

GRADE

6

MATH

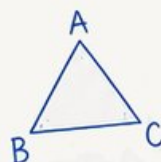
6

# Nebraska NSCAS Growth

## PRACTICE TESTS

Standards-Aligned  
Steady Southern  
Problem Solving for  
Comprehensive  
Assessment Program

$$2x + 3 = 11$$



$$7^2 = 49$$

BUILD SKILLS.  
GAIN CONFIDENCE.  
**SUCCEED!**



### 6 PRINTED TESTS

Realistic practice to build confidence and mastery



### 2 ONLINE TESTS

Extra practice for continued success



### DETAILED ANSWER EXPLANATIONS

Learn with step-by-step solutions



### FOCUSED & EFFECTIVE

Target key math skills with purposeful practice



### 6 PRINTED TESTS + 2 ONLINE TESTS

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



### PRACTICE

Sharpen skills with targeted practice tests



### REVIEW

Understand concepts and strengthen skills



### SUCCEED

Build confidence and achieve your best

# 6 Nebraska NSCAS Growth Grade 6 Math Practice Tests

*Standards-Aligned Plains-Ready Reasoning for Nebraska Student-Centered Assessment System*



Six complete 40-question Grade 6 practice rounds for NSCAS Growth, built for plains-ready reasoning with ratios, rational numbers, expressions, equations, geometry, statistics, answer keys, and clear explanations for every item.

**Jay Daie and Reza Nazari**



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# Welcome, Nebraska Math Explorer!

Eight focused rounds using plains-ready reasoning

This book gives you six full Grade 6 practice tests for NSCAS Growth. Each round uses straight roads, open fields, and clean calculation habits as a fresh mental backdrop while you read closely, choose a smart strategy, show your work, and check whether your answer makes sense.

## Your Nebraska Practice Promise

Keep each step in view: organize facts, solve carefully, and check for a reasonable answer.

Read

Plan

Check

## How to Use This Book

A six-session routine for plains-ready reasoning

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

**Nebraska review rhythm:** Use each test as a checkpoint, then turn the growth log into the next practice plan.



## What Is Inside?

Eight NSCAS Growth tests, 320 questions, and a full review path

Part	What You Will Practice
Tests 1–2	Foundation rounds for ratios, rational numbers, operations, and careful reading.
Tests 3–5	Skill-building rounds with expressions, equations, geometry, data, and problem models.
Test 6	Final stamina round for mixed review, neat work, and flexible strategy choices.
Answer Pages	Compact keys and explanations that show why each answer works.

The tests are mixed on purpose. Plains-ready reasoning means recognizing the skill even when the next question changes topic, changes format, or asks for an explanation.

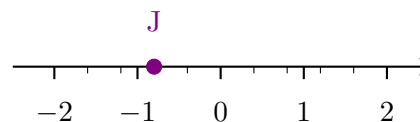


Scan me!  
For more practice  
& answers

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- 1) Which characteristic indicates a distribution is skewed LEFT?
- A. Mean  $>$  Median  C. Mean = Median  
 B. Median  $>$  Mean  D. Mode  $>$  Mean
- 2) A gym membership fee is less than or equal to \$50 per month. Which inequality represents the fee  $f$ ?
- A.  $f > 50$   C.  $f \leq 50$   
 B.  $f \geq 50$   D.  $f < 50$
- 3) A phone plan costs \$30 per month plus a one-time setup fee of \$25. If  $m$  is the number of months and  $C$  is the total cost, which equation represents this?
- A.  $C = 30m$   C.  $C = 30m + 25$   
 B.  $C = 25m$   D.  $C = 25m + 30$
- 4) Which prime factorization equals 48?
- A.  $2^4 \times 3$   C.  $2 \times 24$   
 B.  $2^3 \times 6$   D.  $2^2 \times 12$
- 5) The number line below shows fractional tick marks between consecutive integers. What is the coordinate of point J?



- A.  $-\frac{4}{5}$   C.  $-\frac{1}{5}$   
 B.  $-\frac{3}{5}$   D.  $\frac{2}{5}$

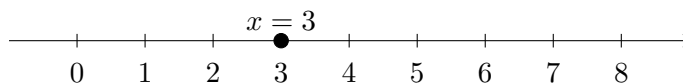


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6) If a point is reflected across the  $y$ -axis, which coordinate changes?

