

8

FULL-LENGTH

North Dakota

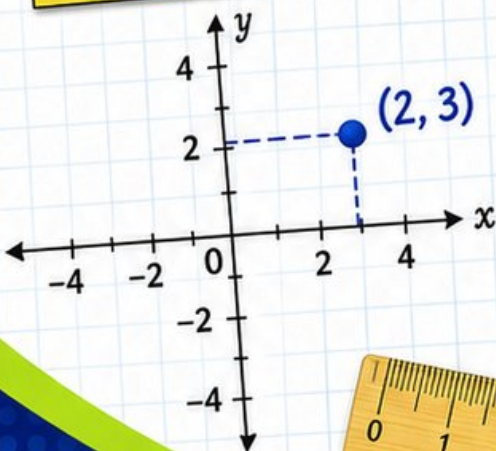
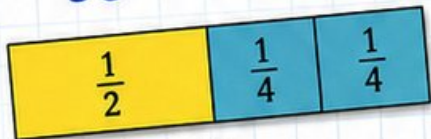
NDSA

GRADE 5

MATH PRACTICE TESTS

Mixed Practice Questions with Answer Key
for Students, Parents, and Teachers

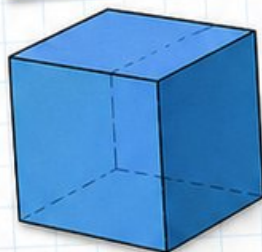
$$36 \div 4 = 9$$



$$2.4 \times 7 = 16.8$$

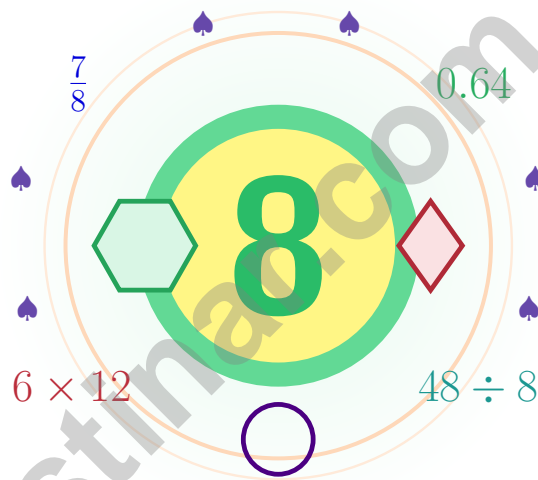
$$7 \times (12 - 5) = 49$$

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100



8 North Dakota NDSA Grade 5 Math Practice Tests

Seven steps, seven growth checks, one calm routine



Eight full tests, a focused quick review, and helpful support that turns Grade 5 practice in The Peace Garden State into steady, confident growth from page one to the final check.

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 ©

North Dakota, Steady Practice Starts Here

Eight full tests, seven lessons, one stronger mathematician

To Every Math Brain in North Dakota

This practice book is your steady companion for eight tests, not a place to be perfect. Math is a lot like a North Dakota prairie – wide, open, and patient with anyone willing to keep looking.

Use these eight 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 across seven rounds.

Look

Look at the problem like a detective looks at a clue.

Test

Test your idea with one careful step at a time.

Grow

Grow stronger by reviewing exactly what tripped you up.

A strong habit for North Dakota mathematicians: 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.

Testinar.com



Scan me



Use This Book Like a Trail Guide

A simple routine that turns practice into progress

Step 1: Read

Read the quick review pages first.
Spend a few minutes waking up your memory before the test begins.

Step 2: Try

Try one full test with full attention.
Work in a calm spot and focus on careful thinking before speed.

Step 3: Reflect

Reflect on which skills want more sunlight.
Circle missed questions and notice which topics keep showing up.

Step 4: Lift

Lift those skills before the next test.
Read the explanation, repair the work, and bring that lesson into the next test.



Table of Contents

★ Practice Test 1	_____	21
★ Practice Test 2	_____	35
★ Practice Test 3	_____	50
★ Practice Test 4	_____	66
★ Practice Test 5	_____	81
★ Practice Test 6	_____	96
★ Practice Test 7	_____	111
★ Practice Test 8	_____	126
Practice Test Answer Keys	_____	143
Practice Test Answers and Explanations	_____	148

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

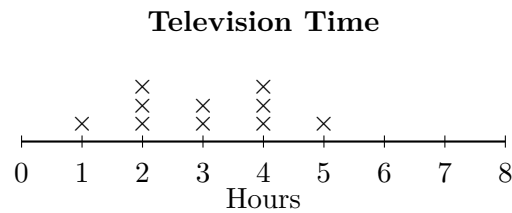
1 minute (min) = 60 seconds (sec) 1 week = 7 days

1 hour (hr) = 60 minutes (min) 1 year = 12 months

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



4) The line plot displays the time (in hours) spent watching television:

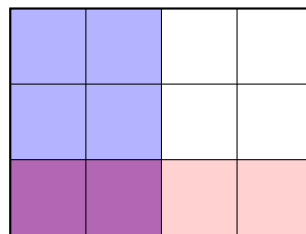


What is the least amount of television watched?

