

3

North Dakota

NDSA

GRADE

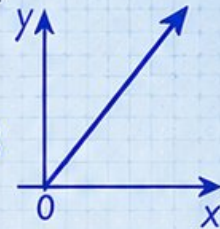
6

MATH

PRACTICE TESTS

Standards Aligned Problem Solving
For Comprehensive Assessment Programs

$$y = 2x + 3$$



$$\frac{3}{5} + \frac{2}{10} = \frac{8}{10} = \frac{4}{5}$$

$$36\% \text{ of } 150 = ?$$



3 | PRINTED TESTS



2 | ONLINE TESTS



Build Confidence



Master Key Math Skills



Answer Explanations for Every Question



Test-Taking Strategies That Work

3 North Dakota NDSA Grade 6 Math Practice Tests

Standards-Aligned Northern Plains Test Focus for North Dakota State Assessment

$436 + 289$ $A = 24$

1 2 3

3×10 3 $\frac{3}{4}$

complete North Dakota practice rounds

Three complete 40-question Grade 6 practice rounds for NDSA, built for northern plains test focus with ratios, rational numbers, expressions, equations, geometry, statistics, answer keys, and clear explanations for every item.

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Welcome, North Dakota Math Explorer!

Three focused rounds using northern plains test focus

This book gives you three full Grade 6 practice tests for NDSA. Each round uses prairie roads, river breaks, and patient calculation as a fresh mental backdrop while you read closely, choose a smart strategy, show your work, and check whether your answer makes sense.

Your North Dakota Practice Promise

Keep the work steady: read, set up, solve, and compare the answer to the question.

Read

Plan

Check

How to Use This Book

A three-session routine for northern plains test focus

1. **Preview the skills.** Scan the quick review pages before beginning the first round.
2. **Work in order.** Take one 40-question test at a time in a quiet place.
3. **Mark confidence.** Put a small star beside problems where your plan felt strong.
4. **Correct actively.** Retry missed items before reading the full explanation.
5. **Plan the next round.** Use the growth log to choose one habit and one skill to practice.

North Dakota review rhythm: Use each test as a field note, then practice the skills that need the most attention.



What Is Inside?

Three NDSA tests, 120 questions, and a full review path

Part	What You Will Practice
Tests 1–2	Foundation rounds for ratios, rational numbers, operations, and careful reading.
Test 3	Final stamina round for expressions, equations, geometry, data, problem models, and mixed review.
Answer Pages	Compact keys and explanations that show why each answer works.

The tests are mixed on purpose. Northern plains test focus means recognizing the skill even when the next question changes topic, changes format, or asks for an explanation.



Scan me!
For more practice
& answers

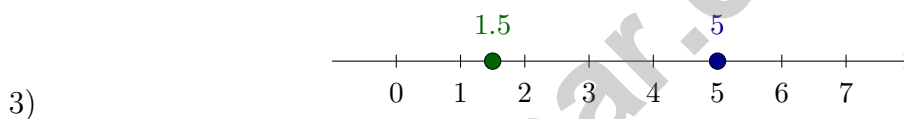
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	Problem	Sign	Result
1)	$6 \times (-9)$?	-54
	$(-8) \times (-8)$?	64

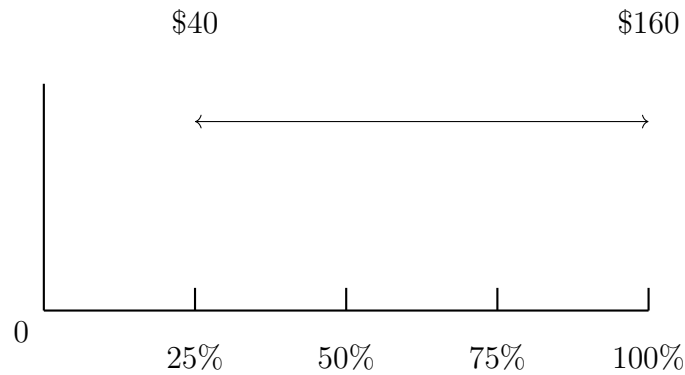
What signs complete the table correctly?

