



6

New Hampshire

NH SAS



GRADE 5 MATH

PRACTICE TESTS

Complete Standards-Based Practice
— for Grade 5 Math Success —



$$5^2 = 25$$



**6 FULL-LENGTH
PRACTICE TESTS**
Realistic style questions



**STANDARDS-BASED
PRACTICE**
Covers all Grade 5
Math standards

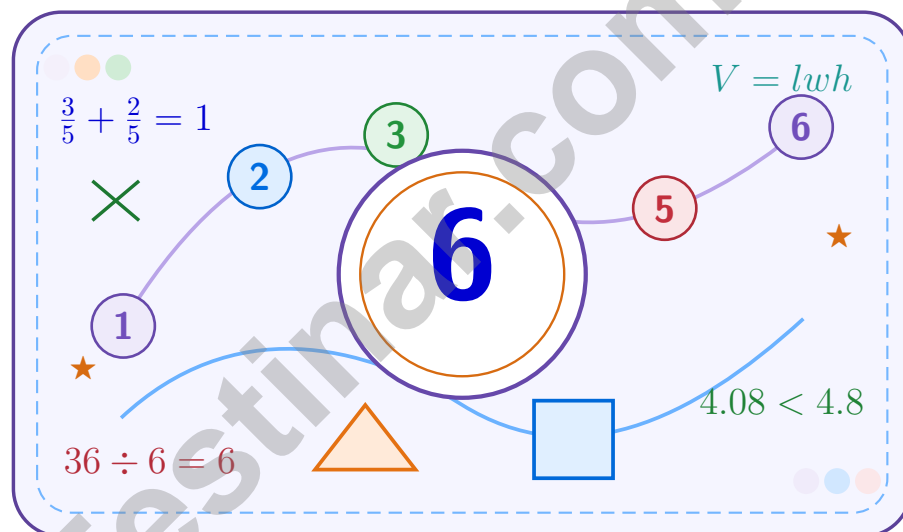


**BUILD CONFIDENCE.
IMPROVE SCORES.**
Target weak areas and
achieve success

★ STRONG PRACTICE. BRIGHT FUTURE. ★

6 New Hampshire NH SAS Grade 5 Math Practice Tests

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



Six full tests, a focused skill booster, 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 six 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 six tests into steady growth

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.

A Six-Week Climb Map

Week	Mission Focus
Week 1	Take Test 1 and review any place-value or operation slips.
Week 2	Take Test 2 and focus on showing neat, easy-to-read work.
Week 3	Take Test 3 and give extra time to fractions or decimals if needed.
Week 4	Take Test 4 and slow down on word problems and units.
Week 5	Take Test 5 and compare your score and habits with earlier rounds.
Week 6	Take Test 6 and finish with calm, careful, confident work that uses everything you practiced before.



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 New Hampshire NH SAS. 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

1

Questions: 40 Duration: No time limit

Calculator Policy: Calculators are not allowed



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



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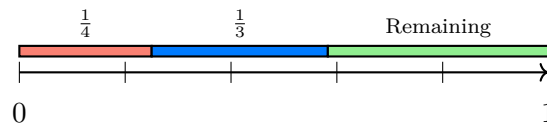
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- 1) A warehouse ships $\frac{1}{4}$ of inventory one day, $\frac{1}{3}$ the next day. Remaining?



- A. $\frac{5}{12}$ C. $\frac{5}{7}$
 B. $\frac{7}{12}$ D. $\frac{11}{12}$
- 2) Find the sum: $\frac{3}{8} + \frac{1}{6}$.

Record your answer in the space provided.

- 3) A rectangular prism has volume 450 cm^3 and base area 50 cm^2 . What is the height?
- A. 7 cm C. 10 cm
 B. 8 cm D. 9 cm
- 4) Without computing, which is true?
- A. $999 \times 7 > 1,000 \times 7$
 B. $999 \times 7 < 1,000 \times 7$
 C. $999 \times 7 = 1,000 \times 7$
 D. Cannot tell



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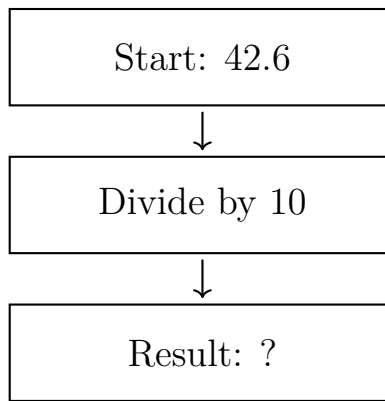
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1)

What is the result?

