

7

New Hampshire

NH SAS

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



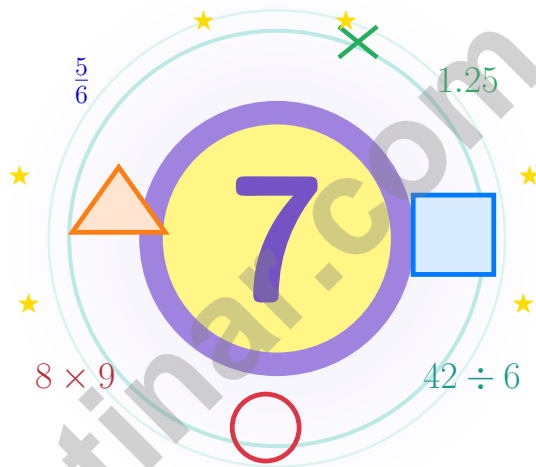
ACHIEVE SUCCESS

Develop skills,
stay prepared,
excel on test day

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

7 New Hampshire NH SAS Grade 5 Math Practice Tests

Seven chances to grow your math mind one careful step at a time



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

Jay Daie and Reza Nazari



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New Hampshire, Steady Practice Starts Here

Seven full tests, seven lessons, one stronger mathematician

To Every Math Brain in New Hampshire

This practice book is your steady companion for seven tests, not a place to be perfect. Math is like Granite State stone – it holds up under pressure when each layer was placed with care.

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.

Read

Read every word twice and underline what is asked.

Solve

Choose the cleanest method and show your steps.

Reflect

Look back to find what worked and what to fix.

A strong habit for New Hampshire 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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Use This Book Like a Trail Guide

A simple routine that turns practice into progress

Step 1: Power Up

Sharpen your math brain with the quick review.

Spend a few minutes waking up your memory before the test begins.

Step 2: Trail Run

Take a full practice test in a quiet spot.

Work in a calm spot and focus on careful thinking before speed.

Step 3: Debrief

Score honestly and circle missed questions.

Circle missed questions and notice which topics keep showing up.

Step 4: Repair

Fix the missed work and lock the lesson in.

Read the explanation, repair the work, and bring that lesson into the next test.

A Good 7-Week New Hampshire Rhythm

Week 1	Take Test 1 and place your first granite stones.
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 steady, calm, confident work.



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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)

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TIME

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

1 hour (hr) = 60 minutes (min) 1 year = 12 months

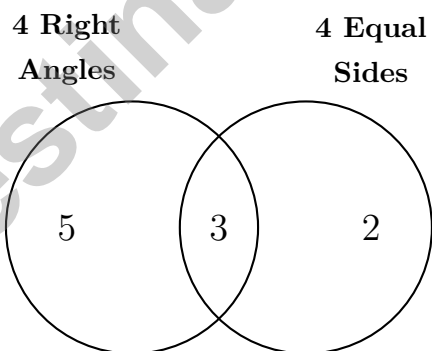
1 day = 24 hours (hr) 1 year = 52 weeks



- 1) A school stores books in one large bin that weighs 125 kg and sports equipment in another bin that weighs 87.5 kg. What is the total weight in grams?

Use: $1 \text{ kg} = 1,000 \text{ grams}$

- A. 212,500 grams C. 212,050 grams
 B. 21,250 grams D. 274,750 grams
- 2) Two identical rectangular prisms are stacked on top of each other. Each prism has dimensions 5 inches by 4 inches by 3 inches. What is the total volume?
- A. 60 cubic inches C. 120 cubic inches
 B. 90 cubic inches D. 150 cubic inches
- 3) Predict the result without calculating: Is $7 \times \frac{9}{7}$ greater than, less than, or equal to 7?
- A. Greater than 7 C. Equal to 7
 B. Less than 7 D. Impossible to tell
- 4) A Venn diagram classifies quadrilaterals by two properties:



Which type of figure is represented by the number 3?

- A. Rectangles that are not squares C. Rhombuses that are not squares
 B. Squares D. Triangles



- 5) An aquarium shaped like a rectangular prism has a volume of 360 m^3 , and its base is 9 m by 8 m. How deep is the aquarium?
- A. 4 m C. 6 m
 B. 5 m D. 7 m
- 6) Pattern: 6, 11, 16, 21, ... What's the rule?
- A. Add 5
 B. Multiply by 2
 C. Add 4
 D. Subtract 5
- 7) Pattern A adds 2 each step: 5, 7, 9, 11. Pattern B adds 4 each step: 3, 7, 11, 15. At which step are both patterns equal?
- A. Step 1 C. Step 3
 B. Step 2 D. Step 4



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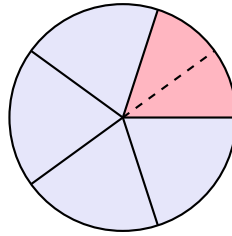


1) Subtract: $1 - \frac{1}{12}$

- A. $\frac{9}{12}$
- B. $\frac{1}{11}$

- C. $\frac{1}{12}$
- D. $\frac{11}{12}$

2) The circle is divided into 5 equal sectors. One sector (which is $\frac{1}{5}$ of the circle) is further divided into 2 equal parts. What fraction of the whole circle is each small part?