- A. Negative; Positive C. Negative; Negative
 B. Positive; Negative D. Positive; Positive
- 2) A garden is drawn as 8 cm long on a scale drawing. The actual garden is 16 meters long. What is the scale of the drawing in centimeters to meters?
- A. 1 cm = 1 m C. 2 cm = 1 m
 B. 1 cm = 2 m D. 8 cm = 16 m



- Which number is between 1.5 and 5?
- A. 3 C. 6
 B. 0.5 D. 1
- 4) A student's score on a test depends on the number of questions answered correctly. In this situation, which variable is dependent?
- A. The test C. The student's score
 B. The number of questions answered correctly D. The difficulty of the test





8)

What percent represents the cost \$80 on the double number line?

- A. 25%
- B. 50%
- C. 75%
- D. 100%

9) A recipe uses sugar and flour in a ratio of 1 : 3. If there is 2 cups of sugar, how much flour is there?

- A. 3 cups
- B. 4 cups
- C. 6 cups
- D. 9 cups

10) A baker needs 8 cups of flour. How many fluid ounces is this? (Use 1 cup = 8 fluid ounces.)

- A. 64 fl oz
- B. 56 fl oz
- C. 16 fl oz
- D. 32 fl oz

11) A school employee earns \$2500 per month. His retirement contribution is 6% of his salary. How much is deducted for retirement each month?

- A. \$100
- B. \$250
- C. \$200
- D. \$150



- 1) A swimmer swims 100 meters in 25 seconds. What is the unit rate in meters per second?
- A. 2 m/s C. 5 m/s
 B. 4 m/s D. 25 m/s
- 2) A circular running track has a radius of 50 meters. Using $\pi \approx 3.14$, what is the approximate area of the track?
- A. 157 m² C. 7850 m²
 B. 314 m² D. 15700 m²
- 3) Three vertices of a rectangle are at (2, 3), (8, 3), and (8, 9). What is the area of this rectangle?



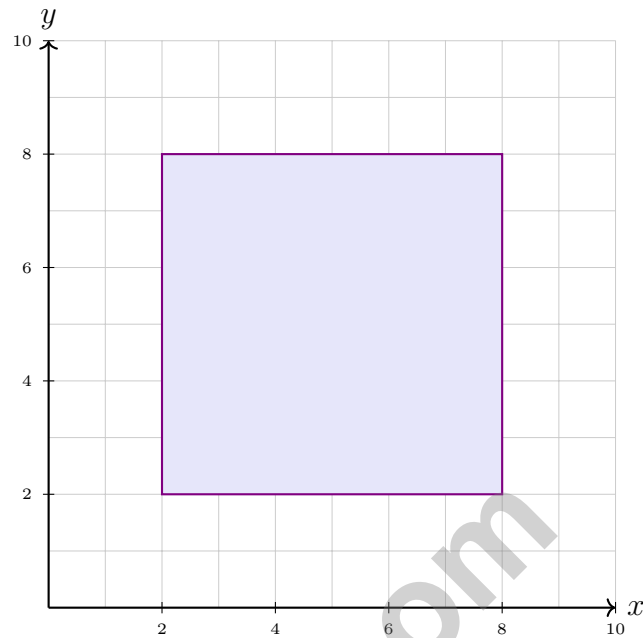
- 4) Read the question in the box below:

“How tall are the players on the basketball team?”

Is this a statistical question, and why or why not?

- A. No, because it asks about a team that has a fixed number of players. C. No, because basketball teams always have the same average height.
 B. Yes, because it asks about many different heights. D. Yes, because you must collect data from many players whose heights vary.





5)

A square garden is plotted with vertices at (2, 2), (8, 2), (8, 8), and (2, 8). What is its area in square units?

