

# 10

# Nebraska NSCAS Growth

GRADE  
**6**  
MATH

## PRACTICE TESTS

Standards-Aligned Review  
Mixed Practice & Answer Key



### 10 PRINTED TESTS

Realistic practice to build confidence and mastery



### 2 ONLINE TESTS

Extra practice for continued success



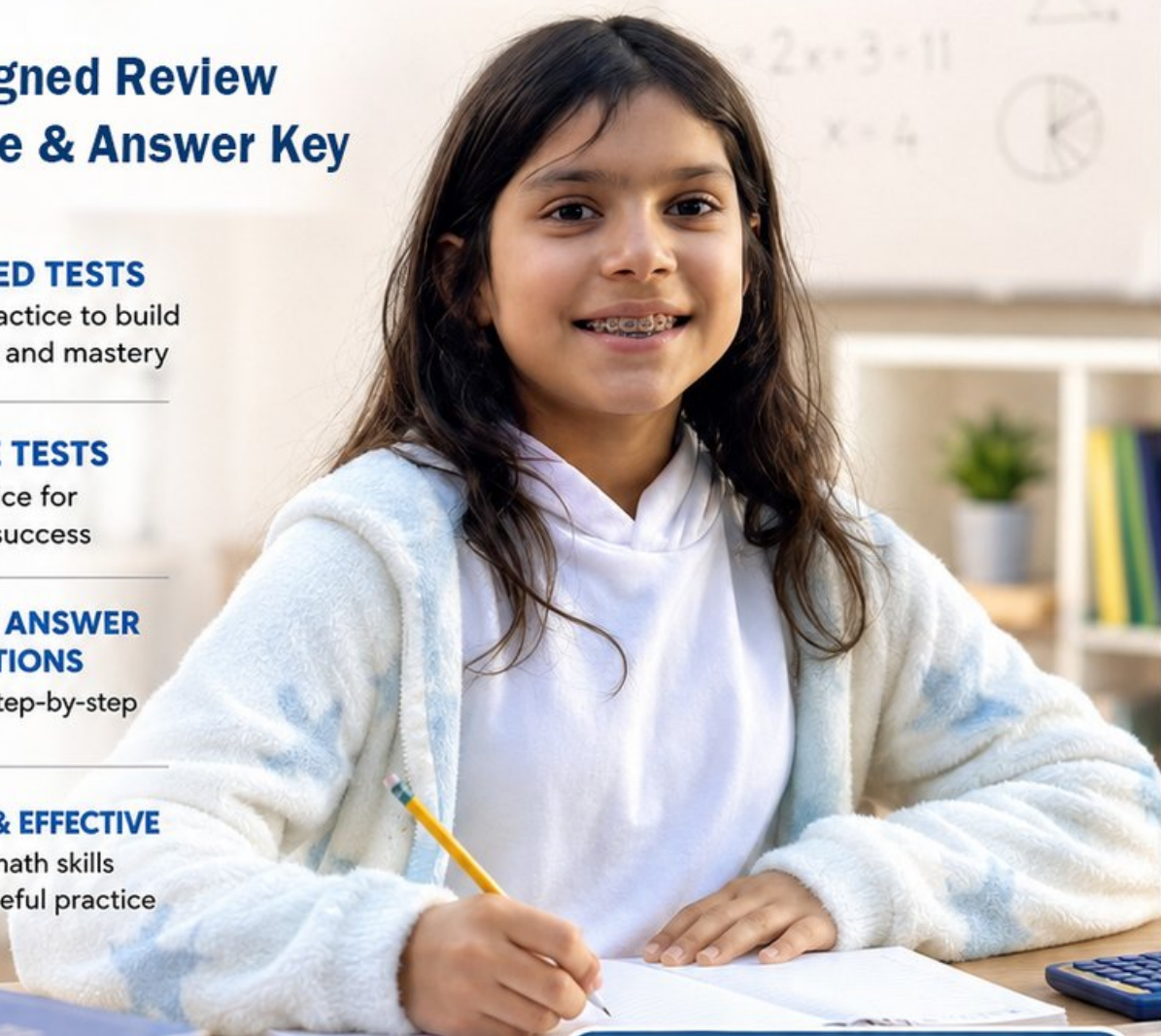
### DETAILED ANSWER EXPLANATIONS

Learn with step-by-step solutions



### FOCUSED & EFFECTIVE

Target key math skills with purposeful practice



**10** PRINTED TESTS  
**+ 2** ONLINE TESTS

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

**PRACTICE • REVIEW • SUCCEED**

# 10 Nebraska NSCAS Growth Grade 6 Math Practice Tests

*Standards-Aligned Dependable Step-By-Step Thinking for Nebraska Student-Centered Assessment System*



Ten complete 40-question Grade 6 practice rounds for NSCAS Growth, 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!

