

# 8

# North Dakota

# NDSA

## GRADE 3

# MATH

## PRACTICE TESTS

Standards-Aligned Review with  
Mixed Practice and Answer Key



8 Full-Length  
Practice Tests



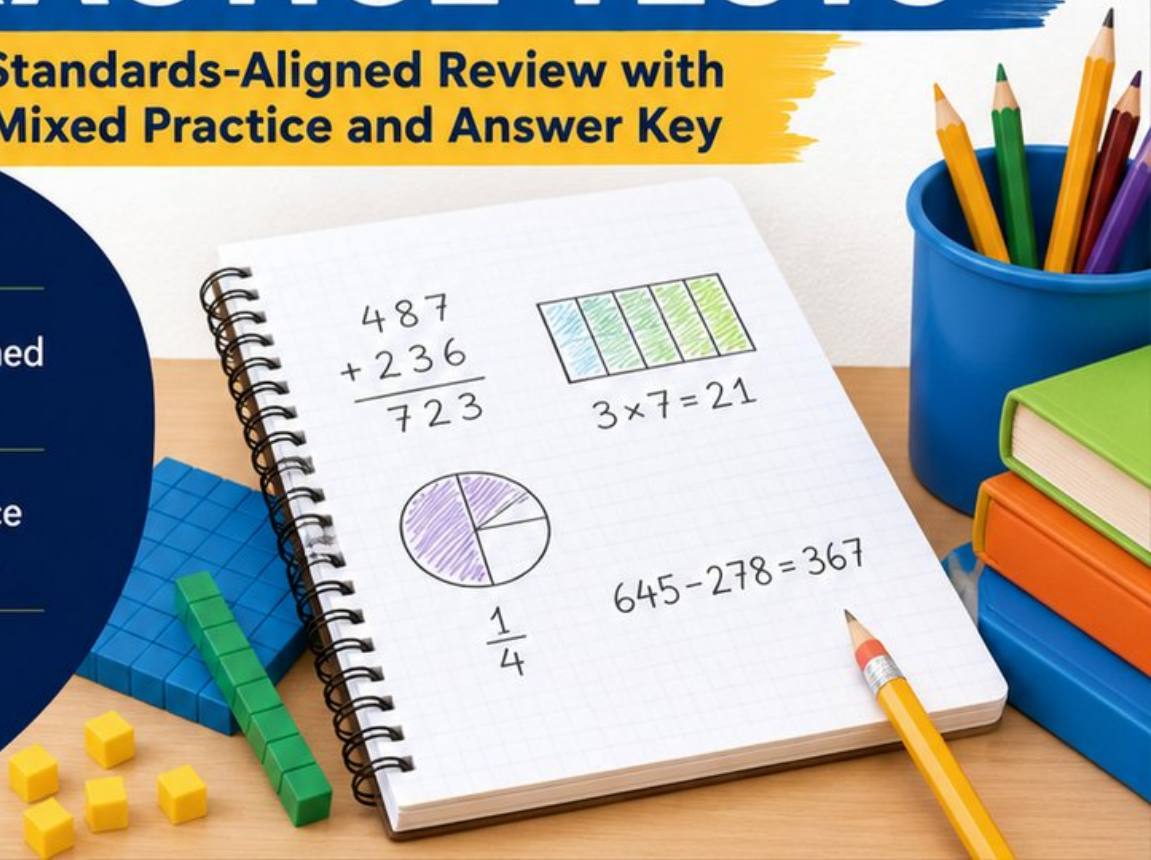
Standards-Aligned  
Questions



Build Confidence  
and Math Skills



Answer Key  
Included



# 8 North Dakota NDSA Grade 3 Math Practice Tests

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



Eight complete 30-question practice rounds for Grade 3 math: operations, fractions, measurement, data, area, shapes, answer keys, and clear explanations for every item.

**Jay Daie and Reza Nazari**



# Copyright ©

## Testinar Inc



Published by Testinar Inc

[Testinar.com](http://Testinar.com)

All rights reserved. No part of this publication may be reproduced, distributed, or transmitted in any form or by any means, including photocopying, recording, or other electronic or mechanical methods, without the prior written permission of the author, except in the case of brief quotations embodied in critical reviews and certain other noncommercial uses permitted by copyright law, including Section 107 or 108 of the 1976 United States Copyright Act.

This publication is independently produced and has no official connection to any state, district, or national testing program.

