

7

North Dakota

NDSA

Grade 3 MATH

PRACTICE TESTS

Standards-Aligned Practice with
Review, Answer Keys, and Explanations



7 Full-Length
Practice Tests



Standards-Aligned
Math Practice



Detailed Answer Keys
and Explanations



Build Confidence.
Achieve Success.

PREPARE
PRACTICE
SUCCEED



$4 \times 6 = 24$



7 North Dakota NDSA Grade 3 Math Practice Tests

Standards-Aligned Practice with Review, Answer Keys, and Explanations



Seven complete 30-question practice trails 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

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 ©

Welcome to the Seven Math Trails

Seven full tests, seven fresh chances, and one braver Grade 3 thinker



Read the trail. Mark the clues. Solve with care.

To the Grade 3 Math Trail Leader

This book gives you seven complete practice trails for the North Dakota NDSA. Each trail is a full 30-question test, so students can practice accuracy, stamina, and clear explanations over time.

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.

Scout

Find what the problem is asking before you calculate.

Solve

Pick an equation, model, array, graph, or number line.

Prove

Check the answer and explain the thinking clearly.

Seven-trail promise: I will work with patience, use my scratch space wisely, and let every correction make my next test stronger.

How to Use This Book

A seven-trail routine for steady Grade 3 growth

Use one practice trail at a time. The goal is not to rush through more pages. The goal is to finish, check, repair, and bring a stronger habit to the next test. For North Dakota students, each trail moves through prairie roads, badland layers, farm fields, big open skies, and steady practice days: steady, alert, and ready for the next clue.

1. **Preview the tools.** Skim the reference page before each test.
2. **Take one test.** Work steadily and mark problems that need another look.
3. **Check the key.** Use the compact answer boxes first.
4. **Study explanations.** Read missed items and lucky guesses.
5. **Redo three problems.** Rewrite the work cleanly without copying.
6. **Name one habit.** Choose a focus such as labels, facts, fractions, or checking.
7. **Start the next trail.** Bring that habit into the next full test.

Best review habit: A missed problem is a trail marker. It shows where to slow down, look again, and choose a better step.



What Is Inside?

Seven complete practice tests with review support

Part	What You Do	Why It Helps
Practice Tests 1–7	Solve seven different 30-question tests.	Build stamina and see Grade 3 skills mixed together.
Reference Materials	Review measurement and time facts before each test.	Keep common tools close without turning pages backward.
Answer Keys	Check each answer in compact boxes.	Find mistakes quickly without losing your place.
Explanations	Read why each answer works.	Turn missed items into a clear next step.
Standards Reference	See how North Dakota Grade 3 standards connect to practice.	Understand the skills behind the questions.

Each test has 26 multiple-choice questions, 1 select-all question, and 3 open-ended questions. This gives students practice with quick decisions, careful reading, and short written math answers for the North Dakota NDSA path.

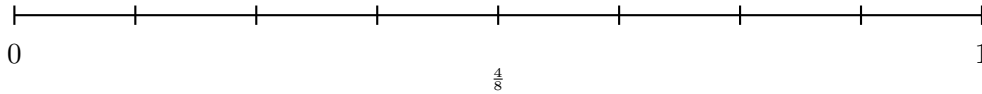


Scan me!
For more practice
& answers

Table of Contents

★ Practice Test 1	_____	14
★ Practice Test 2	_____	25
★ Practice Test 3	_____	37
★ Practice Test 4	_____	49
★ Practice Test 5	_____	62
★ Practice Test 6	_____	74
★ Practice Test 7	_____	86
Practice Test Answer Keys	_____	97
Practice Test Answers and Explanations	_____	102

- 1) On a number line from 0 to 1 divided into 8 equal parts, which two fractions name the same point?



- A. $\frac{1}{2}$ and $\frac{4}{8}$
 C. $\frac{3}{8}$ and $\frac{5}{8}$
 B. $\frac{2}{8}$ and $\frac{3}{8}$
 D. $\frac{2}{4}$ and $\frac{6}{8}$
- 2) A toy store has 7 shelves with 9 toys on each shelf. How many toys are on all the shelves?

- A. 70 toys
 C. 16 toys
 B. 56 toys
 D. 63 toys

- 3) Two shelves each have cookies. Shelf 1 has 3 piles of 4 cookies. Shelf 2 has 4 piles of 3 cookies. How many cookies on each shelf?

- A. Shelf 1 has more
 C. Both shelves have 7 cookies
 B. Shelf 2 has more
 D. Both shelves have 12 cookies

- 4) Which is a property that squares and rectangles both have?