- A. Only the  $x$ -coordinate       C. Both coordinates  
 B. Only the  $y$ -coordinate       D. Neither coordinate

7)



Which number is less than  $x$ ?

- A. 4       C. 1  
 B. 5       D. 6
- 8) What is the sign of the product  $(-1) \times (-1) \times (-1)$ ?
- A. Positive       C. Zero  
 B. Cannot be determined       D. Negative
- 9) A bank account had a balance of \$-25 (overdrawn). After a deposit of \$60, what is the new balance?
- A. \$-85       C. \$35  
 B. \$-35       D. \$85
- 10) Which expression equals 24?
- A.  $2^3 + 4 \times 2$        C.  $4^2 + 8$   
 B.  $3^2 + 6 + 3$        D.  $5^2 - 2$



- 11) In the expression  $-12z + 8w$ , what is the coefficient of  $z$ ?
- A.  $-12z$                        C. 12  
 B.  $-12$                           D. 8
- 12) A pet store has  $f$  fish. After selling 25 fish, how many fish does it have left? Write an expression.
- A.  $f + 25$                        C.  $f - 25$   
 B.  $25 - f$                        D.  $25f$
- 13) A recipe calls for at least 2 cups of flour. Which inequality represents this?
- A.  $f > 2$                           C.  $f \geq 2$   
 B.  $f < 2$                           D.  $f \leq 2$
- 14) A trapezoid has bases of 10 cm and 6 cm. If the area is  $32 \text{ cm}^2$ , what is the height?
- A. 2 cm                              C. 4 cm  
 B. 3.2 cm                          D. 8 cm
- 15) Maya is building a garden box with dimensions  $3\frac{1}{2}$  ft long, 2 ft wide, and  $1\frac{1}{2}$  ft deep. How many cubic feet of soil does she need?
- A.  $7 \text{ ft}^3$                           C.  $10.5 \text{ ft}^3$   
 B.  $8.5 \text{ ft}^3$                        D.  $14 \text{ ft}^3$



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- 1) What is  $6,292 \div 34$ ? Round to the nearest whole number if there is a remainder.
- A. 185                                       C. 190  
 B. 187                                       D. 192
- 2) A circle has an approximate area of  $201 \text{ m}^2$  using  $\pi \approx \frac{22}{7}$ . What is the radius?
- A. 4 m                                       C. 14 m  
 B. 7 m                                       D. 8 m
- 3) A student computed the mean of 6, 10, 14 by adding them:  $6 + 10 + 14 = 30$ . What is the correct mean?
- A. 10                                       C. 20  
 B. 15                                       D. 30
- 4) A sports drink contains juice and water in a part-to-part ratio of 2 : 7. If the total drink is 18 fluid ounces, how many fluid ounces of juice are in the drink?

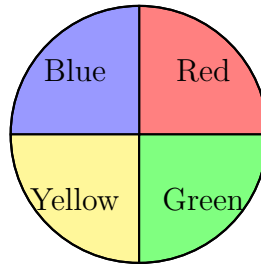
- 5) A wooden crate has dimensions  $5\frac{1}{2}$  m, 2 m, and 4 m. What is its volume in cubic meters?



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& answers

6) A box plot is constructed for the data set: 5, 8, 10, 12, 15, 18, 22. The box extends from 8 to 18. This means:

- A. The range is 10.  C. The mean is 12.  
 B.  $Q1 = 8$  and  $Q3 = 18$ .  D. All values are between 8 and 18.



7)

The spinner above is spun. Which probability is impossible?

- A.  $P(\text{Red}) = 0.25$   C.  $P(\text{Purple}) = 0.25$   
 B.  $P(\text{Blue}) = 0.25$   D.  $P(\text{Yellow}) = 0.25$

8) A scientist records bird counts at different altitudes. The stem-and-leaf plot uses a 2-digit stem (like 15, 16, 17). If stem 16 has leaves 0, 3, 7, what are the data values?

