

4

COMPLETE

New Hampshire NH SAS

Grade

MATH

5

PRACTICE TESTS

Standards-Based Test Prep with
Mixed Review, Word Problems,
and **Full Answer Key**



- ✓ **4 COMPLETE PRACTICE TESTS**
Built to reflect the test format and rigor



- ✓ **COVERS ALL ESSENTIAL TOPICS**
Numbers & Operations, Fractions, Decimals, Geometry, Measurement, Data & Probability, and more



- ✓ **STRENGTHEN SKILLS & CONFIDENCE**
Mixed review, challenging questions, and strategic practice



- ✓ **FULL ANSWER KEY INCLUDED**
Detailed explanations for every question



**BUILD STRONG
MATH SKILLS
& TEST READINESS**



**IMPROVE ACCURACY,
SPEED, AND
PROBLEM SOLVING**



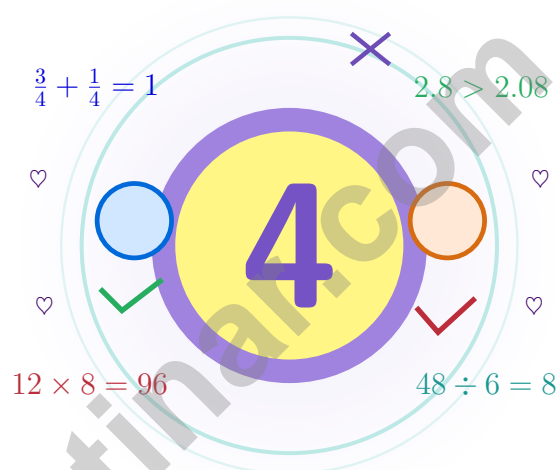
**PERFECT FOR
CLASSROOM,
HOME, OR
SELF-STUDY**



**ALIGNED TO
NEW HAMPSHIRE
STATE STANDARDS
(NH SAS)**

4 New Hampshire NH SAS Grade 5 Math Practice Tests

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



Four full tests, a smart quick review, mission-style strategy pages, and student-tested support that help Grade 5 mathematicians from The Granite State build calm, careful, confident habits.

Jay Daie and Reza Nazari



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New Hampshire Math Crew, Welcome Aboard

Four practice tests, four growth checks, one calm routine

To the Grade 5 Explorer in New Hampshire

This book gives you four chances to read closely, solve carefully, and level up your math thinking. Math is like Granite State stone – it holds up under pressure when each layer was placed with care.

You do not need to feel perfect before you begin. You just need to stay curious, use strategies, and learn from every correction. That is how confident mathematicians are built.

Notice

Notice numbers, units, labels, and tricky words.

Sketch

Sketch a model, table, or quick number line.

Confirm

Confirm your answer with a quick estimate.

A strong mission habit for New Hampshire: keep your work neat, estimate when it helps, label units carefully, and never let one hard question decide your mood for the whole page.

How to Get the Most Out

A four-step routine that turns practice into real improvement

Step 1: Plan

Plan a quiet hour for one full test.
Wake up the big Grade 5 ideas before the test starts so your brain is already warmed up.

Step 2: Practice

Take the test with calm focus.
Find a calm corner, settle in, and aim for careful, honest choices before quick ones.

Step 3: Inspect

Inspect every answer like a careful builder.
Circle missed questions, sort out what went sideways, and notice which skills are calling for attention.

Step 4: Adjust

Adjust what needs adjusting for the next test.
Read the explanation, fix the work, and carry that lesson into the very next test.

A Four-Week New Hampshire Mission Map

Week	Mission Focus
Week 1	Take Test 1 and place your first granite stones.
Week 2	Take Test 2 and aim attention at word problems and step-showing.
Week 3	Take Test 3 to polish fractions, decimals, and conversions.
Week 4	Take Test 4 with steady, calm, confident work.



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What to Expect Inside

What these four practice tests help Grade 5 students build

These three practice tests prepare Grade 5 students in the Granite State for the New Hampshire NH SAS with the steady strength of a White Mountain hike. The goal is bigger than collecting right answers. Students are practicing how to read carefully, choose a strategy, solve step by step, and explain their reasoning clearly – the same way mathematicians do every day.

Selected-Response Questions

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

Constructed-Response Questions

Students show steps, explain a method, or support an answer with clear math. Strong reasoning matters because it shows how the answer was found.