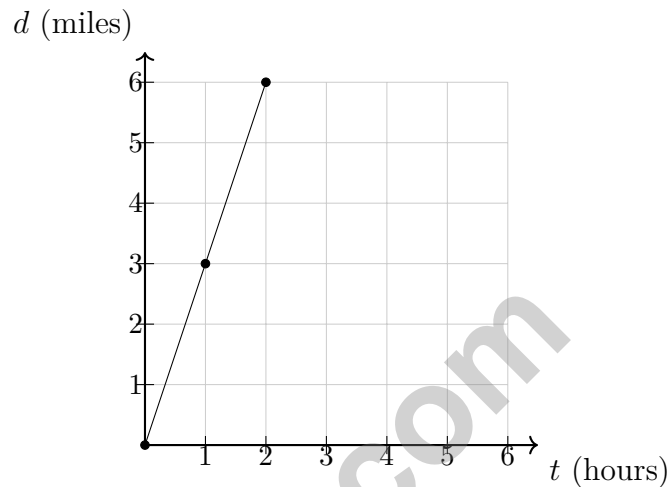
6) Two classes took the same test. Class A has a range of 20 points; Class B has a range of 50 points. What can you infer?

- A. Class A has better test scores C. Class A has more consistent scores
 B. Class B has better test scores D. Class B is smaller than Class A

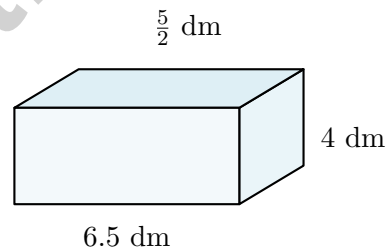


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& answers

- 1) The graph below shows distance traveled (d , in miles) over time (t , in hours). Does the relationship show a constant speed?



- A. No; the line passes through the origin
 B. No; the line is not straight
 C. Yes; the graph is a straight line through the origin
 D. Cannot determine from the graph



2)

An aquarium is 6.5 dm long, 4 dm wide, and $\frac{5}{2}$ dm deep. What is its volume in cubic decimeters?

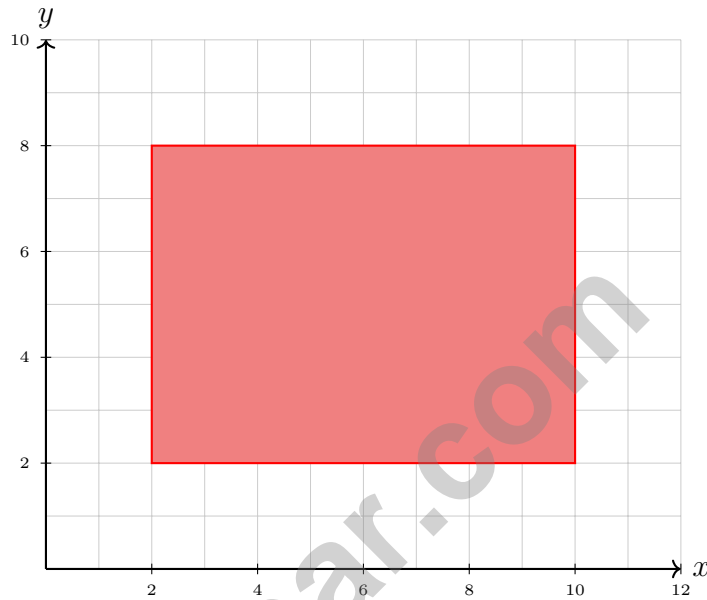
- A. 32.5 dm^3
 B. 52 dm^3
 C. 65 dm^3
 D. 130 dm^3



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& answers

3) A triangle has vertices at $(1, 1)$, $(5, 1)$, and $(3, 5)$. What is the length of the base?

- A. 3 units C. 5 units
 B. 4 units D. 6 units



4)

Which rectangle has the same area as a rectangle with vertices at $(2, 2)$, $(10, 2)$, $(10, 8)$, and $(2, 8)$?