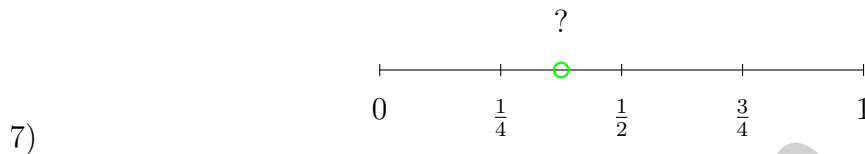
- A. All sides are equal in length
 C. They have exactly one pair of parallel sides
 B. They have no right angles
 D. All angles are right angles

- 5) What is 7×9 ?

- A. 56
 C. 70
 B. 63
 D. 81



- 6) A unit square measures 1 foot by 1 foot. Sam needs to cover a floor that is 5 feet long and 4 feet wide. How many unit squares (tiles) does he need?



The green dot is halfway between $\frac{1}{4}$ and $\frac{1}{2}$. Which is true?

- A. The dot = $\frac{1}{4}$
 C. $\frac{1}{4} < \text{the dot} < \frac{1}{2}$
- B. The dot $> \frac{1}{2}$ and $< \frac{3}{4}$
 D. The dot = $\frac{1}{2}$
- 8) What is 429 rounded to the nearest 10?
- A. 420
 C. 430
- B. 429
 D. 500
- 9) Noah has $\frac{4}{1}$ pencils. How many whole pencils?
- A. 1
 C. 4
- B. 2
 D. $\frac{1}{4}$
- 10) A number line from 0 to 1 is divided into equal parts. Which first tick is closest to 0?
- A. $\frac{1}{2}$
 C. $\frac{1}{6}$
- B. $\frac{1}{4}$
 D. $\frac{1}{8}$



Scan me!
For more practice
& answers

11) Which fraction is equivalent to $\frac{1}{2}$ by multiplying numerator and denominator by 3?

- A. $\frac{2}{6}$
 B. $\frac{3}{6}$

- C. $\frac{2}{5}$
 D. $\frac{4}{6}$

12) A picture graph shows balloons. Each balloon is 1 balloon. Ty has 7 balloons, Sam has 4 balloons. How many balloons do they have altogether?

- A. 3
 B. 7

- C. 11
 D. 12

13) A rectangle has area 20 square feet. Its length is 5 feet. What is its width?

- A. 3 feet
 B. 4 feet

- C. 5 feet
 D. 15 feet

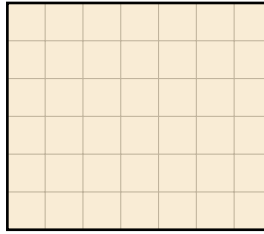
14) An L-shaped figure can be divided into rectangles in different ways. Which decompositions will give the correct total area?

- A. Divide it into a 6 unit by 3 unit rectangle and a 4 unit by 2 unit rectangle, then add: $18 + 8 = 26$ sq units.
 B. Divide it into two rectangles and multiply their areas: $6 \times 3 \times 4 \times 2$.
 C. Divide it horizontally into two rectangles, find each area, and add them.
 D. Divide it vertically into two rectangles, find each area, and add them.
 E. Count only the longest parts of the L-shape.

15) What is 9×40 ? Show how you decompose the 40 and use place value to find your answer.



- 1) On a grid, a rectangle covers 6 rows and 7 columns of unit squares.

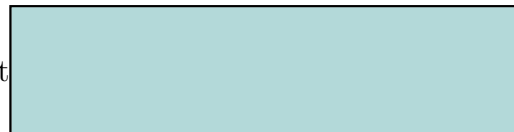


What is the area?

- A. 26 sq units C. 42 sq units
 B. 36 sq units D. 48 sq units
- 2) Lily has 6 whole crayons. Which shows this as a fraction?
- A. $\frac{1}{6}$ C. $\frac{6}{6}$
 B. $\frac{6}{1}$ D. $\frac{2}{6}$
- 3) Eli is on a number line divided into sixths. He hops forward by unit sixths: $\frac{1}{6}, \frac{2}{6}, \frac{3}{6}, \frac{4}{6}, \frac{5}{6}, \frac{6}{6}, \frac{7}{6}, \dots$. At what point does he say $\frac{12}{6}$?

- A. At 1 C. At 3
 B. At 2 D. Beyond 3

2 feet



8 feet

- 4)

A rectangular bench top is 8 feet long and 2 feet wide. What is the area?