Grade 5 Ideas That Show Up Again and Again

- place value, comparing numbers, and rounding
- multi-digit addition, subtraction, multiplication, and division
- fractions, mixed numbers, and decimals
- perimeter, area, volume, and measurement conversions
- tables, line plots, patterns, and coordinate points
- geometry and multi-step real-world problem solving

What strong NH SAS-style work looks like: accurate math, readable steps, the right labels or units, and a final answer that really matches the question being asked.



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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)

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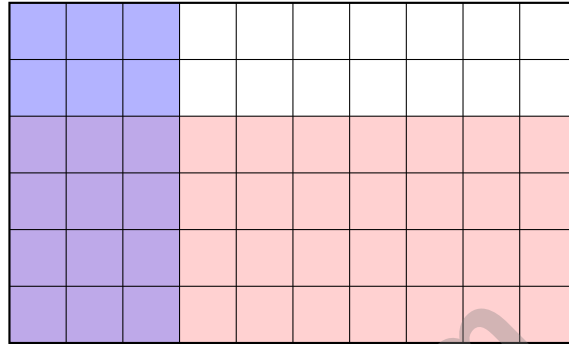
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- 1) An area model shows a grid with 10 columns and 6 rows (60 squares total). The blue shading covers 3 columns, and the red shading covers 4 rows. How many squares are in the double-shaded overlap, and what fraction is that?



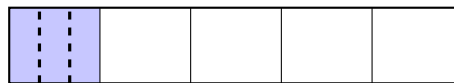
- A. 12 squares, $\frac{12}{60}$
 C. 8 squares, $\frac{8}{60}$
 B. 7 squares, $\frac{7}{60}$
 D. 10 squares, $\frac{10}{60}$

- 2) A prism has volume 125 ft^3 , length 5 ft, and width 5 ft. Find its height.

Record your answer in the space provided.

- 3) The model shows $\frac{1}{5}$ of a whole split into 3 equal parts. What fraction of the whole is each small part?

$\frac{1}{5}$ split into 3



1 whole split into 5 equal parts

- A. $\frac{1}{15}$
 C. $\frac{1}{3}$
 B. $\frac{1}{5}$
 D. $\frac{1}{8}$



4) Which symbol makes the statement true?

$$0.7 \square 0.70$$

A. <

B. >

C. =

D. \neq

5) A class has 24 students. If $\frac{1}{6}$ of them are absent, how many students are absent?

A. 6 students absent

B. 18 students present

C. 12 students present

D. 4 students absent

6) Compare: $(40 + 60) \div 5 \square (40 \div 5) + (60 \div 5)$

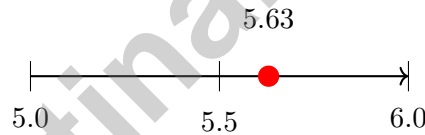
A. >

B. <

C. =

D. Cannot tell

7) Number line from 5.0 to 6.0, midpoint 5.5. Where is 5.63?



What does 5.63 round to (nearest whole)?

A. 5.0

B. 5.5

C. 5.6

D. 6

8) A rectangular fish tank has a base of 6 inches by 4 inches. If the tank is 5 inches tall, what is its volume?

A. 100 in^3

B. 110 in^3

C. 120 in^3

D. 150 in^3



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1) Find the least common denominator for $\frac{1}{5}$ and $\frac{2}{3}$.

A. 8

C. 10

B. 5

D. 15

2) A rectangular gift box has volume 360 in^3 . It is 9 in long and 8 in wide. What is its height?

A. 3 in

C. 5 in

B. 4 in

D. 6 in

3) Add: $\frac{2}{7} + \frac{3}{4}$

A. $\frac{5}{11}$

C. $\frac{5}{28}$

B. $\frac{29}{28}$

D. $\frac{8}{28}$

4) Two boxes are compared. Box A is 8 feet by 4 feet by 3 feet. Box B is 7 feet by 5 feet by 3 feet. By how much is Box B's volume greater than Box A's volume?

Record your answer in the space provided.

5) Estimate: $2\frac{4}{9} + 3\frac{5}{6}$.

