

GRADE

6

MATH

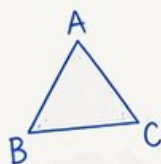
6

# New Mexico NM MSSA

## 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 New Mexico NM-MSSA Grade 6 Math Practice Tests

*Standards-Aligned High-Desert Math Clarity for New Mexico Measures of Student Success and Achievement*



Six complete 40-question Grade 6 practice rounds for NM-MSSA, built for high-desert math clarity 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, New Mexico Math Explorer!

Eight focused rounds using high-desert math clarity

This book gives you six full Grade 6 practice tests for NM-MSSA. Each round uses mesa views, desert colors, and thoughtful problem setup as a fresh mental backdrop while you read closely, choose a smart strategy, show your work, and check whether your answer makes sense.

## Your New Mexico Practice Promise

Look for structure: identify the relationship, choose a representation, and check the result.

Read

Plan

Check

## How to Use This Book

A six-session routine for high-desert math clarity

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.

**New Mexico review rhythm:** Work a round, study the pattern of misses, and bring one cleaner method into the next test.



## What Is Inside?

Eight NM-MSSA 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. High-desert math clarity 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) A storage crate is 12 ft long, 3 ft wide, and 4 ft high. What is its storage capacity in cubic feet?

A.  $38 \text{ ft}^3$

C.  $144 \text{ ft}^3$

B.  $72 \text{ ft}^3$

D.  $288 \text{ ft}^3$

2) Solve for  $x$ :  $\frac{x}{2.5} = 6$

A.  $x = 2.4$

C.  $x = 15$

B.  $x = 8.5$

D.  $x = 3.6$

3) Which multiplication has the decimal point in the correct place?

A.  $2.3 \times 5.1 = 117.3$

C.  $2.3 \times 5.1 = 11.73$

B.  $2.3 \times 5.1 = 1173$

D.  $2.3 \times 5.1 = 1.173$

4) A number is located 5 units to the left of  $-2$  on a number line. Which integer is this?

A. 3

C. 7

B.  $-7$

D.  $-5$

5) Order these values from least to greatest:

$-0.25, 0.4, -0.9, 0.1$

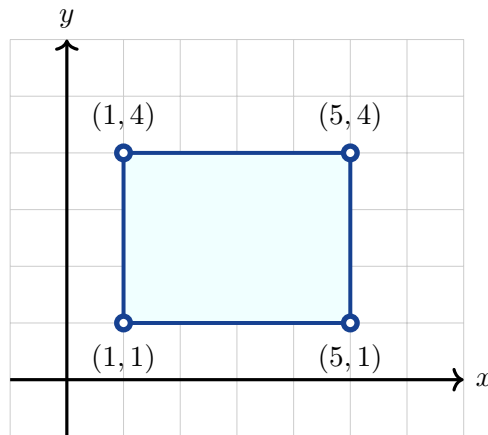
A.  $-0.9, -0.25, 0.1, 0.4$

C.  $-0.25, -0.9, 0.1, 0.4$

B.  $0.1, 0.4, -0.25, -0.9$

D.  $0.4, 0.1, -0.9, -0.25$





6)

A rectangle has vertices at  $(1, 1)$ ,  $(5, 1)$ ,  $(5, 4)$ , and  $(1, 4)$ . What is the perimeter?

- A. 12 units                       C. 16 units  
 B. 18 units                       D. 14 units

7) A hiker starts at elevation 1,200 feet and climbs to 1,850 feet. What is the change in elevation?

- A. 650 feet                       C. 3,050 feet  
 B. -650 feet                       D. 1,200 feet

8) Which expression does NOT equal the others?

- A.  $(-5) \times 6$                        C.  $\frac{-30}{1}$   
 B.  $6 \times (-5)$                        D.  $(-6) \times (-5)$

9) Evaluate:  $7 \times 2 - 3 + 1$

- A. 8                                       C. 14  
 B. 12                                       D. 18



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& answers

10) Which expression correctly translates “the sum of 2 and the quotient of 8 and a number  $z$ ”?

A.  $\frac{2+8}{z}$

B.  $(2+8) \div z$

C.  $z + \frac{8}{2}$

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

11) A cell-phone plan costs \$30 per month plus \$0.10 per text message. The total monthly cost is  $30 + 0.10t$  where  $t$  is the number of texts. What do the terms represent?

 A. 30 is the cost per text;  $0.10t$  is the base cost.

 B. 30 is the base cost;  $0.10t$  is the cost for all texts.

 C. 0.10 is the base cost;  $30t$  is the cost for all texts.

 D. Both are constant costs independent of usage.

12) Find the value of  $2(x+3)$  when  $x=5$ .