 A. 4.26 B. 426 C. 0.426 D. 42.62) Which expression represents volume with base area B and height h ? A. $V = B + h$ B. $V = B \times h$ C. $V = \frac{B}{h}$ D. $V = (B + h) \times 2$ 

Grade 5 Mathematics Reference Materials

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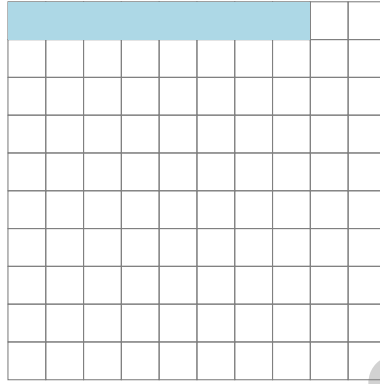
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- 1) Use the 10 by 10 grid below. The shaded region shows $\frac{8}{100}$. What is this fraction in simplest form?



A. $\frac{2}{25}$

B. $\frac{4}{25}$

C. $\frac{1}{8}$

D. $\frac{8}{10}$



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 D is correct.** **(5.NBT.B.5)** Multiply: $29 \times 16 = 29 \times (10 + 6) = (29 \times 10) + (29 \times 6) = 290 + 174 = 464$ cookies.
- 2) **The correct answer is 343 cm^3 .** **(5.MD.C.5a)** A cube has the same side length in every direction. So the volume is $7 \times 7 \times 7 = 343 \text{ cm}^3$.
- 3) **Choice C is correct.** **(5.MD.C.4)** The prism is only 1 unit tall, so it has one layer. The layer has $7 \times 2 = 14$ unit cubes.
- 4) **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.
- 5) **Choice A is correct.** **(5.NF.B.7c)** When you divide a unit fraction by a whole number, multiply by the reciprocal: $\frac{1}{3} \div 4 = \frac{1}{3} \times \frac{1}{4} = \frac{1}{12}$.
- 6) **Choice D is correct.** **(5.NF.B.7c)** The model asks how many one-third pieces fit in 5 wholes. So the matching equation is $5 \div \frac{1}{3} = n$.
- 7) **Choice C is correct.** **(5.NBT.A.2)** $0.003 \times 10^4 = 0.003 \times 10000 = 30$. Moving decimal 4 places right gives 30.
- 8) **Choice C is correct.** **(5.MD.A.1)** 5 lengths: $5 \times 15 = 75$ meters. 3 widths: $3 \times 8 = 24$ meters. Total: $75 + 24 = 99$ meters. Convert: $99 \times 100 = 9,900$ centimeters.
- 9) **Choice B is correct.** **(5.OA.A.1)** Check each expression after simplifying the parentheses. A is $24 \div 4 = 6$, a whole number. B is $13 \div 6$, which is not a whole number. C is $16 \div 4 = 4$, so only B fits.
- 10) **Choice D is correct.** **(5.OA.A.2)** A quotient is a division result, so start with $36 \div 4$. The phrase “increased by 9” means add 9 to that quotient.
- 11) **Choice A is correct.** **(5.NBT.A.2)** The correct answer is $7.5 \div 100 = 0.075$. She incorrectly moved decimal right (multiplying behavior) rather than left.
- 12) **Choice C is correct.** **(5.NF.B.7c)** The student found $4 \times \frac{1}{2} = 2$. But $4 \div \frac{1}{2}$ asks how many halves are in 4 wholes. There are 2 halves in each whole, so 4 wholes contain $4 \times 2 = 8$ halves.
- 13) **Choice A is correct.** **(5.NF.B.7c)** Each whole contains 3 pieces of size $\frac{1}{3}$. With 4 wholes, there are $4 \times 3 = 12$ pieces.
- 14) **Choice B is correct.** **(5.NF.B.4)** $9 \times \frac{1}{3} = \frac{9}{3} = 3$.
- 15) **Choice C is correct.** **(5.MD.A.1)** 6 feet = $6 \times 12 = 72$ inches. Add 3 inches: $72 + 3 = 75$ inches.
- 16) **Choice D is correct.** **(5.NF.B.5a)** $\frac{2}{4} = \frac{1}{2}$, so both products are equal.
- 17) **Choice A is correct.** **(5.NF.B.5b)** $3\frac{1}{4} = \frac{13}{4}$. Then $\frac{13}{4} \times 2 = \frac{26}{4} = 6\frac{2}{4} = 6\frac{1}{2}$.
- 18) **Choice B is correct.** **(5.NBT.A.2)** $52 \times 10 = 520$. Multiply by 10 by appending one zero.
- 19) **Choice C is correct.** **(5.MD.C.5)** Use the rectangular-prism volume formula: $6 \times 7 \times 8 = 336$. So the volume is 336 cubic feet.
- 20) **Choice B is correct.** **(5.NBT.A.2)** The nonzero parts make $3 \times 3 = 9$. The two factor zeros make the product 900, so it has 2 zeros.
- 21) **Choice B is correct.** **(5.G.B.3)** A rhombus has all four sides equal in length. It does not have to have four right angles, and it has two pairs of parallel sides.
- 22) **Choices A, C are correct.** **(5.NBT.B.6)** $576 \div 24 = 24$ and $720 \div 30 = 24$. The other quotients are $960 \div 48 = 20$ and $1,050 \div 50 = 21$.
- 23) **Choice B is correct.** **(5.NBT.B.7)** Add by place value: hundredths $0 + 8 = 8$, tenths $5 + 3 = 8$, and dollars $2 + 1 = 3$. The sum is \$3.88.
- 24) **Choice D is correct.** **(5.NF.A.2)** LCD of 3 and 5 is 15. $\frac{1}{3} = \frac{5}{15}$ and $\frac{2}{5} = \frac{6}{15}$.
- 25) **Choice B is correct.** **(5.NBT.A.2)** Dividing by 10 moves the decimal one place left, so 2,478 becomes 247.8.
- 26) **The correct answer is (6, 4).** **(5.G.A.2)** Move 6 units right for the x-coordinate and 4 units up for the y-coordinate, so the ordered pair is (6, 4).
- 27) **Choice C is correct.** **(5.NBT.B.7)** $9.6 \div 4 = 2.4$. Divide $96 \div 4 = 24$, then place decimal one place from right: 2.4.
- 28) **Choice D is correct.** **(5.MD.A.1)** There are 1,000 meters in 1 kilometer. Since we are changing meters to kilometers, divide: $3,750 \div 1,000 = 3.75$. Emma ran 3.75 kilometers.
- 29) **The correct answer is (4, 1).** **(5.G.A.2)** Start with (0, 0). After one step, A is 4 and B is 1, giving (4, 1).