Estimate

$2\frac{4}{9}$

≈ 2

$3\frac{5}{6}$

≈ 4

A. 5

C. 7

B. 8

D. 6



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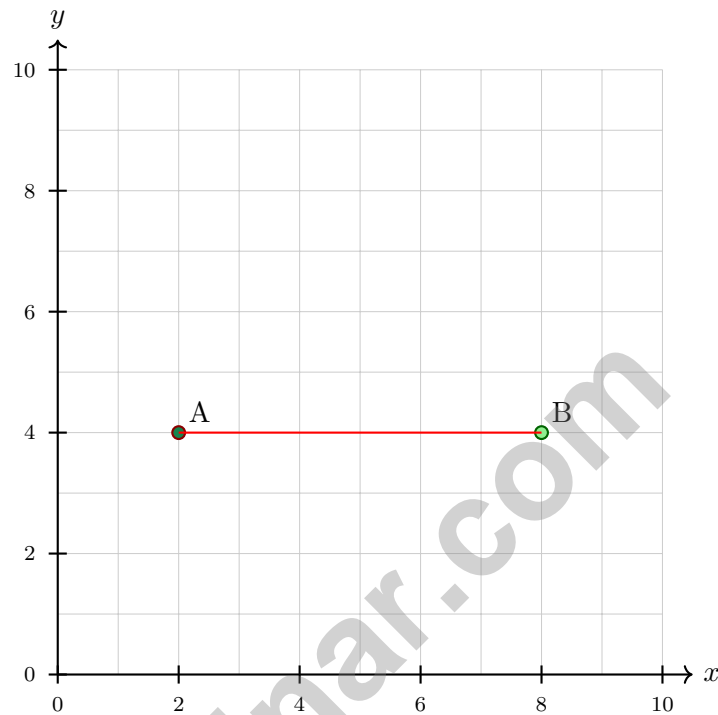
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- 1) Two points are plotted on a coordinate plane. Point A is at (2, 4) and point B is at (8, 4). What is the distance between the two points?



- A. 2 units
- B. 4 units
- C. 6 units
- D. 8 units
- 2) A florist graphs event work. The x-axis shows hours, and the y-axis shows bouquets arranged. What does the point (4, 32) mean?
- A. hours is 32 when bouquets arranged is 4
- B. hours and bouquets arranged are both 36
- C. bouquets arranged is 32 when hours is 4
- D. bouquets arranged is 4 when hours is 32



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.

