

# 6

# New Hampshire

# NH SAS

# GRADE 4 MATH PRACTICE TESTS

Standards-Aligned Review with  
Mixed Practice and Answer Key



**MASTER KEY MATH CONCEPTS**  
**BUILD CONFIDENCE FOR TEST DAY**

**INCLUDES COMPREHENSIVE ANSWER KEY**  
**ALIGNED STATE STANDARDS**

# 6 New Hampshire NH SAS Grade 4 Math Practice Tests

*Standards-Aligned Review with Mixed Practice and Answer Key*



Six complete 30-question Grade 4 practice rounds for NH SAS, built around granite peaks, forest paths, and crisp math explanations, with answer keys and clear explanations for every item.

**Jay Daie and Reza Nazari**



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# Welcome, New Hampshire Math Explorer!

Six steady rounds on the Granite State math route

This book gives you six full Grade 4 practice tests for NH SAS. Each round uses granite peaks, forest paths, and crisp math explanations to keep practice memorable while you read carefully, choose a strategy, show work, and check the answer.

## New Hampshire Practice Promise

I will slow down for the question, circle what matters, solve one step at a time, and use mistakes as clues for getting stronger.

Read

Plan

Check

## How to Use This Book

A ten-session routine for New Hampshire NH SAS review

1. **Preview the skills.** Read the quick review pages before the first test.
2. **Take one test at a time.** Treat each round like a stop on the Granite State math route.
3. **Mark your confidence.** Put a small star beside problems you solved with a strong plan.
4. **Check, then retry.** For missed questions, try the problem again before reading the explanation.
5. **Track your next move.** Use the growth log to name one habit and one skill for the next test.

**Good rhythm:** Test one day, correct carefully the next day, then return for the next round when your corrections feel clear.



## What Is Inside?

Six tests, 180 questions, and a full NH SAS review path

Part	What You Will Practice
Tests 1–3	Warm-up rounds for reading carefully, choosing operations, and using models.
Tests 4–6	Skill-building rounds with fractions, measurement, area, data, and two-step problems.
Tests 4–6	Stamina rounds for mixed review, neat work, and flexible strategies.
Answer Pages	Compact keys and explanations that show why each answer works.

The tests are mixed on purpose. Real test readiness means recognizing the skill even when the next question changes topic.

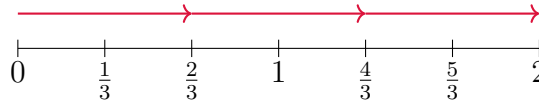


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- 1) Use the number line to find  $3 \times \frac{2}{3}$ .

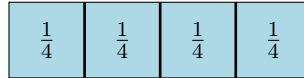


- A.  $\frac{2}{3}$ 
 C. 2  
 B.  $1\frac{1}{3}$ 
 D.  $\frac{9}{3}$  or 3
- 2) Which of the following is the same as  $5 \times \frac{1}{12}$ ?
- A.  $\frac{5}{12}$ 
 C.  $\frac{1}{60}$   
 B.  $\frac{12}{5}$ 
 D.  $\frac{5}{1}$
- 3) A shop owner buys 5 bottles of cleaner, with 12 fluid ounces in each bottle. How many fluid ounces of cleaner does he buy?
- A. 17 fl oz
  C. 65 fl oz  
 B. 60 fl oz
  D. 72 fl oz
- 4) A line plot shows data in fourths. At  $\frac{1}{4}$  there are 2 X marks, at  $\frac{2}{4}$  there are 3 X marks, and at  $\frac{3}{4}$  there is 1 X mark. How many more X marks are at  $\frac{2}{4}$  than at  $\frac{3}{4}$ ?
- A. 1
  C. 3  
 B. 2
  D. 4
- 5) What is  $1,428 \div 6$ ?
- A. 238
  C. 248  
 B. 242
  D. 244



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6)



The bar above shows 1 whole divided into fourths. If Sam uses 3 whole bars like this, how many fourths does he use?

