

$\frac{2}{3}$

FULL-LENGTH

$\frac{2}{4}$

New Hampshire

$7 \times 8 =$

$0,25$



Aligned to State Standards

NH SAS

7×8

MATH

$56 \div 7$

Grade

5

$(a+b)^2$

PRACTICE TESTS

Complete State Standards Review
with Answer Key and
Essential Math Skills Practice



3 Full-Length Practice Tests
Aligned to State Standards



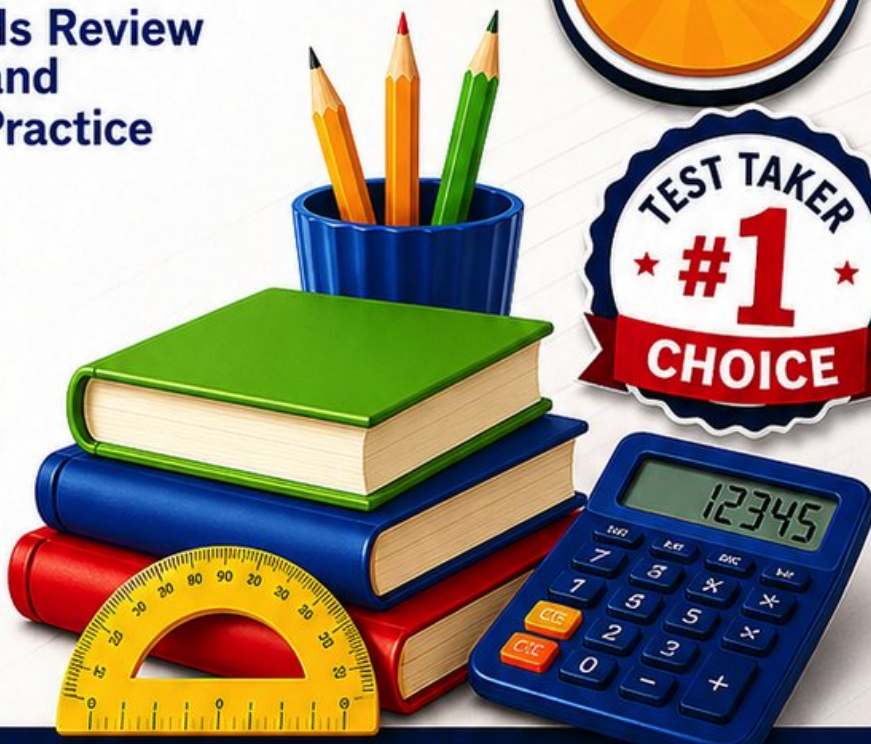
Covers All Grade 5 Math Topics
Numbers & Operations, Fractions,
Decimals, Geometry, Measurement,
Data & Problem Solving



Build Confidence
Strengthen Skills • Improve Accuracy
• Boost Test Readiness



Detailed Answer Key
Step-by-Step Explanations
for All Questions



WRITTEN FOR
GRADE 5 STUDENTS



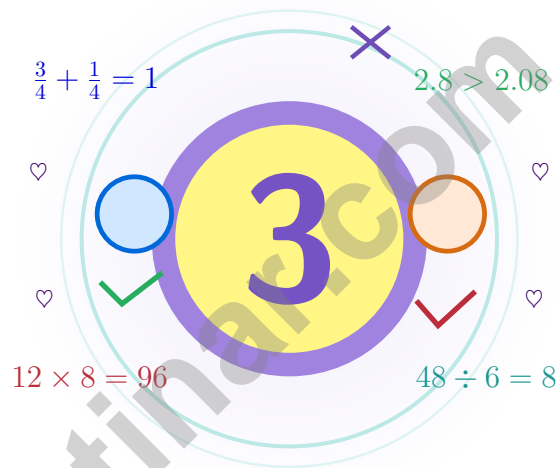
PERFECT FOR
TEST PREP & REVIEW



CLASSROOM, HOME,
OR SELF-STUDY USE

3 New Hampshire NH SAS Grade 5 Math Practice Tests

Granite-strong math for thinkers who hold steady



Three full tests, a friendly quick review, smart strategy pages, and student-tested support that help Grade 5 mathematicians from The Granite State walk in ready to think.

Jay Daie and Reza Nazari



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New Hampshire, Welcome to Your Practice Studio

Granite-strong math for thinkers who hold steady

New Hampshire Grade 5: This Is for You

Math is like Granite State stone – it holds up under pressure when each layer was placed with care.