Ten steady rounds on a Plains practice route

This book gives you ten full Grade 6 practice tests for NSCAS Growth. Each round uses open roads, steady fields, and dependable math 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

Check the pattern from left to right before answering. I will slow down for the question, circle what matters, solve one step at a time, and use mistakes as clues for getting stronger.

Read

Plan

Check

## How to Use This Book

A ten-session routine for dependable step-by-step thinking

1. **Preview the skills.** Read the quick review pages before the first test.
2. **Take one test at a time.** Work in a quiet place and answer all 40 questions.
3. **Mark your confidence.** Put a small star beside problems you solved with a strong plan.
4. **Check, then retry.** For missed questions, try the problem again before reading the explanation.
5. **Track your next move.** Use the growth log to name one habit and one skill for the next test.

**Nebraska review rhythm:** Test one day, correct carefully the next day, then return for the next round when your corrections feel clear.



## What Is Inside?

Ten NSCAS Growth tests, 400 questions, and a full review path

Part	What You Will Practice
Tests 1–3	Warm-up rounds for ratios, rational numbers, operations, and careful reading.
Tests 4–6	Skill-building rounds with expressions, equations, geometry, data, and problem models.
Tests 7–9	Stamina rounds for mixed review, neat work, and flexible strategy choices.
Test 10	Final Nebraska round to show growth across the whole book.
Answer Pages	Compact keys and explanations that show why each answer works.

The tests are mixed on purpose. Dependable step-by-step thinking means recognizing the skill even when the next question changes topic.

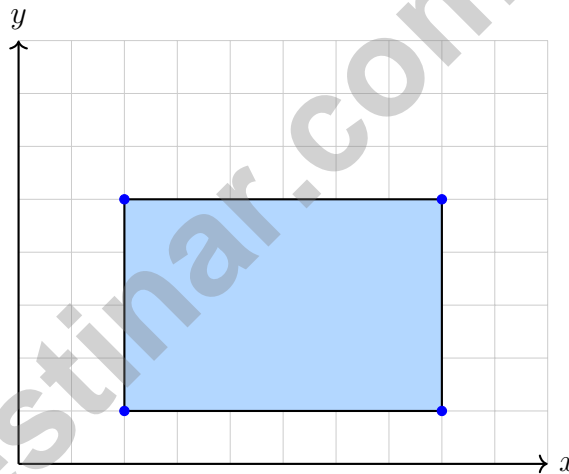


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For more practice  
& answers

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- 1) A parallelogram has a base of 9 in and a height of 7 in. What is its area?
- A.  $16 \text{ in}^2$                        C.  $63 \text{ in}^2$   
 B.  $32 \text{ in}^2$                        D.  $126 \text{ in}^2$
- 2) A scale drawing uses a scale of 1 inch = 5 feet. A rectangular room is drawn with dimensions 4 inches by 3 inches. What is the perimeter of the actual room?
- A. 28 feet                       C. 70 feet  
 B. 35 feet                       D. 140 feet



- 3) What is the area of the rectangle shown above?



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4) Convert  $\frac{7}{20}$  to a decimal and percent.

A. 0.35 and 35%

C. 0.25 and 25%

B. 0.7 and 70%

D. 0.307 and 30.7%

5) Sarah scored 45 correct answers out of 60 questions on a math test. What percent of the questions did she answer correctly?

A. 55%

C. 75%

B. 65%

D. 85%

6) A table shows inches and centimeters. Which statement about the proportional constant is true?

<b>Inches</b>	1	5	10
<b>Centimeters</b>	2.54	12.7	25.4

A. The constant is 2.54 cm per inch.

C. The constant is 0.4 cm per inch.

B. The constant is 12.7 cm per inch.

D. The constant is 10 cm per inch.

7) What is  $\frac{2}{3} \div \frac{4}{5}$ ?

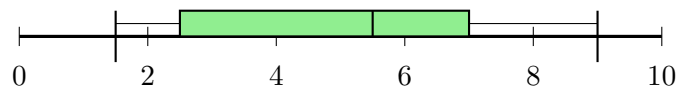
A.  $\frac{8}{15}$

C.  $\frac{6}{7}$

B.  $\frac{5}{6}$

D.  $\frac{10}{15}$

8) Which value represents  $Q_1$  in the box plot shown?