Testinar.com



Practice Test Answers and Explanations

Practice Test 1 Answers and Explanations

- 1) **Choice A is correct.** (5.NF.B.4b) The overlap has $3 \times 4 = 12$ squares out of 60 total, so the fraction is $\frac{12}{60} = \frac{1}{5}$.
- 2) **The correct answer is 5 ft.** (5.MD.C.5) The base area is $5 \times 5 = 25$ square feet. Since $125 \div 25 = 5$, the height is 5 ft.
- 3) **Choice A is correct.** (5.NF.B.7c) Start with one unit fraction, $\frac{1}{5}$, and share it into 3 equal parts. Each part is $\frac{1}{5} \div 3 = \frac{1}{15}$ of the whole.
- 4) **Choice C is correct.** (5.NBT.A.3b) Adding a trailing zero does not change the value: $0.7 = 0.70$ (both equal 7 tenths).
- 5) **Choice D is correct.** (5.NF.B.5a) $24 \times \frac{1}{6} = 4$ students are absent. Scaling down by $\frac{1}{6}$ gives a smaller number.
- 6) **Choice C is correct.** (5.OA.A.2) Splitting the whole sum into 5 equal parts gives the same result as splitting 40 into 5 equal parts, splitting 60 into 5 equal parts, and then adding.
- 7) **Choice D is correct.** (5.NBT.A.4) 5.63 is between 5.5 and 6.0, closer to 6. The tenths digit is 6, which is ≥ 5 , so round up from 5 to 6.
- 8) **Choice C is correct.** (5.MD.C.5a) Base area = $6 \times 4 = 24 \text{ in}^2$. Volume = $24 \times 5 = 120 \text{ in}^3$.
- 9) **Choice C is correct.** (5.OA.B.3) The block counts are 2, 4, 6, and so on, so Figure number n has $2n$ blocks. Figure 12 has $2 \times 12 = 24$ blocks.
- 10) **Choice C is correct.** (5.OA.A.1) Multiply and divide from left to right: $5 \times 10 = 50$, $50 \div 2 = 25$, and $25 + 3 = 28$.
- 11) **Choice A is correct.** (5.NF.B.4) The shaded strip is $\frac{1}{5}$ unit wide for each unit of height. With 2 units of height, the area is $2 \times \frac{1}{5} = \frac{2}{5}$ square unit.
- 12) **Choice D is correct.** (5.OA.A.2) The words “twice the sum” mean group $6 + 4$ first and multiply by 2. Then “subtract 8” places -8 at the end.
- 13) **Choice B is correct.** (5.NF.A.1) Add: $\frac{9}{10} + 4\frac{1}{10} = 5$.
- 14) **Choice A is correct.** (5.NBT.A.2) A: $0.5 \times 100 = 50$. B: $0.5 \times 10 = 5$. C: $0.05 \times 100 = 5$. D: $50 \times 0.1 = 5$. The largest value is 50.
- 15) **Choice D is correct.** (5.NF.B.5b) Check each: A is $\frac{1}{6}$ not $\frac{1}{5}$. B is $\frac{4}{9}$ not $\frac{4}{6}$. C is $\frac{3}{16}$ not $\frac{4}{16}$. D is correct.
- 16) **Choice A is correct.** (5.NBT.B.7) $24.63 - 18.97 = 5.66$. Requires borrowing from both ones and tens places.
- 17) **Choice C is correct.** (5.OA.A.1) Start with the inner parentheses: $4 - 1 = 3$. Then the bracket is $5 \times 3 = 15$, and the braces become $2 + 15 = 17$.
- 18) **Choices A, B are correct.** (5.NBT.B.5) $345 \times 12 = 4,140$, so the product has 4 digits. C is false because 4,140 is greater than 3,000, and D miscalculates.
- 19) **The correct answer is 18 cubic units.** (5.MD.C.3b) The prism has $3 \times 3 = 9$ cubes in each layer and 2 layers. That gives $9 \times 2 = 18$ cubic units.
- 20) **Choice D is correct.** (5.G.A.2) For each point, the second coordinate is 1 more than the first: $0+1=1$, $2+1=3$, $4+1=5$, $6+1=7$.
- 21) **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).
- 22) **Choice B is correct.** (5.OA.B.3) Pencils = $5 \times$ Students: $3 \times 5 = 15$, $6 \times 5 = 30$, $9 \times 5 = 45$, $12 \times 5 = 60$.
- 23) **Choice D is correct.** (5.NBT.A.3a) 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.
- 24) **Choice D is correct.** (5.NF.A.1) $9\frac{7}{8} - 4\frac{3}{8} = 5\frac{4}{8} = 5\frac{1}{2}$ ft.
- 25) **Choice A is correct.** (5.NF.B.7c) $12 \div \frac{1}{3} = 12 \times 3 = 36$ pieces.
- 26) **Choice D is correct.** (5.NF.A.2) LCD = 12. $1 = \frac{12}{12}$, $\frac{1}{4} = \frac{3}{12}$, $\frac{1}{6} = \frac{2}{12}$. $\frac{12}{12} - \frac{3}{12} - \frac{2}{12} = \frac{7}{12}$.
- 27) **Choice A is correct.** (5.NBT.A.1) Trailing zeros after the decimal point do not change the value, so $5.300 = 5.3 = 5.30$. They are equivalent.
- 28) **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.
- 29) **The correct answer is $\frac{7}{12}$.** (5.NF.A.1) LCD = 12. $\frac{4}{12} + \frac{3}{12} = \frac{7}{12}$.



Captain's Log—Voyage Complete

First Mate, Well Done!

◇ You sailed through 4 practice tests with steady hands and a sharp eye. The waters got rough sometimes, but you kept your course. That's what good sailors do. Now the harbor (test day) is in sight, and you are ready to dock with confidence. ◇

★ **Captain's wisdom:** a good sailor doesn't fight the wind—they read it and adjust. On a test, the same thing is true. When a problem feels tricky, don't panic. Read it again. Try a new strategy. Adjust the sails of your thinking. ★

Captain's Skills Inventory

- **Steady Steering:** EXCELLENT! You stay on course even when problems get tough.
- **Wind Reading:** STRONG! You can spot what a problem is really asking.
- **Crew Spirit:** HIGH! You believe in your own ability.
- **Harbor Approach:** READY! You know how to finish a test calmly.

Final captain's note: the best voyages combine planning with courage. You have both. Trust the chart you built through these 4 tests. Trust your hands on the wheel. Then sail confidently into test day.

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 Captain (Smooth Sailing Ahead)

4 COMPLETE TESTS. CONFIDENCE. SUCCESS.



Give your child the practice and confidence they need to excel in **Grade 5 Math**. This book includes **4 full-length** practice tests designed to build skills, improve test readiness, and help students reach their full potential.

WHAT'S INSIDE:



4 COMPLETE PRACTICE TESTS

Full-length tests that reflect real test format and rigor.



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Step-by-step explanations for every question to help students learn and improve.



BUILD CONFIDENCE & IMPROVE SCORES

Practice consistently, reduce test anxiety, and achieve your best score!



PRACTICE SMART. LEARN MORE. ACHIEVE YOUR BEST.



Strengthen
Math Skills



Improve
Accuracy
& Speed



Master
Essential
Concepts



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Confidence
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