Some questions will feel easy from the very first read. Others will ask you to pause, sketch, estimate, or try again. That is not a problem. That is practice doing exactly what it should do. Every honest attempt grows your math brain a little stronger.

Read

Read with care – math problems hide their gifts.

Try

Try a strategy that fits the size of the numbers.

Reflect

Reflect after each problem to lock the lesson in.

A New Hampshire promise to yourself: I will place every step like a stone in a New Hampshire wall: careful, steady, and built to hold.

Three Tests, One Routine

A simple game plan that turns practice into real progress

Step 1: Notice

Notice the structure: warm-up, test, review.

Wake up the big Grade 5 ideas before the test starts so your brain is already warmed up.

Step 2: Practice

Practice one full test under quiet conditions.

Find a calm corner, settle in, and aim for careful, honest choices before quick ones.

Step 3: Honest Check

Check honestly without rushing.

Circle missed questions, sort out what went sideways, and notice which skills are calling for more attention.

Step 4: Polish

Polish the rough spots before test number two.

Read the explanation, fix the work, and carry that lesson forward into the next test.

Three-Week Math Boot Camp

Week 1	Test 1 is your map-making week.
Week 2	Test 2 is your fix-it week.
Week 3	Test 3 is your show-up-strong week.



Scan me

About These Three Tests

What these 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 getting answers right. Students are practicing how to read with care, choose a strategy, solve step by step, and explain their reasoning clearly – the same way mathematicians do every single day.

Selected-Response Questions

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

Constructed-Response Questions

Students show their steps, explain a method, or back up an answer with clear math. Clean reasoning matters because it shows how the answer was actually 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
- line plots, tables, numerical patterns, and coordinate points
- geometry and multi-step real-world problems

What strong work looks like on the NH SAS: the math is correct, the steps are readable, the labels and units match the problem, and the final answer truly answers 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)

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



1) Evaluate: $0.5 \times 1,000 \div 10$

- A. 5 C. 500
 B. 50 D. 5,000

2) Round 34.196 to the nearest whole number.

- A. 34 C. 34.2
 B. 34.1 D. 35

3) What is the best unit for measuring the volume of a sugar cube?



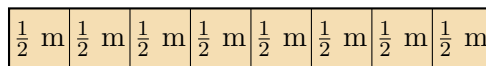
Sugar cube

- A. Cubic meters C. Cubic feet
 B. Cubic kilometers D. Cubic centimeters

4) Without computing, predict whether $9 \times \frac{1}{3}$ is greater than, less than, or equal to 9.

- A. Greater than 9 C. Equal to 9
 B. Less than 9 D. Cannot tell

5) A tailor has 4 meters of fabric. Each costume needs $\frac{1}{2}$ meter. How many costumes can be made?



4 meters

- A. 8 C. 6
 B. 2 D. 4



6) How many more unit cubes are needed to complete a $4 \times 3 \times 2$ rectangular prism if 15 unit cubes are already placed?

- A. 9 unit cubes C. 15 unit cubes
 B. 10 unit cubes D. 24 unit cubes

7) Find: $\frac{7}{8} \times 4$.

Record your answer in the space provided.

8) Maria buys 5 erasers at \$0.75 each. How much does she spend?

- A. \$3.25 C. \$3.75
 B. \$3.50 D. \$4.00

9) Which statement about triangles is true?

- A. An equilateral triangle has three equal sides. C. Every right triangle has three equal sides.
 B. A scalene triangle has two equal sides. D. Every triangle has a right angle.

10) Sandy said: " $8 + (2 \times 4)$ is the same as $8 + 8$ because $2 \times 4 = 8$." Is she right?

- A. Yes C. No, it's 40
 B. No, it's 24 D. No, it's 12



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1) Aquarium: volume 360 in^3 , base 12 in by 5 in. Height =?

- A. 6 in C. 7 in
 B. 1800 in D. 60 in

2) A rectangular prism has volume 450 in^3 , length 15 in, and width 6 in. What is the height?

- A. 4 in C. 7 in
 B. 6 in D. 5 in

3) How many ounces are in 6 pounds? Use the conversion: 1 pound = 16 ounces.

Pounds	Ounces
1	16
3	48
6	?

- A. 80 ounces C. 112 ounces
 B. 120 ounces D. 96 ounces

4) Look at the pattern: 2, 6, 18, 54, ... What is the 6th term?

Record your answer in the space provided.

5) How many times greater is the value of a 3 in the tenths place than the value of a 3 in the thousandths place?