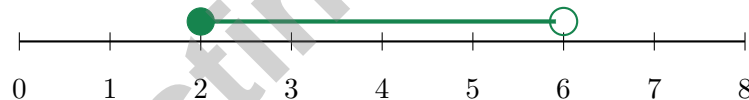
A. 10

B. 13

C. 16

D. 21

13)



Which inequality is shown by the graph above?

A.  $2 \leq x < 6$

B.  $2 < x \leq 6$

C.  $2 < x < 6$

D.  $2 \leq x \leq 6$



1) Which statement is true?

A.  $-10 < -5$

B.  $-5 > 0$

C.  $-3 > -8$

D.  $0 < -1$

2) What is the mean of the data set: 3, 5, 7, 9, 11?

A. 5

B. 11

C. 9

D. 7

3) A student claims the median of 20, 5, 15, 10, 25 is 15 (the first middle number). Is this correct?

A. Yes, the median is 15

B. No, the correct median is 12.5

C. No, must order first; median is 15

D. No, the median is the sum, which is 75

4) Which measure of spread is most affected by outliers?

A. Interquartile range

B. Mean absolute deviation

C. Range

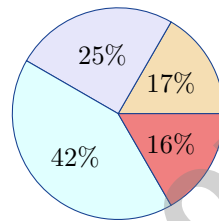
D. Median

5) A garden has red flowers and yellow flowers in the ratio 4 : 5. If there are 20 red flowers, how many yellow flowers are there?



6) Two datasets have box plots with identical boxes but different whiskers. The first dataset's whiskers are much longer. What does this indicate?

- A. The first dataset has a higher median.
- B. The first dataset has a larger minimum and maximum, but the same IQR.
- C. The first dataset has more data points overall.
- D. The first dataset is skewed differently.



7)

A circle graph displays 500 survey responses. What is the central angle for the 42% section?

- A.  $151.2^\circ$
- B.  $144^\circ$
- C.  $162^\circ$
- D.  $168^\circ$

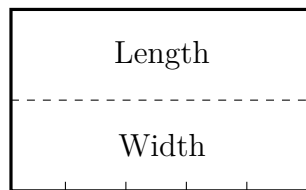


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& answers

- 1) A construction crew builds 78 feet of fence in 6 hours. What is the rate in feet per hour?
- A. 12 feet per hour                       C. 72 feet per hour
- B. 84 feet per hour                       D. 13 feet per hour
- 2) A toy store stocks action figures and dolls in a ratio of 5 : 6. If the store has 30 action figures, how many dolls does it have?

Action Figures	Dolls
5	6
10	12
30	?

- A. 35                       C. 40
- B. 36                       D. 45
- 3) Which pair of ratios are NOT equivalent?
- A. 2 : 5 and 4 : 10                       C. 4 : 8 and 1 : 3
- B. 3 : 7 and 6 : 14                       D. 5 : 6 and 10 : 12
- 4) A rectangular garden is divided into a length-to-width ratio of 5 : 3. If the width is 12 feet, what is the length?



- A. 20 feet                       C. 15 feet
- B. 18 feet                       D. 24 feet

5) A field is 80 yards long. How many feet long is the field? (Use 1 yard = 3 feet.)

- A. 160 feet                       C. 240 feet  
 B. 200 feet                       D. 320 feet

6) From the table above, what percent of the budget is food?

- A. 15%                               C. 25%  
 B. 20%                               D. 30%

7) Which pair of numbers has a GCF of 5?

- A. 15 and 25                       C. 12 and 20  
 B. 10 and 20                       D. 14 and 35

8) Which scenario matches the expression  $5x + 10$ ?

- A. A student has \$5 and earns \$10 per week  
 B. A number is multiplied by 5 and then 10 is added  
 C. A number is 5 plus 10  
 D. A cost increases by 5 and then by 10 more

9) A soccer field has goal markers and corner flags arranged in a pattern. There are 9 goal markers and 3 corner flags. Which statement is NOT correct?

- A. The ratio of markers to flags is 9 : 3.       C. For every 3 markers there is 1 flag.  
 B. The simplified ratio is 3 : 1.                   D. For every 1 marker there are 3 flags.



Scan me!  
For more practice  
& answers

**New Mexico NM-MSSA Practice Test Answer Keys**

**How to use this New Mexico NM-MSSA 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 high-desert math clarity
3. rework the problem before reading the full explanation, using this reminder:  
Look for structure: identify the relationship, choose a representation, and check the result.

**A calm New Mexico correction routine turns every missed item into useful practice. Work a round, study the pattern of misses, and bring one cleaner method into the next test.**



## New Mexico Practice Test Answers and Explanations

Review the six printed NM-MSSA tests with thoughtful, clear, and ready for the next mesa habits.