Test names and organizational names used herein are the property of their respective trademark holders.



*Copyright ©*

# North Dakota, Your Eight-Test Math Path Begins

Eight focused rounds, one stronger Grade 3 problem solver

This book gives you eight full chances to practice like a careful test taker for the North Dakota NDSA. Each test is a new route through numbers, shapes, data, measurement, and word problems. Work slowly enough to notice what the question asks, and proudly enough to show your thinking.

North Dakota has prairie roads, badland layers, farm fields, big open skies, and steady practice days, where careful steps matter. Strong math follows that same path: notice the question, choose a tool, show the work, and keep steady work across the whole test.

## Your North Dakota Math Promise

I will read the whole question, choose a smart strategy, write clear work, and check whether my answer makes sense.

**Eight rounds. Thirty questions each. One careful step at a time.**

# How to Use This Book

## A simple eight-round routine for confident review

Use this North Dakota book as a practice plan, not a race. Finish one test, review it, fix a few problems, then carry one better habit into the next test.

1. **Preview the reference page.** Notice units, time, and measurement facts before you begin.
2. **Take one full test.** Circle anything that feels tricky so you can return to it.
3. **Check the answer key.** Mark correct answers and questions to try again.
4. **Read explanations.** Study missed items and lucky guesses first.
5. **Redo three problems.** Write fresh work without copying the explanation.
6. **Name one habit.** Pick a focus such as labels, facts, fractions, or neat work.
7. **Try the next test.** Bring that habit forward.
8. **Finish with a final check.** Look for growth across all eight tests.

**Best review habit:** In North Dakota, strong practice means slowing down enough to see the clue. When an answer is wrong, ask, “What step would I change next time?”



# What Is Inside the Eight Tests?

## Mixed Grade 3 math practice for the NDSA

Each practice test has 30 questions. You will see multiple-choice questions, select-all questions, and open-ended questions with workspace. The mix helps students practice both choosing an answer and explaining a short mathematical result.

Part	What to Expect
Eight full tests	30 mixed Grade 3 questions in each round
Math topics	multiplication, division, place value, fractions, time, measurement, data, area, perimeter, and shapes
Answer keys	compact answer boxes for quick checking
Explanations	short reasoning for every item so mistakes become useful review
Progress pages	places to record scores, habits, and next-step goals

**North Dakota focus:** The practice path starts with prairie roads, badland layers, farm fields, big open skies, and steady practice days. Strong math uses the same idea: know the path, follow the clues, and check the final answer.



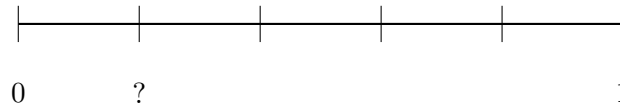
Scan me!  
For more practice  
& answers

# Table of Contents

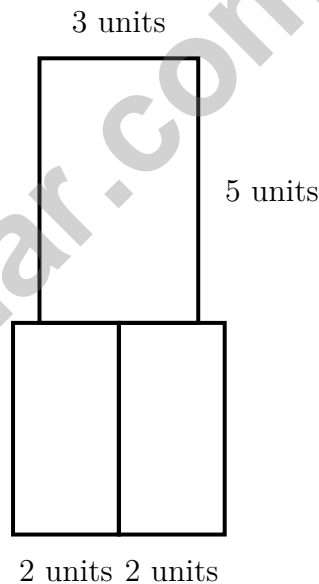
★ Practice Test 1	_____	14
★ Practice Test 2	_____	27
★ Practice Test 3	_____	38
★ Practice Test 4	_____	51
★ Practice Test 5	_____	63
★ Practice Test 6	_____	75
★ Practice Test 7	_____	88
★ Practice Test 8	_____	101
<b>Practice Test Answer Keys</b>	_____	<b>112</b>
<b>Practice Test Answers and Explanations</b>	_____	<b>117</b>



- 5) A number line from 0 to 1 is divided into 5 equal parts. Which shows the unit fraction?



- A.  $\frac{1}{5}$                        C.  $\frac{1}{6}$   
 B.  $\frac{1}{4}$                        D.  $\frac{2}{5}$
- 6) A T-shaped banner has three parts with lengths and widths: 3 units by 5 units (top), 2 units by 4 units (bottom left), and 2 units by 4 units (bottom right). What is the total area?



