



6

North Dakota

NDSA



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

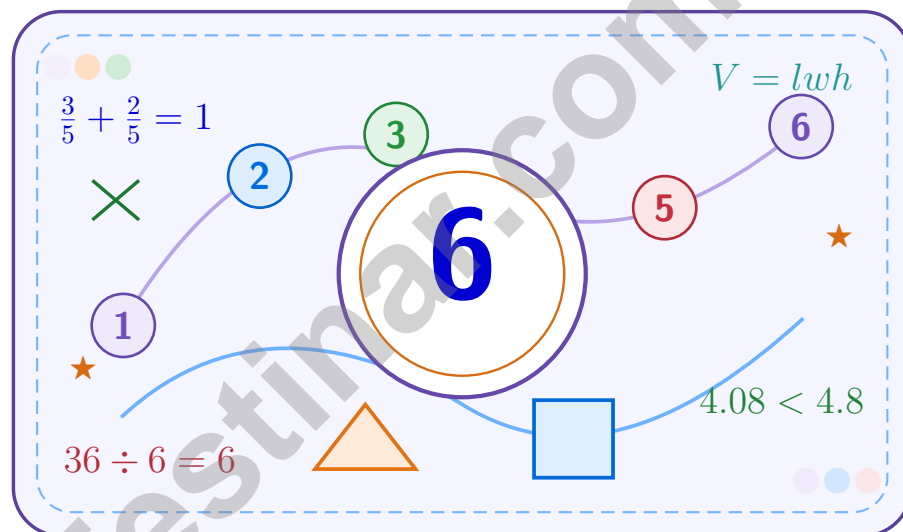


**BUILD CONFIDENCE.
IMPROVE SCORES.**
Target weak areas and
achieve success

★ STRONG PRACTICE. BRIGHT FUTURE. ★

6 North Dakota NDSA 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.



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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 North Dakota NDSA. 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)

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1 kilogram (kg) = 1,000 grams (g)

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TIME

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

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



1) Subtract: $\frac{11}{15} - \frac{1}{5}$

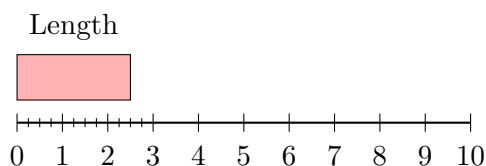
A. $\frac{10}{15} = \frac{2}{3}$

B. $\frac{3}{10}$

C. $\frac{10}{10}$

D. $\frac{8}{15}$

2) Which measurement is shown on the ruler?



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

B. 2 inches

C. 3 inches

D. $2\frac{1}{4}$ inches

3) A recipe calls for $\frac{1}{8}$ cup of sugar. The recipe is divided into 3 equal portions. How much sugar is needed for each portion?

A. $\frac{1}{11}$ cup

B. $\frac{3}{8}$ cup

C. $\frac{1}{5}$ cup

D. $\frac{1}{24}$ cup

4) 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

B. $\frac{1}{16}$ gallon

C. $\frac{1}{10}$ gallon

D. $\frac{1}{14}$ gallon

5) Which statement is true?

Choice	Statement
A	$9 \times 100 = 900$
B	$9 \times 1000 = 900$
C	A and B are both true

A. Only A is true

B. Only B is true

C. Both are true

D. Neither is true



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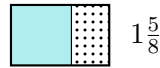
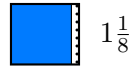
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1)

Add: $1\frac{1}{8} + 1\frac{5}{8}$

A. $2\frac{3}{8}$

C. 3

B. $2\frac{3}{4}$

D. $3\frac{3}{8}$

2) Bookshelf: 5 ft by 3 ft by 6 ft. Volume =?

A. 14 ft^3

C. 90 ft^3

B. 15 ft^3

D. 18 ft^3

3) Subtract: $10 - 3\frac{2}{7}$.

A. $6\frac{5}{7}$

C. $7\frac{1}{7}$

B. $6\frac{4}{7}$

D. $7\frac{5}{7}$

4) Without computing, which expression is greatest?

A. $(12 + 5)$

C. $(12 + 5) \div 2$

B. $2 \times (12 + 5)$

D. $(12 + 5) - 2$

5) A composite garden block is made from two non-overlapping rectangular prisms. Prism A is 4 centimeters long, 2 centimeters wide, and 4 centimeters tall. Prism B is 3 centimeters long, 3 centimeters wide, and 4 centimeters tall. What is the total volume?

A. 68 cubic centimeters

C. 36 cubic centimeters

B. 32 cubic centimeters

D. 76 cubic centimeters



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1) Which product is closest to 15?