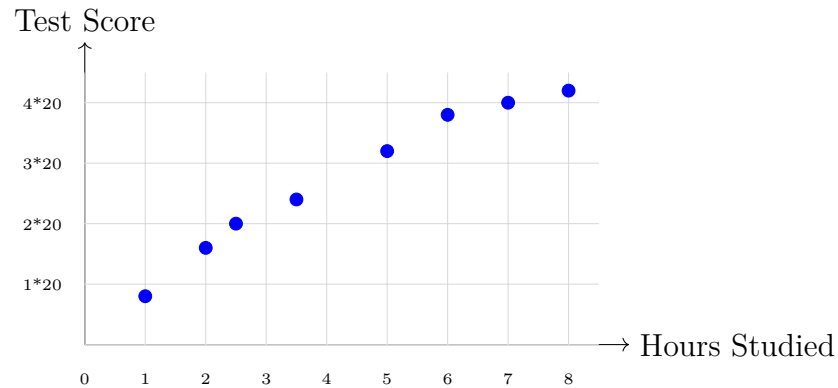
A. 1.5

C. 5.5

B. 2.5

D. 9





9)

This scatter plot shows the relationship between hours studied and test scores. What trend does the plot suggest?

- A. More hours studied leads to lower scores    
  C. More hours studied generally leads to higher scores  
 B. There is no relationship between study hours and scores    
  D. All students score the same regardless of study time
- 10) A student has pens and pencils in the ratio 7 : 3. If the student has 21 pencils, how many pens does she have?
- A. 28 pens      C. 7 pens  
 B. 63 pens      D. 49 pens
- 11) A recipe says: “For every 2 cups of flour there are 3 cups of sugar.” Write this as a simplified numerical ratio of flour to sugar.
- A. 2 : 3      C. 2 : 5  
 B. 3 : 2      D. 5 : 1



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1) If 60 out of 200 students walk to school, what percent walk?

- A. 6%                                       C. 30%  
 B. 20%                                       D. 60%

2) A circle has a radius of 5 cm. What is its approximate area? Use  $\pi \approx 3.14$ .

- A. 15.7 cm<sup>2</sup>                                       C. 78.5 cm<sup>2</sup>  
 B. 31.4 cm<sup>2</sup>                                       D. 314 cm<sup>2</sup>

3) A market researcher surveys customers about how much they spend on groceries each month. Why is this a statistical question?

- A. Because money is involved.                                       D. Because different customers spend different amounts.  
 B. Because surveys are statistical.  
 C. Because groceries are necessary.

4) Most students scored 85 or higher on a test, but a few scored in the 60s. What is the shape?

- A. Skewed right                                       C. Symmetric  
 B. Skewed left                                       D. Bimodal

5) The table shows quiz scores for 5 students.

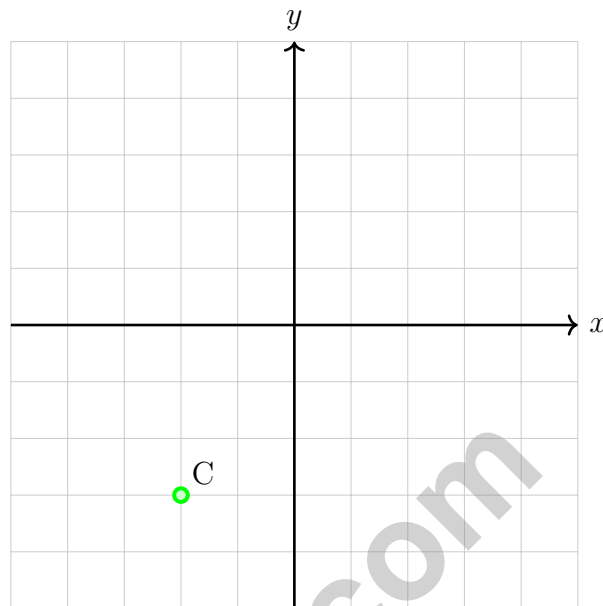
Student	A	B	C	D	E
Score	85	90	88	92	85

What is the mean score?

- A. 86                                       C. 88  
 B. 87                                       D. 90







1)

Point  $C$  is at  $(-2, -3)$ . When it is reflected over the  $y$ -axis, which of the following is its image?