- A. 15 sq units                       C. 31 sq units  
 B. 24 sq units                       D. 120 sq units



Scan me!  
For more practice  
& answers

7) Which multiplication has an odd product?

A.  $6 \times 3$

C.  $5 \times 7$

B.  $4 \times 7$

D.  $8 \times 2$

8) A rectangle has length 4 and width 2. How many sides does it have?



9) Eli is filling a rectangular mat with colored unit square patches. The mat measures 11 units by 3 units. How many patches will he need?


A. 14 patches

C. 33 patches

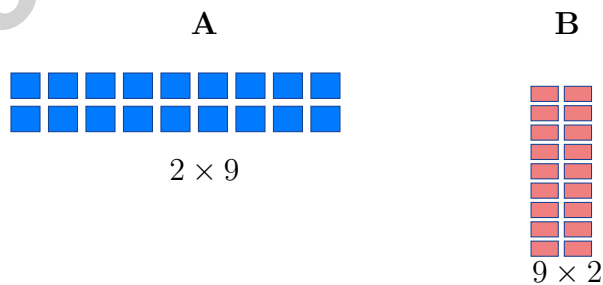
B. 27 patches

D. 44 patches

10) What is  $6 \times 4$ ?



- 1) A rectangle has length 6 units and width 2 units. It has 6 rows with 2 unit squares in each row. Using repeated addition:  $2 + 2 + 2 + 2 + 2 + 2 = ?$
- A. 8 sq units  C. 10 sq units  
 B. 12 sq units  D. 14 sq units
- 2) Eli has a rectangle divided into 4 equal parts. What is the denominator of the unit fraction for one part?
- A. 1  C. 4  
 B. 3  D. 5
- 3) A library has 7 tables. Each table has 8 books. How many books are on the tables?
- A. 15 books  C. 49 books  
 B. 64 books  D. 56 books
- 4) Aiden buys 6 packs of trading cards with 4 cards in each pack. He loses 8 cards. How many cards does he have now?
- A. 16  C. 24  
 B. 22  D. 32
- 5) Which statement about these two arrays shows the commutative property?



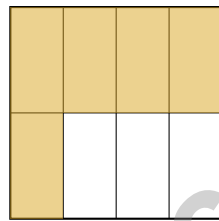
- A. The arrays show the same property as  $9 - 2$ .  C. Array B has more squares.  
 B.  $2 + 9 = 11$  and  $9 + 2 = 11$   D.  $2 \times 9 = 9 \times 2$



Scan me!  
For more practice  
& answers

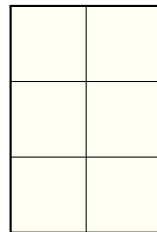
- 6) Mia had some stickers. She gave away 145 stickers and has 238 left. How many stickers did Mia have at the start?

- 7) A square is divided into 8 equal parts. Eli colors 5 of them. What fraction of the square is NOT colored?



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

Each square is 1 ft  $\times$  1 ft



8)

The grid shows a shape made of unit squares measured in feet. How many unit squares fit in this shape?

- A. 3 unit squares
  C. 6 unit squares  
 B. 5 unit squares
  D. 8 unit squares



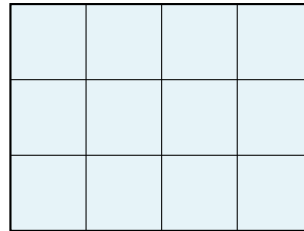
1) A rectangle's length is 12 cm. Its width is 3 cm. What is the perimeter?

A. 15 cm

C. 30 cm

B. 36 cm

D. 72 cm



2)

How many unit squares cover the rectangle shown in the grid?



3) Which multiplication fact helps you solve  $32 \div 8$ ?

A.  $4 \times 8 = 32$

C.  $8 \times 8 = 64$

B.  $5 \times 8 = 40$

D.  $3 \times 8 = 24$

4) Which number sentence represents “20 items divided equally among 4 groups”?

A.  $20 \div 4$

C.  $4 + 20$

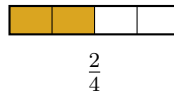
B.  $4 \times 20$

D.  $20 - 4$



Scan me!  
For more practice  
& answers

5)



Using the bars, which is true?

- A.  $\frac{2}{5} > \frac{2}{4}$   
 B.  $\frac{2}{5} < \frac{2}{4}$

- C.  $\frac{2}{5} = \frac{2}{4}$   
 D. Cannot compare

6) The bar is completely shaded. It shows  $\frac{5}{5}$ . Write the whole number this equals.