- A. $\frac{1}{10}$
- B. $\frac{2}{5}$

- C. $\frac{1}{7}$
- D. $\frac{1}{3}$

3) Three swimmers swim laps: A swims $\frac{3}{5}$ lap, B swims $\frac{2}{3}$ lap, and C swims $\frac{5}{6}$ lap. To order them from least to most, what common denominator should be used?

Swimmer	Original	With LCD
A	$\frac{3}{5}$	$\frac{?}{30}$
B	$\frac{2}{3}$	$\frac{?}{30}$
C	$\frac{5}{6}$	$\frac{?}{30}$

- A. 15
- B. 30

- C. 60
- D. 90



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- 1) A baker needs 80 ounces of flour for a recipe. How many pounds is that? (Use: 1 pound = 16 ounces)

80 ounces of flour

→ ? pounds

(1 lb = 16 oz)

- A. 4 pounds C. 6 pounds
 B. 5 pounds D. 8 pounds
- 2) Find: $9.40 - 3.65$.

Record your answer in the space provided.

- 3) Add: $2\frac{7}{10} + 3\frac{6}{10}$
- A. $5\frac{12}{10}$ C. $6\frac{3}{10}$
 B. $5\frac{3}{10}$ D. 6
- 4) A composite model building is made from two non-overlapping rectangular prisms. Prism A is 5 inches long, 4 inches wide, and 3 inches tall. Prism B is 6 inches long, 4 inches wide, and 5 inches tall. What is the total volume?
- A. 60 cubic inches C. 120 cubic inches
 B. 180 cubic inches D. 200 cubic inches



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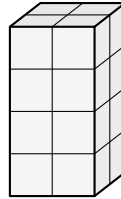
1 day = 24 hours (hr) 1 year = 52 weeks



1) Pattern P: 1, 3, 5, 7, 9. Pattern Q: 2, 4, 6, 8, 10. The difference between corresponding terms is always the same. What is $Q - P$?

- A. 1 C. 3
 B. 2 D. 4

2) Which rectangular prism holds exactly 16 unit cubes?



- A. $3 \times 3 \times 2$ C. $2 \times 2 \times 5$
 B. $2 \times 3 \times 3$ D. $2 \times 2 \times 4$

3) Without calculating, is $1,205 \times (3 + 2)$ greater than, less than, or equal to $5 \times (3 + 2)$?

- A. Cannot tell C. Equal to
 B. Less than D. Greater than

4) What is 10^2 ?

- A. 10 C. 100
 B. 20 D. 1000

5) A child is 1.35 meters tall. How many centimeters is that?