 A.  $(-2, -3)$  C.  $(-2, 3)$  B.  $(2, 3)$  D.  $(2, -3)$ 

2) A garden hose is 35 meters long. How many centimeters is this? (Use 1 meter = 100 centimeters.)

 A. 350 cm C. 35,000 cm B. 3,500 cm D. 0.35 cm

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& answers

3) Two students babysit. The table shows their hourly rate and hours worked.

Student	Rate/hour	Hours	Total Earnings
Amy	\$8.00	8	\$64
Ben	\$7.00	12	?

Who earns more?

- A. Amy earns more
- B. Ben earns more
- C. They earn the same
- D. Cannot determine without knowing the task
- 4) Marcus wants to save \$600 for a laptop. He saves \$40 per month. How many months will it take him to reach his goal?
- A. 12 months
- B. 15 months
- C. 18 months
- D. 20 months
- 5) A train travels at 80 miles per hour for 2.5 hours. How far does the train travel?

- 6) A student uses the fact that  $5,200 \div 13 = 400$  to help solve  $5,213 \div 13$ . What is the relationship between these two quotients?
- A.  $5,213 \div 13 = 401$  (quotient increases by 1)
- B.  $5,213 \div 13 = 400$  remainder 13
- C.  $5,213 \div 13 = 401$  exactly
- D.  $5,213 \div 13 = 400$  remainder 1



## Nebraska NSCAS Growth Practice Test Answer Keys

**How to use this section with a Grade 6 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.**

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## Practice Test Answers and Explanations