7) Which strategy uses 10 groups of 4 and subtracts 1 group of 4 to find  $9 \times 4$ ?

- A.  $9 \times 4 = (5 \times 4) + (4 \times 4) = 20 + 16 = 36$   
 B.  $9 \times 4 = (8 \times 4) + (1 \times 4) = 32 + 4 = 36$   
 C.  $9 \times 4 = 9 \times (2 \times 2) = 9 \times 4 = 36$   
 D.  $9 \times 4 = (10 \times 4) - (1 \times 4) = 40 - 4 = 36$

8) A teacher says: “If a number rounds to 500 when rounded to the nearest 100, it must be at least 450. Is the teacher correct? Why or why not?”

- A. Yes, the teacher is correct  
 B. No, numbers from 450 to 549 round to 500  
 C. No, numbers as low as 400 can round to 500  
 D. No, the rule only works for even numbers



## Practice Test Answer Keys

**How to use this section with a Grade 3 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.**

Testinar.com



## Practice Test Answers and Explanations

### Practice Test 1 Answers and Explanations

- 1) **Choice D is correct.** **(3.AR.OA.5)** Multiply: 4 boxes  $\times$  8 pens per box = 32 pens.
- 2) **Choice B is correct.** **(3.GM.M.8)** Representing area as a rectangular array: multiplying the number of unit squares across (6) by the number down (3) gives  $6 \times 3 = 18$  square units. Choice A (9) is the sum; C (18) is correct but inefficient for Grade 3 (repeated addition); D (18) arrives at correct answer but uses wrong factors.
- 3) **Choice C is correct.** **(3.NO.NF.4)** 5 wholes =  $\frac{5}{1}$ . Any whole number with denominator 1 equals that number. (A) equals 1, (B) is a unit fraction, (D) is more than 2 but not 5 wholes.
- 4) **Choice C is correct.** **(3.NO.NF.1)** Picture C shows a rectangle divided into 3 equal parts with 1 part shaded, which is  $\frac{1}{3}$ .
- 5) **Choice A is correct.** **(3.NO.NF.1)** Five equal parts means each part is  $\frac{1}{5}$ .
- 6) **Choice C is correct.** **(3.GM.M.7)** Top:  $3 \times 5 = 15$  sq units. Bottom left:  $2 \times 4 = 8$  sq units. Bottom right:  $2 \times 4 = 8$  sq units. Total:  $15 + 8 + 8 = 31$  sq units.
- 7) **Choice C is correct.** **(3.AR.OA.6)**  $5 \times 7 = 35$ , which is odd. Choices A, B, D all have an even factor, so they give even products.
- 8) **The correct answer is 4 sides.** **(3.GM.G.2)** A rectangle is a quadrilateral, so it has 4 sides.
- 9) **Choice C is correct.** **(3.GM.M.7)**  $11 \times 3 = 33$  unit square patches.
- 10) **The correct answer is 24.** **(3.AR.OA.2)** By the commutative property,  $4 \times 6 = 6 \times 4 = 24$ .
- 11) **Choice C is correct.** **(3.DPS.D.2)** At  $2\frac{3}{4}$ , there are exactly 2 X's.
- 12) **Choice A is correct.** **(3.NO.NF.2)** The dot is at the first tick out of six equal parts, so it represents  $\frac{1}{6}$ .
- 13) **Choices B and D are correct.** **(3.NO.NF.5)** With numerator 1, smaller denominators give larger pieces. Thirds and halves are larger than fourths. A and C have larger denominators (sixths and eighths) so they are smaller. E equals  $\frac{1}{4}$  (not greater).
- 14) **Choice A is correct.** **(3.GM.M.8)** The height is 4 and width is  $6 = 3 + 3$ . The distributive form is  $4 \times (3 + 3) = (4 \times 3) + (4 \times 3) = 12 + 12 = 24$ .
- 15) **Choice D is correct.** **(3.NO.NBT.2)** The point is at position 7 on the line from 0 to 10, which is past the midpoint of 5. It represents a number 450–499, closer to 500.
- 16) **Choice C is correct.** **(3.GM.M.8)** A  $3 \times 3$  square contains  $3 \times 3 = 9$  unit squares.
- 17) **Choice D is correct.** **(3.AR.OA.1)** If  $8 \times 8 = 64$ , then  $64 \div 8 = 8$ . Multiplication and division are related.
- 18) **Choice C is correct.** **(3.NO.NF.1)** If each part is  $\frac{1}{8}$ , the square is divided into 8 equal parts.
- 19) **Choice C is correct.** **(3.NO.NBT.4)** Multiply  $7 \times 6 = 42$ , then add one zero:  $7 \times 60 = 420$ .
- 20) **Choice C is correct.** **(3.DPS.D.3)** Red:  $5 \times 4 = 20$ . Blue:  $6 \times 4 = 24$ . Green:  $4 \times 4 = 16$ . Total:  $20 + 24 + 16 = 60$ .
- 21) **Choice A is correct.** **(3.AR.OA.3)** Step 1: Total candy:  $4 \times 8 = 32$  pieces. Step 2: Subtract eaten:  $32 - 12 = 20$  pieces left. (Choice C is step 1 only.)
- 22) **Choice D is correct.** **(3.AR.OA.5)** Dividing 16 pencils into 4 equal boxes means  $16 \div 4 = \square$ . Since  $4 \times 4 = 16$ , each box has 4 pencils.
- 23) **The correct answer is 5.** **(3.AR.OA.2)** Divide:  $40 \div 8 = 5$  pencils per student.
- 24) **Choice C is correct.** **(3.GM.M.7)** Multiply length by width:  $10 \times 6 = 60$  square inches.
- 25) **Choice B is correct.** **(3.NO.NF.4)** Multiply numerator and denominator by 2:  $\frac{1 \times 2}{3 \times 2} = \frac{2}{6}$ .
- 26) **Choice A is correct.** **(3.NO.NBT.3)** Ones:  $4 - 9$  requires regrouping, so  $14 - 9 = 5$ . Tens:  $2 - 8$  requires regrouping, so  $12 - 8 = 4$ . Hundreds:  $1 - 1 = 0$ . Difference is 45.
- 27) **Choice D is correct.** **(3.NO.NF.1)**  $15 \div 5 = 3$ . Sharing means dividing the total into equal groups.
- 28) **Choice D is correct.** **(3.GM.M.2)** Add:  $300 + 200 = 500$  mL.
- 29) **Choice B is correct.** **(3.AR.OA.2)** Area =  $2 \times 3 = 6$  square cm.