- A.  $\frac{3}{4}$ 
 C.  $\frac{3}{12}$   
 B.  $\frac{12}{4}$  (or 3 wholes)
 D.  $\frac{1}{4}$

7) What are the factors of 15?

- A. 1, 3, 5, 9, 15
 C. 3, 5, 15  
 B. 1, 5, 15
 D. 1, 3, 5, 15

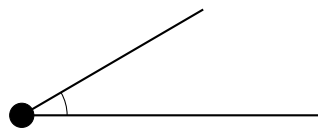
8) Which option shows TWO different decompositions that both equal  $\frac{10}{12}$ ?

- A.  $\frac{6}{12} + \frac{4}{12}$  and  $\frac{5}{12} + \frac{5}{12}$ 
 C.  $\frac{4}{12} + \frac{4}{12} + \frac{2}{12}$  and  $\frac{6}{12} + \frac{5}{12}$   
 B.  $\frac{7}{12} + \frac{3}{12}$  and  $\frac{8}{12} + \frac{3}{12}$ 
 D.  $\frac{9}{12} + \frac{2}{12}$  and  $\frac{3}{12} + \frac{6}{12}$

9) Greyson collects 8 baseball cards. His friend collects 4 times as many. How many cards does his friend collect?

- A. 12
 C. 4  
 B. 2
 D. 32

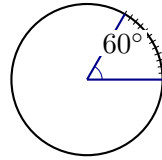
10)



Which statement is true about this angle?

- A. It is larger than a right angle
 C. It is equal to a right angle  
 B. It is smaller than a right angle
 D. It is a straight angle





11)

Mia's angle measures 60 degrees. How many one-degree angle units make up this angle?

- A. 6 units                       C. 60 units  
 B. 30 units                     D. 120 units

12) A store has 100 apples. They receive 35 more apples. Then they sell 42 apples. How many apples are left?

- A. 65                               C. 135  
 B. 77                               D. 93

13) What is 78,234 rounded to the nearest hundred?

- A. 78,000                       C. 78,230  
 B. 78,300                       D. 78,200

14) Estimate by rounding to the nearest thousand:  $26,345 - 8,912 = ?$

- A. About 18,000               C. About 19,000  
 B. About 20,000               D. About 17,000

15) Select the TWO fractions that are greater than  $\frac{1}{2}$ .

- A.  $\frac{2}{5}$   
 B.  $\frac{3}{5}$   
 C.  $\frac{1}{3}$   
 D.  $\frac{5}{8}$   
 E.  $\frac{1}{4}$



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1) Mia receives  $\frac{3}{4}$  dollar as allowance each week. How much allowance does she receive after 2 weeks?

- A.  $\frac{3}{8}$  dollars                       C.  $1\frac{1}{2}$  dollars  
 B.  $\frac{5}{4}$  dollars                         D.  $\frac{2}{4}$  dollars

2) A line plot shows pencil weights in eighths of an ounce. There are 1 pencil at  $\frac{1}{8}$ , 3 pencils at  $\frac{2}{8}$ , and 2 pencils at  $\frac{3}{8}$ . What is the total number of pencils?

- A. 3     C. 5  
 B. 4     D. 6

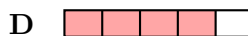
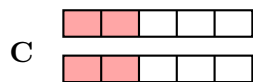
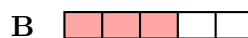
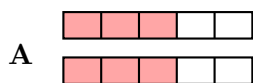
3) There are 84 pencils in a box. 12 pencils are broken. The remaining good pencils are shared equally among 6 friends. How many pencils does each friend get?

- A. 14     C. 16  
 B. 10     D. 12 pencils

4) Which expression matches the fraction  $\frac{8}{10}$ ?

- A.  $2 \times \frac{1}{10}$                                        C.  $10 \times \frac{1}{8}$   
 B.  $8 \times \frac{1}{10}$                                        D.  $8 \times \frac{1}{80}$

5) Which bar model represents  $2 \times \frac{3}{5}$ ?



- A. Top-left picture                               C. Bottom-left picture  
 B. Top-right picture                             D. Bottom-right picture

6) What is  $\frac{9}{10} + \frac{1}{10}$ ?