- A. 2 times C. 100 times
 B. 10 times D. 1000 times



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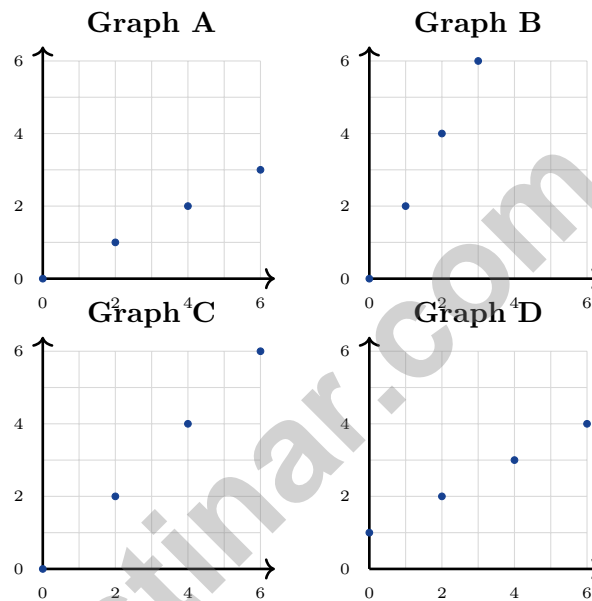
1 day = 24 hours (hr) 1 year = 52 weeks



1) Estimate $2,345 \div 59$ using compatible numbers:

- A. $2,400 \div 60 = 40$
 C. $2,000 \div 50 = 40$
 B. $2,100 \div 70 = 30$
 D. $2,500 \div 75 = 33$

2) A pattern starts at $(0, 0)$ and follows the rule “add 2 to x and add 1 to y ”. Which graph matches this pattern?



- A. Graph A
 C. Graph C
 B. Graph B
 D. Graph D

3) A painting class has $\frac{1}{4}$ gallon of paint to share equally among 4 tables. How many gallons does each table get?

- A. $\frac{1}{5}$ gallon
 C. $\frac{1}{10}$ gallon
 B. $\frac{1}{16}$ gallon
 D. $\frac{1}{14}$ gallon