### Practice Test 1 Answers and Explanations

- 1) **Choice C is correct.** (6.G.A.2)  $V = 12 \times 3 \times 4 = 36 \times 4 = 144 \text{ ft}^3$ .
- 2) **Choice C is correct.** (6.EE.B.5) Multiply both sides by 2.5:  $x = 6 \times 2.5 = 15$ .
- 3) **Choice C is correct.** (6.NS.B.3)  $23 \times 51 = 1173$ . We have  $1 + 1 = 2$  decimal places total, so 11.73 is correct.
- 4) **Choice B is correct.** (6.NS.C.5) Moving left means subtracting. The number is  $-2 - 5 = -7$ .
- 5) **Choice A is correct.** (6.NS.C.7d) Negatives come before positives. Among negatives:  $-0.9 < -0.25$ . Among positives:  $0.1 < 0.4$ .
- 6) **Choice D is correct.** (6.NS.C.8) Length:  $|5 - 1| = 4$  units. Width:  $|4 - 1| = 3$  units. Perimeter:  $2(4 + 3) = 14$  units.
- 7) **Choice A is correct.** (6.NS.B.3) Change in elevation:  $1,850 - 1,200 = 650$  feet.
- 8) **Choice D is correct.** (6.NS.B.3) Choices A, B, and C all equal  $-30$ . Choice D equals 30 because the product of two negative numbers is positive, so it does not equal the others.
- 9) **Choice B is correct.** (6.EE.A.1) Multiply first:  $7 \times 2 = 14$ . Then subtract and add from left to right:  $14 - 3 = 11$ , then  $11 + 1 = 12$ .
- 10) **Choice D is correct.** (6.EE.A.2a) "The quotient of 8 and  $z$ " is  $\frac{8}{z}$ . "The sum of 2 and" that quotient is  $2 + \frac{8}{z}$ .
- 11) **Choice B is correct.** (6.EE.A.2b) The constant 30 is the fixed base cost. The term  $0.10t$  varies with  $t$  texts, so 0.10 is the per-text rate.
- 12) **Choice C is correct.** (6.EE.A.2c) Substitute  $x = 5$ :  $2(5 + 3) = 2(8) = 16$ .
- 13) **Choice A is correct.** (6.EE.B.8) The filled circle at 2 means "equals 2" ( $\geq$ ). The open circle at 6 means "not including 6" ( $<$ ). Together:  $2 \leq x < 6$ .
- 14) **Choice D is correct.** (6.EE.B.8) "Greater than or equal to" uses the  $\geq$  symbol, so the inequality is  $x \geq -5$ .
- 15) **Choice C is correct.** (6.EE.C.9) Hours parked (independent) determines cost (dependent). Cost increases by \$5 for each additional hour. The equation is  $c = 5h$ .
- 16) **Choice B is correct.** (6.G.A.3) The top side goes from (2, 6) to (5, 6), both at  $y = 6$ . Distance is  $5 - 2 = 3$  units.
- 17) **Choice A is correct.** (6.G.A.1) Base:  $9 - 1 = 8$  units. Height:  $9 - 1 = 8$  units. Area =  $\frac{1}{2} \times 8 \times 8 = 32$  square units.
- 18) **The correct answer is Both scenarios require rounding up because partial containers/buses must be counted as whole units.** (6.NS.B.2) 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).
- 19) **Choice C is correct.** (6.RP.A.1) The area of a circle is  $\pi r^2$ . Choice B is circumference; choices A and D are incorrect formulas.
- 20) **Choice C is correct.** (6.SP.A.2) Puppies in a litter have different weights, requiring data collection. This is correctly labeled as statistical. Option A is incorrectly labeled because February has a fixed number of days. Option B is incorrect because apple prices can vary. Option D is incorrect because backpack colors in a class can vary, so it is statistical.
- 21) **Choice B is correct.** (6.SP.A.2) Most students clustered on the right (high scores) with a tail extending left (low scores) creates a left-skewed distribution.
- 22) **The correct answer is 625.** (6.EE.B.6) If  $s = 600$ , then  $\text{staff} = s + 25 = 600 + 25 = 625$ .
- 23) **Choice A is correct.** (6.SP.B.5c) Median is the average of the two middle values (positions 3 and 4):  $\frac{8 + 11}{2} = 9.5$ .
- 24) **Choice D is correct.** (6.SP.B.5c) Range = maximum - minimum =  $300 - 200 = 100$  mL.
- 25) **Choice C is correct.** (6.SP.B.4) The bar for the 60–80 interval has height 35, representing the frequency for that range.



## Hi, Math Champion!

◇ Look what you did! 6 full practice tests. That's hundreds of math problems. You started as a learner. You are now a math athlete. ◇

★ **Champions know:** hard work pays off. You did the hard work. Your math skills are strong because you practiced. ★

### Champion's Stats

- **Focus:** HIGH! You stay on task.
- **Speed:** STRONG! You move at the right pace.
- **Accuracy:** SHARP! You catch your own mistakes.
- **Mindset:** CHAMPION! You believe in yourself.

**Champion tip:** on test day, walk in proud. You trained for this. 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 Coach

# 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