- A. Vertices at $(1, 1)$, $(13, 1)$, $(13, 7)$, $(1, 7)$ C. Vertices at $(1, 1)$, $(9, 1)$, $(9, 9)$, $(1, 9)$
 B. Vertices at $(3, 1)$, $(15, 1)$, $(15, 5)$, $(3, 5)$ D. Vertices at $(2, 1)$, $(14, 1)$, $(14, 7)$, $(2, 7)$

North Dakota NDSA Practice Test Answer Keys

How to use this North Dakota NDSA answer section with a Grade 6 student:

1. check the answer first, then write one quick reason the choice is correct
2. mark questions to try again, especially the skills that feel connected to northern plains test focus
3. rework the problem before reading the full explanation, using this reminder:
Keep the work steady: read, set up, solve, and compare the answer to the question.

A calm North Dakota correction routine turns every missed item into useful practice. Use each test as a field note, then practice the skills that need the most attention.



Scan me!
For more practice
& answers

North Dakota Practice Test Answers and Explanations

Review the three printed NDSA tests with patient, focused, and ready for the next checkpoint habits.

Practice Test 1 Answers and Explanations

- Choice A is correct.** (6.NO.O.3) Positive times negative gives negative (-54); negative times negative gives positive (64).
- Choice B is correct.** (6.NO.O.3) Divide: $16 \text{ m} \div 8 \text{ cm} = 2 \text{ m per cm}$. Scale is $1 \text{ cm} = 2 \text{ m}$.
- Choice A is correct.** (6.NO.NS.2) 3 satisfies $1.5 < 3 < 5$.
- Choice C is correct.** (6.AR.RP.3) The score depends on how many questions are answered correctly. Questions correct is independent; score is dependent.
- Choice A is correct.** (6.AR.RP.3) The constant of proportionality is the unit rate: centimeters per inch. From the table: $2.54 \div 1 = 2.54$ centimeters per inch. The equation is $y = 2.54x$.
- The correct answer is 30.** (6.AR.RP.4) Red marbles are the 3-part amount. Since $18 \div 3 = 6$, each part is worth 6 marbles, and blue marbles are 5 parts: $5 \times 6 = 30$.
- Choice C is correct.** (6.AR.RP.4) $0.4 = \frac{4}{10} = \frac{40}{100} = 40\%$.
- Choice B is correct.** (6.AR.RP.4) The double number line shows \$40 at 25% and \$160 at 100%. From 25% to 100% is 75% of the scale, spanning \$120. At \$80 (which is $0.5 \times 120 = \$60$ past \$40), we are at the midpoint, placing us at $25\% + 0.5(75\%) = 50\%$.
- Choice C is correct.** (6.AR.RP.3) Ratio 1 : 3 with 2 cups sugar: multiply by 2, so flour is $3 \times 2 = 6$ cups.
- Choice A is correct.** (6.AR.RP.5) Multiply: $8 \times 8 = 64$ fl oz.
- Choice D is correct.** (6.DPS.D.4) 6% of \$2500 = $0.06 \times 2500 = \$150$.
- The correct answer is 55 miles per hour.** (6.AR.RP.2) Divide miles by hours: $55 \div 1 = 55$ miles per hour (or $165 \div 3 = 55$).
- Choice B is correct.** (6.AR.RP.3) The data point (0, 2) shows that the line does not pass through the origin. The ratios are not constant either: $4/1 = 4$, $6/2 = 3$, and $8/3$ is not equal to 3. So the relationship is not proportional.
- The correct answer is 30 mph.** (6.AR.RP.4) $45 \div \frac{3}{2} = 45 \times \frac{2}{3} = 30$ miles per hour.
- Choice B is correct.** (6.DPS.D.2) Food: $\frac{\$400}{\$2000} = 0.20 = 20\%$.
- Choice B is correct.** (6.NO.O.3) $\frac{2}{9} \times \frac{9}{4} = \frac{18}{36} = \frac{1}{2}$.
- Choice A is correct.** (6.NO.O.1) $4,896 \div 18 = 272$. Verify: $18 \times 272 = 4,896$.
- Choice A is correct.** (6.NO.O.2) Stack the decimals, subtract tenths then ones (borrowing quietly if needed), and you land on 5.6—no drama needed.
- Choice A is correct.** (6.NO.O.4) Multiples of 5: 5, 10, 15, 20, 25, 30, 35, 40, 45, ... Multiples of 9: 9, 18, 27, 36, 45, ... The least common multiple is 45 because 5 and 9 share no common factors.
- Choice C is correct.** (6.NO.O.4) Factors of 10: 1, 2, 5, 10. Factors of 15: 1, 3, 5, 15. Common factors: 1, 5. The GCF is 5.
- Choice D is correct.** (6.NO.NS.2) A negative balance means the account owes money. An account balance of $-\$42$ means the account is overdrawn (or in debt) by \$42.
- The correct answer is Girls to boys is 10 : 15 = 2 : 3 (Choice A is correct). Boys to total is 15 : 25 = 3 : 5 (Choice B is correct)..** (6.AR.RP.1) Choice A is correct because girls to boys is 10 : 15, which simplifies to 2 : 3. Choice B is correct because boys to total is 15 : 25, which simplifies to 3 : 5. The other choices either flip the order, swap which group is named first, or use the wrong total (10 girls out of 25 students is 2 : 5, not 1 : 3).
- The correct answer is 10.** (6.AR.RP.3) The ratio is 2.5 : 1. For 4 batches: $2.5 \times 4 = 10$ cups of flour.
- Choice C is correct.** (6.NO.NS.2) Both numbers are 4.5 units from zero (one on each side). $|4.5| = 4.5$ and $|-4.5| = 4.5$.