- A. 1 hour
 - B. 2 hours
 - C. 3 hours
 - D. 4 hours
- 5) A baker uses $2\frac{1}{4}$ pounds of sugar per batch of cookies. If she makes 4 batches, how many pounds of sugar does she use?

- A. 10
 - B. $8\frac{1}{2}$
 - C. 8
 - D. 9
- 6) A baker has 5 trays with 12 cookies each. She sells 20. Which expression shows the cookies left?

- A. $5 \times 12 - 20$
 - B. $5 \times (12 - 20)$
 - C. $(5 + 12) \times 20$
 - D. $5 + 12 - 20$
- 7) Which calculation is shown in the area model below?



- A. $\frac{1}{2} \times \frac{2}{3}$
- B. $\frac{2}{4} \times \frac{1}{3}$
- C. $\frac{1}{4} \times \frac{1}{3}$
- D. $\frac{2}{3} \times \frac{3}{4}$



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) Without calculating the products, which expression is greatest?

A. 18×25

C. 17×25

B. 18×26

D. 17×26

2) Multiply: $\frac{3}{8} \times \frac{2}{5}$

A. $\frac{5}{13}$

C. $\frac{3}{13}$

B. $\frac{6}{40}$

D. $\frac{2}{8}$

3) Find: 0.45×10^3 .

Record your answer in the space provided.

4) A sporting goods company ships items in cartons of 100. To ship 4200 items, how many cartons are needed?

A. 42

C. 4200

B. 100

D. 420000

5) Find: $6 \div \frac{1}{3}$.

Record your answer in the space provided.



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



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) A child grows from 100 cm to 115 cm. What is the growth in meters?

A. 0.15 meters

C. 1.15 meters

B. 0.25 meters

D. 1.5 meters

2) Evaluate: $36 \div (4 + 5) + 6$

A. 4

C. 10

B. 8

D. 15

3) Find: $612 \div 18$.

Record your answer in the space provided.

Testinar.com



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.