### Practice Test 1 Answers and Explanations

- 1) **Choice C is correct.** (6.A.2) Area =  $9 \times 7 = 63 \text{ in}^2$ .
- 2) **Choice C is correct.** (6.R.2) Actual dimensions:  $4 \times 5 = 20$  feet and  $3 \times 5 = 15$  feet. Perimeter:  $2(20 + 15) = 70$  feet.
- 3) **The correct answer is 24.** (6.A.2) Length =  $8 - 2 = 6$  units; width =  $5 - 1 = 4$  units. Area =  $6 \times 4 = 24$  square units.
- 4) **Choice A is correct.** (6.D.2)  $\frac{7}{20} = \frac{35}{100} = 0.35 = 35\%$  (multiply numerator and denominator by 5).
- 5) **Choice C is correct.** (6.D.2) To find the percent:  $\frac{45}{60} = \frac{3}{4} = 0.75 = 75\%$ .
- 6) **Choice A is correct.** (6.G.3) The constant of proportionality is  $k = \text{centimeters/inches} = 2.54/1 = 12.7/5 = 25.4/10 = 2.54$  cm per inch.
- 7) **Choice B is correct.** (6.N.1) Invert  $\frac{4}{5}$  to  $\frac{5}{4}$ , then multiply:  $\frac{2}{3} \times \frac{5}{4} = \frac{10}{12}$ . That reduces nicely to  $\frac{5}{6}$ .
- 8) **Choice B is correct.** (6.G.2)  $Q_1$  is the left edge of the box in the box plot.
- 9) **Choice C is correct.** (6.R.2) The dots form an upward trend from left to right, indicating a positive correlation: as study hours increase, test scores tend to increase.
- 10) **Choice D is correct.** (6.N.1) Pencils are the 3-part amount, and they total 21. Each part is  $21 \div 3 = 7$ , so pens are 7 parts:  $7 \times 7 = 49$ .
- 11) **Choice A is correct.** (6.G.3) The phrase gives flour first and sugar second. So “for every 2 cups of flour there are 3 cups of sugar” translates directly to 2 : 3.
- 12) **The correct answer is  $201\frac{1}{7}$ .** (6.R.2) Radius  $r = \frac{16}{2} = 8$  in. Area =  $\pi r^2 \approx \frac{22}{7} \times 8^2 = \frac{22}{7} \times 64 = \frac{1408}{7} \approx 201\frac{1}{7}$  or approximately 201  $\text{in}^2$ .
- 13) **Choice C is correct.** (6.D.2) Divide distance by gallons:  $225 \div 9 = 25$  miles per gallon.
- 14) **Choice B is correct.** (6.N.1) Apples:  $\$4.50 \div 5 = \$0.90/\text{lb}$ . Cheese:  $\$12.00 \div 3 = \$4.00/\text{lb}$ . Bread:  $\$5.00 \div 2 = \$2.50/\text{loaf}$ . Cheese has the highest unit price.
- 15) **Choice C is correct.** (6.G.3) The ratio is 3 : 7. When espresso is 6 (multiply by 2), milk is  $7 \times 2 = 14$  oz.
- 16) **Choice B is correct.** (6.N.2) The unit rate (speed) is  $\frac{110 \text{ miles}}{2 \text{ hours}} = 55$  miles per hour. The equation is  $d = 55t$ , where  $d$  is distance and  $t$  is time.
- 17) **Choice C is correct.** (6.A.2) Scale: 1 inch = 10 miles. Distance:  $3.5 \times 10 = 35$  miles.
- 18) **Choice A is correct.** (6.A.1) Divide:  $45 \div 1000 = 0.045$  km.
- 19) **Choice D is correct.** (6.N.2) 6% of  $\$2500 = 0.06 \times 2500 = \$150$ .
- 20) **Choice D is correct.** (6.G.3) 2 years = 24 months. Total savings:  $\$200 \times 24 = \$4800$ .
- 21) **Choice A is correct.** (6.N.1) Verification:  $28 \times 156 = 4,368$ . Marcus’s answer is exactly correct—no remainder.
- 22) **The correct answer is Both A and B have volume 24.** (6.G.1) A:  $6 \times 2 \times 2 = 24 \checkmark$ . B:  $4 \times 3 \times 2 = 24 \checkmark$ . C:  $8 \times 3 \times 2 = 48$ . D:  $5 \times 5 \times 1 = 25$ . E:  $4 \times 4 \times 2 = 32$ . Only A and B equal 24 cubic units.
- 23) **Choice B is correct.** (6.N.2) Work left to right:  $8.9 - 3.4 = 5.5$ , then  $5.5 - 1.2 = 4.3$ .
- 24) **Choice A is correct.** (6.R.2) Following the tree:  $60 = 6 \times 10 = (2 \times 3) \times (2 \times 5) = 2 \times 2 \times 3 \times 5 = 2^2 \times 3 \times 5$ .
- 25) **Choice C is correct.** (6.G.3) Find GCF(12, 18). Factors of 12: 1, 2, 3, 4, 6, 12. Factors of 18: 1, 2, 3, 6, 9, 18. GCF is 6. She can make 6 piles with 2 red shirts and 3 blue shirts each.
- 26) **Choice D is correct.** (6.D.2) The distance between  $-4$  and  $4$  is  $4 - (-4) = 4 + 4 = 8$  units. These two numbers are 8 units apart on a number line.
- 27) **Choice B is correct.** (6.D.1) Absolute value is defined as the distance from zero, which is always non-negative (positive or zero).
- 28) **Choice B is correct.** (6.G.1) Reading from the number line, point B is located at the tick mark labeled  $-2$ .
- 29) **The correct answer is 20.** (6.D.1) Total sum =  $25 \times 4 = 100$ . Sum of three =  $20 + 28 + 32 = 80$ . Fourth =  $100 - 80 = 20$ .
- 30) **Choice C is correct.** (6.G.3) From coldest to warmest:  $-8 < -5 < 2$ .
- 31) **Choice C is correct.** (6.G.1) Distance on map:  $|9 - 3| = 6$  units. Actual trail length:  $6 \times 150 = 900$  meters.



## Hi, Math Champion!

◇ You trained hard! 10 full practice tests is real practice. Your math game is way better now than when you started. ◇

★ **Coach's truth:** kids who practice get better. You practiced. You got better. That's how it works!  
★

### Your Game Stats

- **Energy:** HIGH! You can finish a long test.
- **Smart Plays:** You know lots of strategies.
- **Calm Head:** You stay cool with hard problems.
- **Game-Day Ready:** You feel strong and prepared.

**Coach's tip:** the night before the test, get good sleep. Eat a good breakfast. Bring a sharp pencil. Trust your training!

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 Coach

# PRACTICE MORE. ACHIEVE MORE. SUCCEED!

This **Grade 6 Math Practice Tests** book is designed to help students build strong math skills, deepen their understanding of key concepts, and gain the confidence they need to succeed on any test.

With 10 full-length printed tests and 2 online tests, students get the review, practice, and realistic test experience they need to improve accuracy, strengthen problem-solving abilities, and reach their full potential.

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

## PERFECT FOR:

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



**CONFIDENCE TODAY.  
SUCCESS TOMORROW!**

## 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.



### Deepen Understanding

Reinforce key math concepts aligned with standards.



### Test Confidence

Get familiar with test formats and improve accuracy.



### 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.



10 PRINTED  
PRACTICE TESTS



2 ONLINE  
PRACTICE TESTS



DETAILED ANSWER  
EXPLANATIONS