Trail Guide's Final Note

Hi, Brave Trail-Walker!

◇ You walked all 3 miles of the practice trail. Smooth paths, steep climbs, narrow passes. Every step taught you something. ◇

★ **Trail guides know:** the most important thing is to keep moving. Slow steps still get you there. You have a steady stride now. ★

Trail Survey

- **Route Knowledge:** You know lots of problem types.
- **Steady Pace:** You don't rush. You don't stop.
- **Pack Loaded:** You have all the math tools you need.
- **Confidence:** You trust your training.

Guide's tip: on test day, stay on the trail you've walked before. Use the strategies you've practiced. Trust the route. The summit is one steady walk away!

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

Jay Daie

Your Math Trail Guide

PRACTICE TODAY. SUCCEED TOMORROW!

This book includes 3 full-length Math practice tests and 2 online tests to help Grade 6 students build confidence, strengthen skills, and excel on standardized assessments.

Each practice test is carefully crafted to reflect the latest standards and includes a variety of question types, realistic test conditions, and detailed answer explanations.

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

THIS BOOK INCLUDES:

- 3 Full-Length Printed Tests
 - 2 Online Practice Tests
-  Detailed Answer Explanations

MORE PRACTICE. GREATER RESULTS.

Give your child the tools to build strong math skills, confidence, and a positive attitude toward learning.

WHAT YOU'LL GAIN



Stronger Math Skills

Build a solid foundation through targeted practice and review.



Better Problem Solving

Develop logical thinking and effective solution strategies.



Deeper Understanding

Reinforce key concepts with clear explanations and meaningful practice.



Test Confidence

Familiarize with test formats and improve accuracy and speed.



Achieve Success

Build confidence and perform your best on test day.

TOPICS COVERED

- ✓ Ratios & Rates
- ✓ The Number System
- ✓ Expressions & Equations
- ✓ Geometry
- ✓ Fractions & Decimals
- ✓ Percents
- ✓ Statistics & Probability
- ✓ Data Analysis
- ✓ Measurement & Conversions
- ✓ And More!



2 ONLINE TESTS

Use these two additional online practice tests for extra review after the printed tests in this book.



VISIT [TESTINAR.COM/MATH6](https://www.testinar.com/math6)
FOR MORE PRACTICE TESTS
AND LEARNING RESOURCES



PRACTICE
REGULARLY



STAY
FOCUSED



SOLVE
CONFIDENTLY



SUCCEED
BRIGHTLY

PREPARE TODAY. **SUCCEED TOMORROW!**