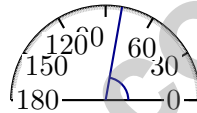
$$\frac{9}{10} \text{ (light red)} + \frac{1}{10} \text{ (dark red)}$$

- A.  $\frac{10}{10}$  or 1                       C.  $\frac{8}{10}$   
 B.  $\frac{10}{20}$                                  D.  $\frac{1}{10}$

7) Which statement about the letter *N* is correct?

- A. It has 1 line of symmetry                       C. It has no line of symmetry  
 B. It has 2 lines of symmetry                       D. It has 4 lines of symmetry

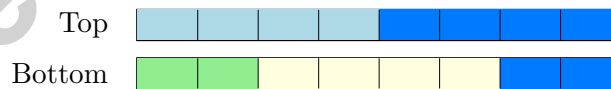
8)



What is the measure of the angle shown?

- A. 80 degrees                                       C. 85 degrees  
 B. 75 degrees                                       D. 90 degrees

9) A student draws two bars showing  $\frac{8}{8}$ :



Which decomposition does the top bar show?

- A.  $\frac{4}{8} + \frac{4}{8}$      C.  $\frac{1}{8} + \frac{7}{8}$   
 B.  $\frac{2}{8} + \frac{2}{8} + \frac{2}{8} + \frac{2}{8}$                                D.  $\frac{3}{8} + \frac{5}{8}$



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1) A recipe calls for  $\frac{3}{4}$  cup of sugar. If Dylan is making 5 batches, how much sugar does he need?

- A.  $\frac{3}{20}$  cup                       C.  $\frac{15}{20}$  cup  
 B.  $\frac{8}{4}$  cups                         D.  $\frac{15}{4}$  cups or  $3\frac{3}{4}$  cups

2) Is 25 prime or composite?

- A. Prime                                 C. Neither  
 B. Both                                  D. Composite

3) What is  $31 \times 21$ ?

- A. 651                                  C. 551  
 B. 341                                  D. 52

4) Two angles together are  $\frac{10}{12}$  of a straight angle. One angle is  $\frac{4}{12}$  of a straight angle. What is the other angle?



Angle 1:  $\frac{4}{12}$

Angle 2: ?  
Total =  $\frac{10}{12}$

- A.  $\frac{6}{12}$                                   C.  $\frac{4}{12}$   
 B.  $\frac{14}{12}$                                 D.  $\frac{6}{24}$

5) In the number 7,707, the digit 7 in the hundreds place has a value that is how many times the digit 7 in the ones place?

- A. 10                                     C. 1,000  
 B. 1                                       D. 100



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6) What is  $4\frac{1}{4} + 1\frac{2}{4}$ ?

A.  $5\frac{1}{4}$

B.  $5\frac{2}{4}$

C.  $5\frac{3}{4}$

D.  $6\frac{1}{4}$

7) A recipe calls for  $\frac{3}{5}$  cup of milk. If you double the recipe, how much milk do you need?

A.  $\frac{3}{10}$  cup

B.  $\frac{6}{5}$  cups (or  $1\frac{1}{5}$  cups)

C.  $\frac{5}{6}$  cup

D.  $\frac{2}{5}$  cup

8) Which decimal equals  $\frac{8}{10}$ ?

A. 0.8

B. 0.08

C. 0.88

D. 0.088

9) Carlos uses 7 out of 10 equal pieces of string. What fraction of the string did he use?

10) Mia has  $4\frac{2}{3}$  hours to complete a project. She spends  $2\frac{1}{3}$  hours on the first part. How much time remains for the rest?