- A. 13.5 cm C. 1,350 cm
 B. 135 cm D. 13,500 cm



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

- Choice A is correct.** **(5.MD.A.1)** Add the weights first: $125 + 87.5 = 212.5$ kg. Then convert kilograms to grams: $212.5 \times 1,000 = 212,500$ grams.
- Choice C is correct.** **(5.MD.C.5a)** One prism has volume $5 \times 4 \times 3 = 60$ cubic inches. Two prisms have volume $60 \times 2 = 120$ cubic inches.
- Choice A is correct.** **(5.NF.B.5a)** Since $\frac{9}{7} > 1$, multiplying 7 by $\frac{9}{7}$ produces a larger result. No computation needed!
- Choice B is correct.** **(5.G.B.4)** The number 3 is in the intersection. A square has four right angles and four equal sides, so it belongs in both circles.
- Choice B is correct.** **(5.MD.C.5)** The base area is $9 \times 8 = 72$ square meters. Since $360 \div 72 = 5$, the aquarium is 5 m deep.
- Choice A is correct.** **(5.OA.B.3)** Look at how much the pattern changes each time: $11 - 6 = 5$, $16 - 11 = 5$, and $21 - 16 = 5$. The repeated difference is 5, so the rule is add 5.
- Choice B is correct.** **(5.OA.B.3)** Pattern A: 5, 7, 9, 11. Pattern B: 3, 7, 11, 15. At step 2, both equal 7.
- Choice C is correct.** **(5.G.A.2)** Both points have the same x -coordinate (4), so they are on a vertical line. The distance is $7 - 2 = 5$ units.
- Choice C is correct.** **(5.NBT.B.7)** Line up decimal points and subtract place by place. $10.00 - 4.38 = 5.62$. This confirms the answer.
- Choice C is correct.** **(5.OA.A.1)** Simplify both parentheses first: $8 + 2 = 10$ and $5 - 1 = 4$. Then go left to right: $10 \times 4 = 40$, and $40 \div 5 = 8$.
- The correct answer is $1\frac{1}{4}$.** **(5.NF.A.2)** $\frac{3}{4} + \frac{1}{2} = \frac{3}{4} + \frac{2}{4} = \frac{5}{4} = 1\frac{1}{4}$.
- Choice B is correct.** **(5.NF.A.2)** $\frac{6}{7} \approx 1$, $\frac{4}{9} \approx \frac{1}{2}$, and $\frac{1}{10} \approx 0$. So $\frac{6}{7} + \frac{4}{9} + \frac{1}{10} \approx 1 + \frac{1}{2} + 0 = 1\frac{1}{2}$.
- Choice B is correct.** **(5.NBT.A.1)** Reading the place-value chart: 3 in ones place, 2 in tenths, 5 in hundredths, 7 in thousandths gives 3.257.
- Choice D is correct.** **(5.NF.A.1)** $\text{LCM}(12, 4) = 12$. $\frac{1}{4} = \frac{3}{12}$. $\frac{7}{12} + \frac{3}{12} = \frac{10}{12} = \frac{5}{6}$ mile.
- Choice B is correct.** **(5.NF.B.7c)** Each whole contains 2 pieces of size $\frac{1}{2}$. With 6 wholes, there are $6 \times 2 = 12$ pieces.
- Choice D is correct.** **(5.G.B.4)** All three angles (50° , 60° , 70°) are less than 90 degrees, making this an acute triangle.
- The correct answer is 0.245.** **(5.NBT.A.2)** Move the decimal point two places left: $24.5 \rightarrow 0.245$.
- Choices A, B are correct.** **(5.OA.A.2)** A and B both start with twice 9 and then take away 7. C puts the 7 first, and D subtracts before doubling, so those do not match the words.
- Choice C is correct.** **(5.OA.A.1)** Each parenthesis becomes one number: $5 + 3 = 8$ and $7 - 4 = 3$. Then multiply those results: $8 \times 3 = 24$.
- Choice D is correct.** **(5.MD.B.2)** The most common value is the one with the greatest number of X marks. 5 has 4 X marks, which is more than 2 (1 mark), 3 (2 marks), 4 (3 marks), or 6 (1 mark).
- Choice B is correct.** **(5.G.A.2)** For input 2: first output is 10 (position 2 in 5, 10, 15, 20), second output is 6 (position 2 in 3, 6, 9, 12).
- Choice B is correct.** **(5.NBT.B.5)** Multiply: $23 \times 11 = 23 \times (10 + 1) = (23 \times 10) + (23 \times 1) = 230 + 23 = 253$.
- Choice C is correct.** **(5.MD.C.3b)** The crate has $2 \times 3 = 6$ cubic meters in each layer and 2 layers. So $6 \times 2 = 12$ cubic meters.
- The correct answer is 0.058.** **(5.NBT.A.2)** Dividing by 1,000 moves the decimal point three places left: $58 \rightarrow 0.058$.
- Choice A is correct.** **(5.NF.A.2)** $\frac{5}{6} = \frac{10}{12}$ and $\frac{1}{4} = \frac{3}{12}$. Then $\frac{10}{12} - \frac{3}{12} = \frac{7}{12}$.
- Choice C is correct.** **(5.G.A.2)** Both points have the same y -coordinate (6), which means they lie on a horizontal line at height 6.
- Choice B is correct.** **(5.NBT.A.2)** $156 \times 10 = 1,560$. The total cost is \$1,560.
- Choice D is correct.** **(5.NBT.A.2)** $2.4 \times 10 = 24$ (move decimal 1 place right).
- Choice D is correct.** **(5.MD.C.5a)** $V = 9 \times 6 \times 7 = 54 \times 7 = 378 \text{ cm}^3$.
- Choice A is correct.** **(5.NBT.A.4)** The hundredths digit is 9. The thousandths digit is 4. Since $4 < 5$, keep hundredths as 9, giving 20.39.



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.

KEY BENEFITS:



TARGETED PRACTICE

Focus on the most important Grade 5 math skills.



STANDARD-ALIGNED

All tests align with state standards for Grade 5.



BUILD CONFIDENCE

Strengthen skills, reduce test anxiety, and boost confidence.



IMPROVE PERFORMANCE

Timed practice helps improve speed and accuracy.



ACHIEVE SUCCESS

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

PERFECT FOR:

✓ Classroom Practice

✓ Homework Help

✓ Test Preparation

✓ Summer Learning

✓ On-the-Go Practice

✓
PRACTICE
PREPARE
SUCCEED



STRONG SKILLS. BRIGHT FUTURE.

Give your child the tools they need to succeed in math and in life!



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Quality resources you can trust.



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FOR SUCCESS

Proven practice for real results.



SUPPORT
YOUR CHILD

Every step of the way.