A: $15 \times \frac{1}{10}$

B: $15 \times \frac{9}{10}$

C: $15 \times \frac{12}{10}$

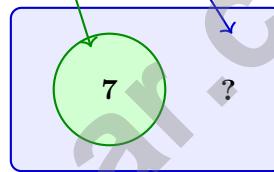
 A. A B. B C. C D. Cannot tell

2) Evaluate: $56 - (7 \times 4) + 18 \div 3$

 A. 30 B. 32 C. 34 D. 36

3) A Venn diagram has 12 polygons. Of these, 7 are quadrilaterals. How many polygons are not quadrilaterals?

Quadrilaterals 2 polygons



Record your answer in the space provided.

4) The inputs are 1, 2, 3, 4 and the matching outputs are 3, 6, 9, 12. What ordered pair represents the 4th term?

 A. (4, 12) B. (4, 15) C. (3, 9) D. (12, 4)

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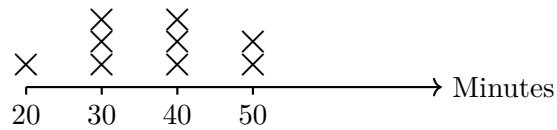
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1) The line plot shows the number of minutes students practiced an instrument:



What is the total number of minutes all students practiced?

- A. 300 minutes
 - B. 310 minutes
 - C. 320 minutes
 - D. 330 minutes
- 2) Error analysis: A student computed 52×10 and wrote the answer as 520. Which statement is correct?
- A. The student added a digit instead of shifting place value.
 - B. The student multiplied by 5 instead of 10.
 - C. There is no error; the answer is correct.
 - D. The student forgot to add a zero at the end.
- 3) Which factor will make $28 \times$ factor less than 28?

$\frac{6}{5} > 1$
 $\frac{9}{9} = 1$
 $\frac{5}{7} < 1$
 $1\frac{1}{5} > 1$

Compare each factor to 1

- A. $\frac{6}{5}$
 - B. $\frac{9}{9}$
 - C. $\frac{5}{7}$
 - D. $1\frac{1}{5}$
- 4) $0.9 \div 100 = ?$
- A. 9
 - B. 0.09
 - C. 0.009
 - D. 90