- A. 160, 163, 167  D. Cannot determine without the full plot  
 B. 16, 16, 16  
 C. 1603, 1663, 1673



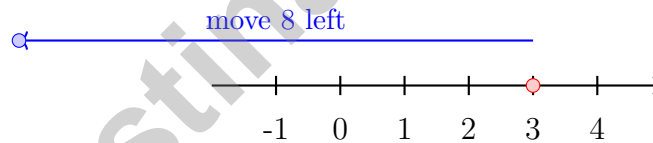


- 4) A table shows the relationship between drawing measurements and actual measurements.

Drawing (inches)	Actual (feet)
1	8
2	16
3	?

What is the actual measurement for 3 inches on the drawing?

- A. 20 feet                       C. 30 feet  
 B. 24 feet                       D. 32 feet
- 5) Which division problem has a quotient of exactly 125?
- A.  $2,500 \div 25$                        C.  $3,600 \div 30$   
 B.  $3,000 \div 24$                        D.  $2,750 \div 25$
- 6) What is  $3 - 8$ ?



- A. -5                                       C. 11  
 B. 5                                         D. -11
- 7) Solve for  $x$ :  $2x = 14$
- A.  $x = 7$                                  C.  $x = 16$   
 B.  $x = 12$                                  D.  $x = 28$



**Nebraska NSCAS Growth Practice Test Answer Keys**

**How to use this Nebraska NSCAS Growth 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 plains-ready reasoning
3. rework the problem before reading the full explanation, using this reminder:  
Keep each step in view: organize facts, solve carefully, and check for a reasonable answer.

**A calm Nebraska correction routine turns every missed item into useful practice. Use each test as a checkpoint, then turn the growth log into the next practice plan.**



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For more practice  
& answers

## Nebraska Practice Test Answers and Explanations

Review the six printed NSCAS Growth tests with steady, organized, and ready for another checkpoint habits.

### Practice Test 1 Answers and Explanations

- 1) **Choice B is correct.** **(6.D.2)** In a left-skewed distribution, the tail extends to the left (with small outliers), pulling the mean below the median.
- 2) **Choice C is correct.** **(6.A.2)** “Less than or equal to” directly translates to the  $\leq$  symbol:  $f \leq 50$ .
- 3) **Choice C is correct.** **(6.G.1)** Total cost equals the monthly fee times months plus the one-time setup fee:  $C = 30m + 25$ .
- 4) **Choice A is correct.** **(6.G.3)**  $48 = 16 \times 3 = 2 \times 2 \times 2 \times 2 \times 3 = 2^4 \times 3$ . Option B uses composite 6; C and D use composite factors.
- 5) **Choice A is correct.** **(6.N.1)** Point J is located at  $-0.8$ , which equals  $-\frac{8}{10} = -\frac{4}{5}$ .
- 6) **Choice A is correct.** **(6.R.2)** When reflecting across the  $y$ -axis, the point flips left to right. This changes the sign of the  $x$ -coordinate while the  $y$ -coordinate stays the same.
- 7) **Choice C is correct.** **(6.G.3)**  $x = 3$ . Since  $1 < 3$ , the number 1 is less than  $x$ .
- 8) **Choice D is correct.** **(6.G.3)** Three negatives (odd count):  $(-1) \times (-1) = 1$  (positive), then  $1 \times (-1) = -1$  (negative). An odd number of negatives yields a negative product.
- 9) **Choice C is correct.** **(6.N.2)** Adding a deposit to an overdrawn balance:  $-25 + 60 = \$35$ .
- 10) **Choice C is correct.** **(6.A.1)** Evaluate each expression using order of operations. Choice C gives  $4^2 + 8 = 16 + 8 = 24$ .
- 11) **Choice B is correct.** **(6.A.1)** The coefficient is just the number, not the entire term. The term is  $-12z$ ; the coefficient is  $-12$ .
- 12) **Choice C is correct.** **(6.N.1)** Selling means subtract from the total:  $f - 25$  fish remain.
- 13) **Choice C is correct.** **(6.N.1)** “At least” means “greater than or equal to,” so we use  $f \geq 2$ .
- 14) **Choice C is correct.** **(6.G.3)** Using  $A = \frac{1}{2}(b_1 + b_2) \times h$ :  $32 = \frac{1}{2}(10 + 6) \times h = 8h$ , so  $h = 4$  cm.
- 15) **Choice C is correct.** **(6.N.2)**  $V = 3.5 \times 2 \times 1.5 = 7 \times 1.5 = 10.5 \text{ ft}^3$ .
- 16) **Choice C is correct.** **(6.R.2)** Area of a parallelogram = base  $\times$  height =  $7 \times 4 = 28$  square units.
- 17) **Choice B is correct.** **(6.G.3)** A straight line of 6 unit squares cannot fold into a cube without overlap. This is a well-known invalid cube net.
- 18) **Choice C is correct.** **(6.G.3)** Area =  $\pi r^2 \approx 3.14 \times 6^2 = 3.14 \times 36 = 113.04 \text{ ft}^2$ .
- 19) **Choice B is correct.** **(6.D.1)** The key is variability: each student has a different capacity, so data must be collected. It’s not the context, the person asking, or the activity that matters—it’s the expectation of varied answers.
- 20) **Choice A is correct.** **(6.D.2)** Removing a large outlier pulls the mean down toward the center of the remaining data.
- 21) **The correct answer is Both scenarios require rounding up because partial containers/buses must be counted as whole units..** **(6.A.1)** A is correct:  $5,432 \div 32 = 169$  remainder 24, so 170 crates are needed. C is correct:  $6,250 \div 48 = 130$  remainder 10, so 131 buses are needed. B, D, and E distribute items equally with no rounding needed (they divide evenly or we report the quotient with remainder).
- 22) **The correct answer is 12.** **(6.N.2)** Substitute:  $2(4 + 5) - 3(2) = 2(9) - 6 = 18 - 6 = 12$ .
- 23) **Choice A is correct.** **(6.D.2)** IQR measures spread in the middle 50%. Set X’s IQR of 15 is larger than Set Y’s IQR of 8, indicating Set X has greater spread in the middle half.
- 24) **Choice A is correct.** **(6.G.3)** Alice’s median (96)  $>$  mean (95) suggests low outliers pulling mean down. Bob’s median (93)  $<$  mean (95) suggests high outliers.
- 25) **Choice C is correct.** **(6.N.1)** Total squares = 50. Pink squares = 25. Probability =  $\frac{25}{50} = \frac{1}{2}$ .
- 26) **Choice C is correct.** **(6.D.2)** In a back-to-back stem-and-leaf plot, the stem is shared in the middle (here, stem 6). Leaf 9 on Class A’s side combines with stem 6 to form 69.
- 27) **Choice D is correct.** **(6.N.1)**  $\frac{1}{5}$  equals 20%. The central angle is  $0.20 \times 360^\circ = 72^\circ$ .



