frac{3}{8}, \frac{3}{8}, \frac{1}{2}$. Which value will have the most X's?

Record your answer in the space provided.

3) Without calculating exactly, which has the larger value: $\frac{6}{7} \times 21$ or 21?

Record your answer in the space provided.

4) Look at the figure. Which description matches it best?



- A. Parallelogram
- B. Trapezoid
- C. Rectangle
- D. Rhombus



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.

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Practice Test Answers and Explanations

Practice Test 1 Answers and Explanations

- 1) **Choice B is correct.** **(5.NF.A.2)** The number line shows the dot positioned at $\frac{2}{5}$ (two-fifths of the way from 0 to 1).
- 2) **Choice B is correct.** **(5.OA.A.2)** Both expressions have the same factor, 3. Since 25 is less than 27, 3 groups of 25 are less than 3 groups of 27.
- 3) **Choice C is correct.** **(5.G.B.4)** A figure with 4 equal sides and 4 right angles is a square. A square is also a rectangle and a rhombus, so "only" makes choices A and B too narrow.
- 4) **Choice C is correct.** **(5.NBT.A.2)** The exponent tells us there are three factors of 10, so $10^3 = 1,000$. Then $9 \times 1,000 = 9,000$.
- 5) **Choice C is correct.** **(5.NBT.A.2)** $0.003 \times 1000 = 3$ (move decimal 3 places right). The exponent is 3.
- 6) **Choice C is correct.** **(5.NF.B.5b)** $1\frac{1}{2} \times 1\frac{1}{2} = \frac{3}{2} \times \frac{3}{2} = \frac{9}{4} = 2\frac{1}{4}$ square inches.
- 7) **Choice A is correct.** **(5.NF.A.1)** Use sixths: $\frac{1}{2} = \frac{3}{6}$ and $\frac{1}{3} = \frac{2}{6}$. Then $\frac{3}{6} + \frac{2}{6} + \frac{1}{6} = \frac{6}{6} = 1$ whole.
- 8) **Choice D is correct.** **(5.NF.A.2)** $\frac{1}{5} = \frac{2}{10}$. $\frac{9}{10} - \frac{2}{10} = \frac{7}{10}$.
- 9) **Choice D is correct.** **(5.NF.A.2)** Convert to common denominator 6: $\frac{1}{6} = \frac{1}{6}$ and $\frac{2}{3} = \frac{4}{6}$. Since $\frac{4}{6} > \frac{1}{6}$, water is more.
- 10) **Choice B is correct.** **(5.NF.B.4)** $3 \times \frac{4}{5} = \frac{12}{5} = 2\frac{2}{5}$ meters of ribbon.
- 11) **Choice D is correct.** **(5.NBT.A.3b)** Trailing zeros do not change value: $0.25 = 0.250$. Either amount works for the recipe.
- 12) **Choice B is correct.** **(5.NBT.B.6)** $2,288 \div 52 = 44$ remainder 0 (divides evenly). Check: $52 \times 44 = 2,288$.
- 13) **Choice D is correct.** **(5.NF.A.2)** LCD of 12 and 8 is 24. $\frac{7}{12} = \frac{14}{24}$ and $\frac{5}{8} = \frac{15}{24}$. Since $15 > 14$, $\frac{5}{8}$ is longer.
- 14) **Choice C is correct.** **(5.MD.A.1)** Convert all to mL: A = 800 mL, B = 850 mL, C = 750 mL. Since $750 < 800 < 850$, Sample C is smallest.
- 15) **Choice C is correct.** **(5.NF.A.2)** $\frac{1}{8}$ is close to 0, and $\frac{7}{8}$ is close to 1. So $\frac{1}{8} + \frac{7}{8} \approx 0 + 1 = 1$.
- 16) **Choice C is correct.** **(5.NF.B.7c)** The unit fraction is the amount being shared, so divide $\frac{1}{6}$ by 5. The equation is $\frac{1}{6} \div 5 = n$.
- 17) **The correct answer is 42.** **(5.MD.C.4)** A 7 by 2 layer has 14 cubes. With 3 layers, $14 \times 3 = 42$ cubic units.
- 18) **Choice D is correct.** **(5.G.A.1)** The first coordinate tells the distance right from the origin, and the second coordinate tells the distance up. The point is 6 units right and 3 units up, so the ordered pair is (6, 3).
- 19) **The correct answer is 5.** **(5.MD.C.5)** Divide the volume by the base area: $60 \div 12 = 5$, so the height is 5 cm.
- 20) **Choices A, B are correct.** **(5.MD.A.1)** C is not true because 1 gallon is 16 cups. D is not true because 1 mile is 5,280 feet.
- 21) **Choice B is correct.** **(5.NF.B.7c)** A meter has 10 tenths, so $1 \div \frac{1}{10} = 10$ fixtures.
- 22) **Choice A is correct.** **(5.NBT.A.2)** A power of 10 tells how many factors of 10 to use. $25 \times 10^5 = 25 \times 100,000 = 2,500,000$. This confirms the answer.
- 23) **Choice C is correct.** **(5.MD.C.5)** Use the rectangular-prism volume formula: $5 \times 5 \times 4 = 100$. So the volume is 100 cubic feet.
- 24) **The correct answer is $2\frac{1}{2}$ m.** **(5.NF.B.6)** $3 \times \frac{5}{6} = \frac{15}{6} = \frac{5}{2} = 2\frac{1}{2}$ m.
- 25) **Choice A is correct.** **(5.MD.C.3b)** Volume requires multiplying the three dimensions: $V = 5 \times 3 \times 2 = 30$ cubic cm, not adding them.
- 26) **Choice B is correct.** **(5.MD.B.2)** Count the X marks above each length. The length $\frac{3}{8}$ foot has 3 X marks, more than any other length.
- 27) **Choice D is correct.** **(5.NBT.A.2)** The student forgot the key concept: dividing by powers of 10 requires shifting the decimal point left. The correct answer is $8,300 \div 1,000 = 8.3$.
- 28) **The correct answer is $3\frac{7}{8}$.** **(5.NF.A.1)** Wholes: $2 + 1 = 3$. Fractions: $\frac{6}{8} + \frac{1}{8} = \frac{7}{8}$. Total: $3\frac{7}{8}$.
- 29) **Choice D is correct.** **(5.NBT.B.7)** Line up decimal points and subtract place by place. Add: $7.56 + 4.29 = 11.85$. This confirms the answer.



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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PRACTICE TODAY. PERFORM TOMORROW.

Success in math starts with practice! This book provides the **practice, confidence, and skills** your child needs to excel on the Grade 5 Math test and beyond.

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Focus on the most important Grade 5 math skills.



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Develop strong test-taking skills and achieve your best score!

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✓ Homework Help

✓ Test Preparation

✓ Summer Learning

✓ On-the-Go Practice

✓
PRACTICE
PREPARE
SUCCEED



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Every step of the way.