Scan me!  
For more practice  
& answers

From Your Math Family

---

Hi, Math Family Member,

◇ Welcome to a special note from your math family. You finished 8 full practice tests, and that hard work matters more than any score. We see you. We are proud of you. ◇

★ **Our math family knows:** math is a journey. You have taken many steps already. The test is just one stop. Every skill you built is yours forever. ★

**What Your Math Family Sees**

- **Hard Work:** You keep showing up.
- **Real Growth:** You can do problems today you couldn't before.
- **Brave Heart:** You face hard problems with brave thinking.
- **Bright Future:** Your math journey is just beginning.

**Family tip:** on test day, picture us standing behind you, smiling and rooting for you. You are not alone. Your math family is with you!

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 Family

# PRACTICE TODAY. MASTER TOMORROW.

This book is designed to help **Grade 3** students strengthen their math skills through focused practice and real progress.

- ✓ 8 full-length practice tests
- ✓ Aligned to Grade 3 standards
- ✓ Build confidence and achieve success



## EACH PRACTICE TEST INCLUDES:



Standards-  
Aligned  
Questions



Variety of  
Question  
Types



Real-World  
Math  
Applications



Step-by-Step  
Progress  
Tracking



Build Skills  
and Boost  
Confidence

## COVERS ALL ESSENTIAL TOPICS

- ✓ Whole Numbers & Operations
- ✓ Fractions & Decimals
- ✓ Algebraic Thinking
- ✓ Geometry
- ✓ Measurement & Data
- ✓ Number Patterns
- ✓ Word Problems
- ✓ Ratio & Proportion
- ✓ Perimeter, Area & Volume
- ✓ Graphing & Data Analysis
- ✓ And More!



Visit [testinar.com/math3](https://testinar.com/math3)  
for more Grade 3 math resources  
and practice materials!

## PREPARE. PRACTICE. SUCCEED.

Give your child the **confidence** to excel in math!



Aligned to  
Standards



Created by  
Educators



Designed for  
Success