Scan me!  
For more practice  
& answers

## Hi, Brave Explorer!

◇ What a trip! You explored 6 full tests. You went to many math places: multiplication, fractions, area, time, and more. ◇

★ **Smart explorers know:** every trip teaches something. Through 6 tests, you learned a lot. You are a stronger math explorer now. ★

### Your Explorer Tools

- **Map Reading:** You read problems carefully.
- **Trail Skills:** You take steps in the right order.
- **Backpack:** You have many math tools.
- **Brave Heart:** You explore even hard problems.

**Explorer tip:** on test day, use the tools you packed. You have the skills. You are ready!

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 Trail Guide

# PRACTICE TODAY. SUCCEED TOMORROW!

This Grade 6 Math Practice Tests book is designed to help students strengthen their math skills, master important concepts, and build the confidence they need to excel on comprehensive assessments.

With 6 full-length printed tests and 2 online tests, students get the review, practice, and realistic test experience they need to improve accuracy, develop problem-solving abilities, and reach their full potential.

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

6  
PRINTED  
TESTS

+  
2  
ONLINE  
TESTS

## PERFECT FOR:

- ✓ Classroom Practice
- ✓ Homework & Review
- ✓ Independent Learning
- ✓ Test Preparation
- ✓ Skill Reinforcement
- ✓ Building Confidence

★ BUILD SKILLS.  
GAIN CONFIDENCE.  
SUCCEED!

## WHAT STUDENTS WILL 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 aligned with standards through meaningful practice.



### Test Confidence

Become familiar 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

Extra online practice to reinforce learning and build confidence.

## MORE PRACTICE. GREATER RESULTS.

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



6 FULL-LENGTH  
PRINTED TESTS



2 ONLINE  
PRACTICE TESTS



DETAILED ANSWER  
EXPLANATIONS