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 B is correct.** (5.NBT.A.2) First multiply by 1,000, moving the decimal three places right to get 500. Then divide by 10, moving one place left to get 50.
- Choice A is correct.** (5.NBT.A.4) The tenths digit is 1. Since $1 < 5$, round down. 34.196 rounded to the nearest whole number is 34.
- Choice D is correct.** (5.MD.C.3b) A sugar cube is very small. Cubic centimeters is the most appropriate unit. The others are too large.
- Choice B is correct.** (5.NF.B.5a) Since $\frac{1}{3} < 1$, multiplying 9 by $\frac{1}{3}$ will give a result smaller than 9. No computation needed!
- Choice A is correct.** (5.NF.B.7c) $4 \div \frac{1}{2} = 4 \times 2 = 8$. She can make 8 costumes.
- Choice A is correct.** (5.MD.C.4) Total volume: $4 \times 3 \times 2 = 24$ cubes. Already placed: 15. Needed: $24 - 15 = 9$ unit cubes.
- The correct answer is $3\frac{1}{2}$.** (5.NF.B.4) Four copies of $\frac{7}{8}$ make $\frac{28}{8}$. Divide 28 by 8 to get $3\frac{4}{8}$, which simplifies to $3\frac{1}{2}$.
- Choice C is correct.** (5.NBT.B.7) Multiply $5 \times 0.75 = 3.75$. Since 0.75 has 2 decimal places and 5 has 0, the product has 2 decimal places: \$3.75.
- Choice A is correct.** (5.G.B.4) An equilateral triangle is classified by its side lengths: all three sides are equal.
- Choice A is correct.** (5.OA.A.2) Sandy is right because the grouped product is $2 \times 4 = 8$. So $8 + (2 \times 4)$ becomes $8 + 8$.
- Choice D is correct.** (5.NF.A.2) Multiply both the numerator and the denominator of $\frac{3}{5}$ by 2: $\frac{3 \times 2}{5 \times 2} = \frac{6}{10}$. So $\frac{3}{5}$ and $\frac{6}{10}$ are equivalent.
- Choice C is correct.** (5.MD.B.2) There are four ribbons at $\frac{3}{4}$ inch. Their total length is $4 \times \frac{3}{4} = 3$ inches.
- Choice C is correct.** (5.NBT.A.2) A and B both equal 7.5. Choice C equals 0.75, and D equals 0.0075.
- Choice A is correct.** (5.NF.A.1) Borrow 1: $1\frac{5}{4} - 1\frac{3}{4} = \frac{2}{4} = \frac{1}{2}$ hr.
- Choice B is correct.** (5.NBT.B.7) Option B ($5.82 - 2.56$) requires borrowing because 2 hundredths is not enough to subtract 6 hundredths. Borrow 1 tenth to make 12 hundredths.
- Choice C is correct.** (5.G.A.2) For this rule, each y -value should be 5 times the x -value. When $x = 6$, the output should be $5 \times 6 = 30$, not 25.
- Choice C is correct.** (5.NF.A.2) $\frac{5}{6} - \frac{2}{6} = \frac{3}{6} = \frac{1}{2}$. Subtract the numerators when denominators are the same, then simplify.
- Choice C is correct.** (5.MD.A.1) 1 kilometer = 1,000 meters. Multiply: $4.5 \times 1000 = 4500$ m.
- Choice C is correct.** (5.NBT.A.2) Dividing by 100: $12.6 \div 100 = 0.126$ liters per portion.
- Choice A is correct.** (5.NF.B.6) $\frac{1}{2} \times \frac{7}{8} = \frac{7}{16}$ liter.
- Choices A, B are correct.** (5.NF.A.2) A is true because 12 is a common denominator. B is true because $\frac{10}{12} - \frac{3}{12} = \frac{7}{12}$. C and D subtract incorrectly.
- Choice A is correct.** (5.MD.C.5a) The base area is 100 square meters. Since $500 \div 100 = 5$, the height is 5 m.
- Choice C is correct.** (5.MD.C.5) Divide: $63.45 \div 3 = 21.15$ dollars per friend.
- The correct answer is 9.** (5.OA.A.1) Start with the grouped subtraction: $20 - 5 = 15$. Then divide: $15 \div 3 = 5$. Finally add: $5 + 4 = 9$.
- The correct answer is 2.** (5.G.A.1) Point P is inside Quadrant I, so its x -coordinate and y -coordinate are both positive. Points on an axis can have a 0 coordinate, but this point is not on an axis.
- Choice B is correct.** (5.OA.A.1) Both parentheses become simpler numbers: $9 + 6 = 15$ and $5 - 2 = 3$. So the original expression is equivalent to 15×3 .
- Choice C is correct.** (5.NBT.A.2) $\frac{10^5}{10^3} = 10^2 = 100$ times larger.
- Choice B is correct.** (5.MD.B.2) Add the ribbon lengths shown: $2\left(\frac{1}{4}\right) + 3\left(\frac{1}{2}\right) + 2\left(\frac{3}{4}\right) + 1 + 1\frac{1}{4} = 5\frac{3}{4}$ yards.
- Choice A is correct.** (5.NF.B.7c) $\frac{1}{5} \div 5 = \frac{1}{5} \times \frac{1}{5} = \frac{1}{25}$.



Champion in Training!

◇ What a season! You've completed 3 full practice tests, and that's the kind of training that builds real champions. Every test was a workout, and your math muscles are stronger today than they were before. Your stamina, focus, and accuracy have all leveled up. ◇

★ **Here's what every great coach knows:** the team that practices the most plays the best. You've put in the practice. You know the plays. You've handled the drills. Now it's almost game day, and you are ready. ★

Your Training Camp Stats

- **Math Stamina:** HIGH! You can stay focused for a full test.
- **Strategy Playbook:** LOADED! You have multiple ways to attack a problem.
- **Mistake Recovery:** STRONG! You can pick yourself up and keep going.
- **Game Day Mindset:** READY! You know how to stay calm under pressure.

Pre-game tip: the night before test day, get a great sleep. Eat a good breakfast. Bring a sharp pencil and a positive attitude. And remember—you have already trained for this. Trust your training.

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 Coaches (Game On!)

Build Skills. Boost Confidence. Excel on the Grade 5 Math Test.

Help your child succeed with confidence! This book includes **3 full-length Grade 5 Math practice tests** aligned to state standards. With a focus on essential skills, problem solving, and test readiness, it's the perfect resource for classroom, home, or on-the-go practice.



WHAT'S INSIDE:



3 Full-Length Grade 5 Math Practice Tests

Realistic test format to build familiarity and confidence.



Covers All Essential Math Topics

Fractions, decimals, geometry, measurement, data, number operations, and more.



Build Strong Math Skills

Strengthen understanding and problem-solving through varied question types.



Detailed Answer Key

Step-by-step explanations to help your child learn from mistakes and improve.



Track Progress & Improve

Use score trackers to identify strengths and focus on areas that need more practice.



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- ✓ Reinforce classroom learning
- ✓ Improve accuracy and speed
- ✓ Reduce test anxiety
- ✓ Achieve your best score!



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and practice materials!