- A. 10 sq ft C. 20 sq ft
 B. 16 sq ft D. 40 sq ft



Scan me!
For more practice
& answers

5) Which time is the same as 11 : 48?

- A. 12 minutes before noon C. 12 minutes after 11
 B. 48 minutes past 11 D. 11 hours and 48 seconds

6) A store orders 5 boxes of red apples with 7 apples in each box. They also order 4 boxes of green apples with 9 apples in each box. How many apples in total?

- A. 35 C. 71
 B. 36 D. 72

7) Each part is $\frac{1}{8}$ of a square. How many equal parts are there?



8) A square is 5 unit squares long on each side. How many unit squares cover it?

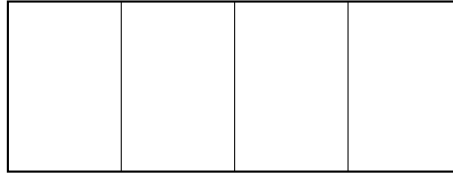
- A. 20 unit squares C. 12 unit squares
 B. 10 unit squares D. 25 unit squares

9) Sam has 234 marbles. He finds 167 more marbles. How many marbles does Sam have now?

- A. 401 C. 400
 B. 402 D. 391



- 6) A rectangle is divided with 3 vertical lines making 4 equal columns. How many parts is the rectangle divided into?



- A. 2 parts C. 3 parts
 B. 5 parts D. 4 parts
- 7) A bakery puts 20 cupcakes into boxes of 5. How many boxes do they fill?
- A. 3 C. 5
 B. 100 D. 4
- 8) Eli has two identical smoothie cups. Cup 1 is $\frac{3}{4}$ full. Cup 2 is $\frac{6}{8}$ full. Which has more smoothie?
- A. Cup 1 has more. C. They have the same amount.
 B. Cup 2 has more. D. Cannot tell.
- 9) Find $30 \div 5$.