A.  $2\frac{1}{3}$

B.  $1\frac{1}{3}$

C.  $6\frac{3}{3}$

D.  $2\frac{2}{3}$



## Practice Test Answer Keys

**How to use this section with a Grade 4 student:**

1. check the answer first
2. mark questions to try again
3. rework the problem before reading the full explanation

**A calm correction routine turns every missed item into useful practice.**

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## Practice Test Answers and Explanations

### Practice Test 1 Answers and Explanations

- Choice C is correct.** (4.NF.B.4) On the number line, we make 3 jumps of  $\frac{2}{3}$  each, landing at 2. So  $3 \times \frac{2}{3} = \frac{6}{3} = 2$ . The answer is **2**.
- Choice A is correct.** (4.NF.B.4) When we multiply a whole number by a unit fraction, we get that many copies of the unit fraction. So  $5 \times \frac{1}{12}$  means 5 copies of  $\frac{1}{12}$ , which is  $\frac{5}{12}$ .
- Choice B is correct.** (4.MD.A.2) Each bottle holds 12 fl oz. He buys 5 bottles, so multiply:  $5 \times 12 = 60$  fl oz. He buys **60** fluid ounces total.
- Choice B is correct.** (4.MD.B.4) At  $\frac{2}{4}$  inch there are 3 X marks. At  $\frac{3}{4}$  inch there is 1 X mark. The difference is  $3 - 1 = 2$ .
- Choice A is correct.** (4.NBT.B.6) Long division:  $1 \div 6 = 0$  r1, bring down the 4 to get  $14 \div 6 = 2$  r2, bring down the 2 to get  $22 \div 6 = 3$  r4, bring down the 8 to get  $48 \div 6 = 8$ . The answer is **238**.
- Choice B is correct.** (4.NF.B.4) Each whole bar shows 4 fourths. If we use 3 whole bars, we have  $3 \times 4 = 12$  fourths total, which is  $\frac{12}{4}$  or 3 wholes.
- Choice D is correct.** (4.OA.B.4) Find every number that divides 15 evenly. Pair them up:  $1 \times 15$  and  $3 \times 5$ . So the factor list is 1, 3, 5, 15. (Note that 1 and the number itself are always factors!)
- Choice A is correct.** (4.NF.B.3) Check both decompositions in choice A by adding numerators. First way:  $6 + 4 = 10$ , so  $\frac{6}{12} + \frac{4}{12} = \frac{10}{12} \checkmark$ . Second way:  $5 + 5 = 10$ , so  $\frac{5}{12} + \frac{5}{12} = \frac{10}{12} \checkmark$ . Both ways break  $\frac{10}{12}$  apart differently but equal the same total. *Why other options fail:* B's second pair sums to  $11/12$ ; C's second sum is  $11/12$ ; D's second sum is only  $9/12$ .
- Choice D is correct.** (4.OA.A.1) "4 times as many" is a multiplication signal. The friend collects 4 groups of Greyson's 8 cards:  $8 \times 4 = 32$  cards.
- Choice B is correct.** (4.MD.C.5) This angle is acute because it has a small opening, smaller than a right angle (90 degrees).
- Choice C is correct.** (4.MD.C.5) Mia's angle of  $60^\circ$  is composed of **60** one-degree angle units.
- Choice D is correct.** (4.OA.A.3) Two steps! Step 1: add the new shipment:  $100 + 35 = 135$  apples. Step 2: take away the ones sold:  $135 - 42 = 93$  apples left.
- Choice D is correct.** (4.NBT.A.3) We're rounding to the nearest hundred. Look at the tens digit: 3. Since  $3 < 5$ , we round DOWN. The hundreds digit stays at 2, giving us **78,200**.  $\checkmark$
- Choice D is correct.** (4.NBT.B.4) Round each number to the nearest thousand:  $26,345 \approx 26,000$  and  $8,912 \approx 9,000$ . Subtract:  $26,000 - 9,000 = 17,000$ .
- The correct answer is B, D.** (4.NF.A.1) Use  $\frac{1}{2}$  as benchmark:  $\frac{3}{5} = \frac{6}{10} > \frac{5}{10} = \frac{1}{2}$  and  $\frac{5}{8} > \frac{4}{8} = \frac{1}{2}$ . The others are less than  $\frac{1}{2}$ .
- Choice C is correct.** (4.MD.A.1) Since 1 tablespoon = 3 teaspoons, multiply:  $4 \times 3 = 12$  teaspoons. The answer is **12** teaspoons.
- Choice A is correct.** (4.MD.C.6) One ray sits on the baseline at  $0^\circ$ , and the other ray points to the  $30^\circ$  mark. Since  $30^\circ < 90^\circ$ , this is an acute angle. The answer is **30** degrees.
- The correct answer is 1.** (4.NF.B.3) Add the numerators:  $5 + 1 = 6$ . We get  $\frac{6}{6}$ , which equals **1** whole.
- Choice C is correct.** (4.MD.A.3) Carpet needed =  $14 \times 10 = 140$  sq ft.
- Choice B is correct.** (4.G.A.1) Angle 1 is a small opening — less than  $90^\circ$  — so it's acute. Angle 2 opens much wider, more than  $90^\circ$ , making it obtuse.
- Choice A is correct.** (4.NF.C.5) Compare the tenths place:  $8 > 6$ , so  $0.86 > 0.68$ . Isha ran farther.
- Choice A is correct.** (4.NF.A.1) The shaded wedges in both circles are the same size. The first circle is split into 4 pieces (1 shaded), the second into 8 pieces (2 shaded). They cover the same amount:  $\frac{1}{4} = \frac{2}{8}$ .
- Choice D is correct.** (4.NBT.B.5) The standard algorithm breaks the multiplier by place value:  $(23 \times 8) + (23 \times 10) = 184 + 230 = 414$ .
- Choice D is correct.** (4.NBT.A.2) From the chart: hundred-thousands:  $2 \rightarrow 200,000$ , ten-thousands:  $1 \rightarrow 10,000$ , thousands:  $4 \rightarrow 4,000$ , hundreds:  $5 \rightarrow 500$ , tens:  $3 \rightarrow 30$ , ones:  $7 \rightarrow 7 \checkmark$