Greetings, Star Navigator!

★ Stellar achievements unlocked! You've traversed six complete mathematical galaxies, calculating trajectories, solving cosmic puzzles, and navigating through challenging mathematical dimensions like an intergalactic explorer! Each test took you to new mathematical frontiers, and you charted your course with remarkable precision. Your navigation systems are fully calibrated and operational! ★

◇ **Here's what intergalactic navigators understand:** exploring unknown galaxies requires preparation, courage, and advanced navigation skills. They study star maps, practice emergency protocols, and trust their instruments completely. You've developed those same skills through these six test voyages! Your mathematical navigation systems are reliable and ready for any cosmic challenge! ◇

Spacecraft Systems Status

- **Navigation Computers:** All mathematical coordinates calculated accurately!
- **Life Support Systems:** Problem-solving stamina at maximum capacity!
- **Communication Array:** Clear understanding of all mathematical signals!
- **Mission Status:** Cleared for test day deep space exploration!

Interstellar travel wisdom: experienced navigators remain calm during meteor showers because they've trained for turbulence. When test day presents unexpected mathematical asteroids, remember your six training missions through different galaxies. You've already navigated successfully through diverse challenges. Trust your instruments, maintain your course, and reach your destination confidently!

Want to report discoveries from distant mathematical galaxies? Transmit your findings to reza@testinar.com. Command Center is receiving!

Reza Nazari & Jay Daie

Your Math Coaches for Big Confidence

6 FULL-LENGTH TESTS. ENDLESS POTENTIAL.

PRACTICE TODAY. SUCCEED TOMORROW.

Give your child the tools they need to build strong math skills and test-taking confidence! This book includes **6 full-length practice tests** along with standards-based practice, mixed review, word problems, and a complete answer key.

★★★
PRACTICE
WITH PURPOSE.
ACHIEVE WITH
CONFIDENCE.

WHAT'S INSIDE:



6 FULL-LENGTH PRACTICE TESTS

Realistic tests designed to reflect the actual test format and help build confidence.



STANDARDS-BASED PRACTICE

Covers all essential Grade 5 math standards with clear explanations and examples.



MIXED REVIEW

Reinforces key concepts with a variety of question types and review exercises.



WORD PROBLEMS

Build critical thinking and problem-solving skills with real-world scenarios.



COMPLETE ANSWER KEY

Step-by-step explanations for every question to support learning and growth.



IMPROVE. PRACTICE. ACHIEVE.

Consistent practice leads to stronger skills, higher scores, and greater success.



WHY PRACTICE MAKES A DIFFERENCE



BUILD CONFIDENCE

Feel prepared and ready for any challenge.



IMPROVE ACCURACY

Strengthen skills and reduce careless mistakes.



THINK STRATEGICALLY

Develop problem-solving skills and deepen understanding.



MANAGE TIME

Practice under timed conditions to build stamina.



STAY MOTIVATED

Track progress and celebrate every win.



ACHIEVE SUCCESS

Reach goals and unlock your full potential!



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for more Grade 5 math resources and practice materials!



Testinar

Smart Practice. Stronger Results.