Scan me!
For more practice
& answers

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



Scan me!
For more practice
& answers

Practice Test Answers and Explanations

Practice Test 1 Answers and Explanations

- 1) **Choice A is correct.** **(3.NO.NF.2)** Both $\frac{1}{2}$ and $\frac{4}{8}$ represent the point halfway from 0 to 1 on a number line.
- 2) **Choice D is correct.** **(3.GM.M.8)** 7 shelves with 9 toys each means 7 groups of 9. So $7 \times 9 = 63$ toys.
- 3) **Choice D is correct.** **(3.AR.OA.2)** Shelf 1: $3 \times 4 = 12$. Shelf 2: $4 \times 3 = 12$. By the commutative property, both equal 12.
- 4) **Choice D is correct.** **(3.GM.G.2)** Both squares and rectangles have 4 right angles (90 degrees). A square also has all equal sides, but a rectangle does not require this.
- 5) **Choice B is correct.** **(3.AR.OA.1)** $7 \times 9 = 63$. Think: $7 \times 10 = 70$, then subtract one group of 7: $70 - 7 = 63$. Choice C is 7×10 ; choice A is 7×8 .
- 6) **The correct answer is 20 unit squares.** **(3.GM.M.8)** Multiply length by width: $5 \text{ ft} \times 4 \text{ ft} = 20$ square feet, which equals 20 unit squares of 1 ft each.
- 7) **Choice C is correct.** **(3.NO.NF.5)** The green dot is halfway between $\frac{1}{4}$ and $\frac{1}{2}$, so it is at $\frac{3}{8}$. This means $\frac{1}{4} < \frac{3}{8} < \frac{1}{2}$.
- 8) **Choice C is correct.** **(3.NO.NBT.2)** The ones digit is 9. Since $9 \geq 5$, round up: 429 rounds to 430.
- 9) **Choice C is correct.** **(3.NO.NF.4)** $\frac{4}{1} = 4$. Any number over 1 equals that number.
- 10) **Choice D is correct.** **(3.NO.NF.1)** Eighths are the smallest pieces listed, so the first tick at $\frac{1}{8}$ is closest to 0.
- 11) **Choice B is correct.** **(3.NO.NF.4)** Multiply numerator and denominator by 3: $\frac{1 \times 3}{2 \times 3} = \frac{3}{6}$.
- 12) **Choice C is correct.** **(3.DPS.D.3)** $7 + 4 = 11$ balloons.
- 13) **Choice B is correct.** **(3.AR.OA.2)** Area = length \times width. So $20 = 5 \times \text{width}$. Width = $20 \div 5 = 4$ feet.
- 14) **Choices A and C are correct.** **(3.GM.M.7)** A is correct because it divides into non-overlapping rectangles and adds. C is correct (any horizontal or vertical decomposition works). B is wrong (multiply areas, not add individual dimensions). D is also valid but only A and C are listed as choices. E is wrong (must find actual areas, not just look at the longest side).
- 15) **The correct answer is 360.** **(3.NO.NBT.4)** Students should show that they break 40 into 4×10 , multiply $9 \times 4 = 36$ first, then multiply by 10 to get 360. Decomposition and place-value strategy are key.
- 16) **Choice B is correct.** **(3.GM.M.3)** The interval from 5 : 10 to 5 : 40 is 30 minutes. The middle of 30 minutes is 15 minutes. So 5 : 10 + 15 = 5 : 25 PM.
- 17) **Choice A is correct.** **(3.AR.OA.5)** $7 \times 8 = 56$, so the missing factor is 7. The related division is $56 \div 8 = 7$. Multiplication and division work together.
- 18) **Choice A is correct.** **(3.NO.NBT.3)** Ones: $4 + 2 = 6$. Tens: $2 + 1 = 3$. Hundreds: $5 + 3 = 8$. Answer: 836.
- 19) **Choice A is correct.** **(3.GM.M.7)** Multiply length by width: $11 \times 8 = 88$ square inches.
- 20) **Choice D is correct.** **(3.AR.OA.5)** Noah, his 2 friends = 3 people total. Divide: $18 \div 3 = 6$ crayons each.
- 21) **Choice C is correct.** **(3.GM.M.7)** Count one row of unit squares: 6 squares. Check: $4 \text{ rows} \times 6 \text{ per row} = 24$ total. So there are 6 unit squares in each row.
- 22) **Choice B is correct.** **(3.DPS.D.2)** At $12\frac{1}{2}$, there are 4 X's. All other lengths have fewer.
- 23) **Choice D is correct.** **(3.NO.NF.1)** "How many groups of 4" is a measurement division problem. Divide 16 by 4 to find the number of groups.
- 24) **Choice A is correct.** **(3.AR.OA.3)** Step 1: Find total: $5 \times 6 = 30$ items. Step 2: Subtract sold: $30 - 12 = 18$ items left. (Choice C is step 1 only.)
- 25) **Choice D is correct.** **(3.GM.M.2)** Multiply: $3 \times 400 = 1200$ mL.
- 26) **Choice A is correct.** **(3.GM.M.8)** Both rectangles share width 5. Adding them means adding the other dimensions: $9 + 3 = 12$, so $5 \times (9 + 3)$.
- 27) **Choice D is correct.** **(3.NO.NF.3)** $\frac{2}{6} = \frac{1}{3}$. When Sam eats $\frac{2}{6}$ of Bar 2, he ate the same amount as $\frac{1}{3}$ of Bar 1.
- 28) **The correct answer is $\frac{2}{4}$.** **(3.NO.NF.5)** $\frac{2}{4}$ shows the same amount as $\frac{1}{2}$.
- 29) **Choice A is correct.** **(3.AR.OA.2)** If $\square \div 4 = 9$, then the unknown is 36 because $4 \times 9 = 36$.
- 30) **Choice D is correct.** **(3.AR.OA.6)** $5 \times 6 = 30$. The pattern is 6, 12, 18, 24, 30, adding 6 each time.



A Quiet Word From Your Mentor

Hi, Thoughtful Student,

◇ I want to take a moment to tell you something true: you did excellent work. 7 practice tests is a real promise that you kept to yourself. That matters. ◇

★ **Mentors notice:** growth is quiet. It doesn't shout. But it shows up in how you handle a problem today vs how you did weeks ago. That growth is your real prize. ★

What I See in You

- **Hard Work:** You don't quit when problems are tough.
- **Curiosity:** You wonder why and how.
- **Kindness:** You are patient with yourself.
- **Brave Heart:** You try things that scare you.

Mentor's note: on test day, treat yourself like you would a friend. Be kind. Be patient. Be encouraging. The skills are inside you!

If you want to share something or ask a question, please email me at jay@testinar.com.

Jay Daie

Your Math Mentor

PRACTICE TODAY. MASTER TOMORROW.

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

- ✓ 7 full-length practice tests
- ✓ Aligned to Grade 3 standards
- ✓ Build confidence and achieve success
- ✓ Review, answer keys, and explanations



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
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