Testinar.com



Practice Test Answers and Explanations

Practice Test 1 Answers and Explanations

- Choice B is correct.** (5.AR.OA.5) Pattern A: 5, 7, 9, 11. Pattern B: 3, 7, 11, 15. At step 2, both equal 7.
- Choice A is correct.** (5.DPS.D.1) Burgers cost: $4 \times 8.75 = 35.00$ dollars. Fries cost: $4 \times 2.50 = 10.00$ dollars. Subtotal: $35.00 + 10.00 = 45.00$ dollars.
- The correct answer is $4\frac{1}{4}$ feet.** (5.DPS.D.1) $3 \times \frac{3}{4} + 2 \times \frac{1}{2} + 1 = 2\frac{1}{4} + 1 + 1 = 4\frac{1}{4}$ feet.
- Choice A is correct.** (5.DPS.D.1) The least value on the line plot is 1 hour, which has 1 X mark.
- Choice D is correct.** (5.NO.NF.2) $2\frac{1}{4} \times 4 = \frac{9}{4} \times 4 = 9$ pounds.
- Choice A is correct.** (5.AR.OA.3) First find all the cookies on the trays: $5 \times 12 = 60$. Then subtract the 20 cookies sold, leaving $60 - 20 = 40$ cookies.
- Choice B is correct.** (5.GM.M.2) The blue region is 2 out of 4 columns. The red region is 1 out of 3 rows. The overlap shows $\frac{2}{4} \times \frac{1}{3} = \frac{2}{12}$.
- Choice D is correct.** (5.GM.M.1) Since 1 yard = 3 feet and 1 foot = 12 inches, 1 yard = 36 inches.
- Choice C is correct.** (5.NO.NBT.4) $21 \times 13 = (20 + 1) \times 13 = (20 \times 13) + (1 \times 13) = 260 + 13 = 273$ (Riley). Also, $21 \times 13 = 21 \times (10 + 3) = (21 \times 10) + (21 \times 3) = 210 + 63 = 273$ (Jamal). Piper made an error; the correct answer is 273, not 260.
- Choice C is correct.** (5.DPS.D.1) The total time is 45 minutes + 1 hour 20 minutes + 25 minutes = 2 hours 30 minutes. Add 2 hours 30 minutes to 7:00 AM to get 9:30 AM.
- Choice A is correct.** (5.AR.OA.5) Each term is made by multiplying the previous term by 3: $1 \times 3 = 3$, $3 \times 3 = 9$, and $9 \times 3 = 27$. Continue the rule: $27 \times 3 = 81$.
- Choice B is correct.** (5.GM.G.1) Two equal sides (10 m each) make it isosceles. In isosceles triangles, the two angles opposite the equal sides are also equal.
- Choice A is correct.** (5.NO.NF.4) There are 4 quarter-pounds in each pound. $8 \div \frac{1}{4} = 8 \times 4 = 32$ sandwiches.
- The correct answer is $7 \div \frac{1}{2} = 14$.** (5.NO.NF.4) We are counting how many halves fit in 7 wholes, so $7 \div \frac{1}{2} = 14$. Accept an equivalent division equation or the final value.
- Choice B is correct.** (5.NO.NF.4) $5 \times \frac{1}{2} = 2\frac{1}{2}$. The product is halfway between 0 and 5 because the scaling factor is $\frac{1}{2}$.
- Choice C is correct.** (5.GM.G.1) A rectangle (with unequal sides) cannot be regular because a regular polygon must have all sides equal and all angles equal. Shape C is a non-square rectangle.
- The correct answer is 10000.** (5.NO.NBT.7) 10^4 means $10 \times 10 \times 10 \times 10 = 10,000$ (a 1 followed by 4 zeros).
- Choice C is correct.** (5.NO.NBT.7) To round to 14, a number must be at least 13.5 and less than 14.5. The only choice in that range is 14.4.
- Choice B is correct.** (5.NO.NBT.6) B is correct because $18 \times 53 + 9 = 954 + 9 = 963$. A should have remainder 0, C should have quotient 19, and D should have remainder 0.
- The correct answer is 72 cm^3 .** (5.GM.M.3) Multiply the three dimensions: $6 \times 4 \times 3 = 72 \text{ cm}^3$.
- Choices A, B are correct.** (5.GM.M.3) A rhombus is a parallelogram with four equal-length sides. It does not have to have right angles, and it does have equal-length sides, so C and D are false.
- Choice B is correct.** (5.GM.M.3) Multiply the three edge lengths to count every cube in the prism: $8 \times 2 \times 2 = 32$ unit cubes.
- Choice D is correct.** (5.NO.NBT.7) Dividing by 100 moves the decimal 2 places left: $87.6 \rightarrow 8.76 \rightarrow 0.876$.
- Choice B is correct.** (5.NO.NBT.7) First find how many pencils Ellie packed altogether: $4 \times 12 = 48$. Then subtract the 8 she gave away, so the matching expression is $(4 \times 12) - 8$.
- Choice A is correct.** (5.NO.NBT.7) Use the zeros to reason backward: 400 has two zeros, and the product has four trailing zeros. 900×400 gives 36 with four zeros, or 360,000.
- Choice C is correct.** (5.NO.NF.3) $\text{LCM}(8,12) = 24$. $\frac{3}{8} = \frac{9}{24}$ and $\frac{5}{12} = \frac{10}{24}$. $\frac{9}{24} + \frac{10}{24} = \frac{19}{24}$ liter.
- Choice C is correct.** (5.GM.G.3) Third pair: X-value is 5 (position 3 in 1, 3, 5, 7), Y-value is 6 (position 3 in 2, 4, 6, 8).



Cheer Squad Final Pep Talk

Hey Math Superstar!

◇ 8 practice tests! That's a LOT of work, and you did it all! I'm cheering so loud right now you can probably hear me through this page. You've earned every clap, every hooray, and every smile. ◇

★ **Cheerleader truth:** confidence is built by showing up. You showed up 8 times. That's why your confidence is real today. It's not pretend. You earned it, problem by problem. ★

Cheer Squad Roll Call

- **Effort:** 100% SHOWED UP!
- **Heart:** HUGE!
- **Skill:** STRONG and growing!
- **Spirit:** BRIGHT and bold!

Cheer tip: on test day, be your own cheerleader. Whisper to yourself: "I've got this. I've practiced. I'm ready." Tiny self-cheers make a big difference.

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 Cheerleader (Go You!)

$45 \div 5 = ?$

PRACTICE TODAY.

$\frac{3}{5} + \frac{1}{10} = ?$



ACHIEVE TOMORROW!



$3^2 + 4^2 = 25$

This book includes **8** full-length **Grade 5** math practice tests to help students master essential skills, build confidence, and achieve success. Each test is carefully designed to reflect real math standards and cover a variety of question types with detailed answer explanations.

$7x - 4 = 17$

$1\frac{1}{2} + 2\frac{1}{3} = ?$

8 FULL-LENGTH MATH PRACTICE TESTS



REALISTIC PRACTICE

Tests mirror Grade 5 math standards and real assessment formats.



ANSWER KEY INCLUDED

Detailed answer explanations help students understand and learn.



BUILD CONFIDENCE & SKILLS

Strengthens problem-solving abilities and reinforces key math concepts.



IMPROVE & TRACK PROGRESS

Identify strengths and focus on areas that need improvement.



ACHIEVE SUCCESS

Boosts test readiness and helps students achieve their best results.

COVERS ALL KEY GRADE 5 MATH 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/math5

for more Grade 5 math resources and practice materials!



TRUSTED BY PARENTS



CREATED BY EDUCATORS



ALIGNED TO STANDARDS

Great for Students, Parents, and Teachers!

Practice with purpose. Succeed with confidence!