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.NO.NF.3)** $\frac{1}{5} = \frac{3}{15} \cdot \frac{11}{15} - \frac{3}{15} = \frac{8}{15}$.
- 2) **Choice A is correct.** **(5.GM.M.1)** The shaded bar extends from 0 to 2.5, which is $2\frac{1}{2}$ inches.
- 3) **Choice D is correct.** **(5.NO.NF.4)** $\frac{1}{8} \div 3 = \frac{1}{8} \times \frac{1}{3} = \frac{1}{24}$.
- 4) **Choice B is correct.** **(5.NO.NF.4)** A fourth split into 4 equal parts gives sixteenths: $\frac{1}{4} \div 4 = \frac{1}{16}$ gallon for each table.
- 5) **Choice A is correct.** **(5.NO.NBT.7)** $9 \times 100 = 900$ (two zeros) is true, but $9 \times 1000 = 9000$ (three zeros), not 900.
- 6) **Choice B is correct.** **(5.AR.OA.3)** The parentheses tell us that $6 - 2$ is one grouped amount: “the difference of 6 and 2.” Then 8 is multiplied by that difference.
- 7) **Choice D is correct.** **(5.NO.NBT.7)** The factors 5 and 2 make 10, and then multiplying by another 10 makes 100. The product has 2 zeros.
- 8) **Choice D is correct.** **(5.NO.NBT.1)** In 4.237, the digit 7 is in the third place after the decimal, which is the thousandths place.
- 9) **Choice A is correct.** **(5.NO.NF.2)** Since $\frac{7}{8}$ is less than 1, $\frac{7}{8} \times 16$ is less than 16. So Expression A is less than Expression B.
- 10) **Choice B is correct.** **(5.AR.OA.5)** Pattern Two is 7 times Pattern One: $2 \times 7 = 14$, $3 \times 7 = 21$, $4 \times 7 = 28$, $5 \times 7 = 35$.
- 11) **Choice C is correct.** **(5.NO.NBT.7)** Dividing by a power of 10 shifts the value to a smaller place. $4,500 \div 10 = 450$ books per store. This confirms the answer.
- 12) **Choice C is correct.** **(5.DPS.D.1)** Count the X marks above each value. 5 has 4 marks, which is more than 2 (1 mark), 3 (3 marks), 4 (2 marks), or 6 (2 marks).
- 13) **Choice C is correct.** **(5.NO.NBT.7)** Move the decimal point 1 place right: $2.13 \times 10 = 21.3$.
- 14) **Choice A is correct.** **(5.GM.M.3)** Use the rectangular-prism volume formula: $5 \times 5 \times 2 = 50$. So the volume is 50 cubic centimeters.
- 15) **Choice C is correct.** **(5.NO.NF.4)** Two groups of $\frac{3}{8}$ give $\frac{6}{8}$. Since both 6 and 8 can be divided by 2, $\frac{6}{8} = \frac{3}{4}$.
- 16) **Choice B is correct.** **(5.GM.M.3)** The base area is $12 \times 3 = 36$ square centimeters. Since $144 \div 36 = 4$, the height is 4 cm.
- 17) **Choice B is correct.** **(5.GM.G.3)** Width is the horizontal distance left to right, determined by the difference in x-coordinates: $6 - 1 = 5$ units.
- 18) **Choice B is correct.** **(5.GM.M.3)** Area measures 2D flat space (square units); volume measures 3D solid space (cubic units). These are fundamentally different and use different unit types.
- 19) **Choice A is correct.** **(5.GM.G.1)** The matching tick marks show Figure A has four equal sides. It has no right-angle marks, so it is a rhombus but not a square.
- 20) **Choices A, B are correct.** **(5.NO.CC.1)** 0.25 is twenty-five hundredths, and it can also be written as $0.2 + 0.05$. C equals 2.5, and D equals 0.025.
- 21) **Choice A is correct.** **(5.GM.M.2)** The blue region is 2 out of 5. The red region is 3 out of 4. The double-shaded overlap has 6 squares out of a total of 20, so the product is $\frac{6}{20}$.
- 22) **The correct answer is 96 ft³.** **(5.GM.M.3)** $8 \times 3 \times 4 = 96$ ft³.
- 23) **The correct answer is 5.** **(5.AR.OA.3)** The expression $12 \div 8$ is one amount. Multiplying it by 5 makes 5 copies of that amount, so the answer is 5.
- 24) **Choice A is correct.** **(5.GM.G.3)** Rule A (+1): 0, 1, 2, 3; Rule B (+3): 0, 3, 6, 9. Pairs (0,0), (1,3), (2,6), (3,9) are plotted correctly.
- 25) **Choice D is correct.** **(5.AR.OA.3)** Multiplication is commutative, so switching the order of the factors does not change the product.
- 26) **Choice D is correct.** **(5.NO.NBT.6)** $1,134 \div 21 = 54$ bricks per site. Check: $21 \times 54 = 1,134$.
- 27) **Choice B is correct.** **(5.NO.NF.3)** $\frac{5}{6} - \frac{1}{6} = \frac{4}{6} = \frac{2}{3}$. The missing addend is $\frac{2}{3}$.
- 28) **The correct answer is 5000.** **(5.GM.M.1)** $5 \times 1,000 = 5,000$ m. Each kilometer has 1,000 meters, so 5 kilometers has five groups of 1,000 meters.



Hey there, Master Gamer!

★ Level mastery achieved! You've conquered six complete game worlds, defeating mathematical boss battles and collecting skill power-ups like a professional gamer! Each test level presented unique challenges and hidden obstacles, but you've learned the patterns, mastered the controls, and leveled up your abilities significantly. Your character stats are at maximum capacity! ★

◇ **Here's what elite gamers understand:** mastering difficult games requires repeated playthroughs, learning from defeats, and developing strategic thinking. They study level designs, practice timing, and memorize successful strategies. You've done exactly that through these six test levels! You've learned the mathematical game mechanics, and now you're ready for the championship tournament! ◇

Character Stats Maxed Out

Problem-Solving Power: Leveled up to Expert tier through consistent training!

Strategic Thinking: Unlocked advanced tactical abilities through practice!

Endurance Meter: Can maintain focus through extended gaming sessions!

Boss Battle Ready: Prepared to defeat the final test day challenge!

Gaming wisdom: professional players stay calm during competitive matches because they've practiced under pressure. Test day is your championship match. When you encounter a challenging problem-boss, remember your six training sessions. You've defeated tougher enemies before. Use your best strategies, stay focused, and claim victory!

Want to share your gaming strategies or discuss a particularly clever solution combo? Send your achievements to reza@testinar.com. Let's celebrate your wins!

Reza Nazari & Jay Daie

Your Math Coaches for Strong Starts

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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Smart Practice. Stronger Results.