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## Hi, Hero!

◇ Once there was a Grade 4 student who took 6 practice tests. At first, the math was tricky. But this student kept showing up, kept trying, and kept learning. By the end, the student became a math hero. That hero is you! ◇

★ **Storytellers know:** every story has a hard middle. The hard middle is where heroes grow. You lived your hard middle. Your story ends with confidence! ★

### Your Hero Toolkit

- **Brave Heart:** You try hard problems.
- **Sharp Mind:** You think carefully before you act.
- **Steady Hand:** You write neatly and check.
- **Kind Spirit:** You are patient with yourself.

**Storyteller tip:** on test day, remember the hero you became. The chapters before today made you stronger. Now write your best chapter!

If you want to share something or ask a question, please email me at [jay@testinar.com](mailto:jay@testinar.com).

**Jay Daie**

Your Math Storyteller

# PRACTICE TODAY, SUCCEED TOMORROW!

This **Grade 4 Math Practice Tests** book is the perfect tool to help students strengthen their math skills, master important concepts, and build confidence for test success.

With 6 full-length practice tests, a variety of question types, and detailed answer explanations, students get the review and practice they need to improve accuracy, develop critical thinking, and achieve their best.

Ideal for classroom use, homework, test preparation, and extra practice at home.

## PERFECT FOR:

- ✔ Classroom Practice
- ✔ Homework & Review
- ✔ Independent Learning
- ✔ Test Preparation
- ✔ Skill Reinforcement
- ✔ Confidence Building

★ **CONFIDENCE IN MATH.  
SUCCESS FOR LIFE.**

## WHAT STUDENTS WILL GAIN



### Stronger Math Skills

Build a solid foundation through targeted practice and review.



### Better Problem Solving

Develop logical thinking and effective solution strategies.



### Test Confidence

Become familiar with test-style questions and formats.



### Track Progress

Measure growth across multiple practice tests.



### Master Key Concepts

Reinforce important skills aligned with grade-level standards.



### Prepare for Success

Build the confidence needed to do your best on test day.

## TOPICS COVERED

- ✔ Place Value & Number Sense
- ✔ Addition & Subtraction
- ✔ Multiplication & Division
- ✔ Fractions & Equivalent Fractions
- ✔ Decimals
- ✔ Geometry & Measurement
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