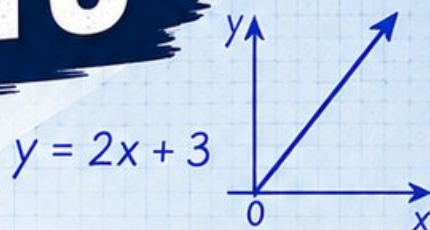


# 3 New Mexico NM MSSA

GRADE  
**6**  
MATH

## PRACTICE TESTS

Standards Aligned Problem Solving  
For Comprehensive Assessment Programs



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

36% of 150 = ?



**3** | PRINTED TESTS



**2** | ONLINE TESTS



Build Confidence



Master Key Math Skills



Answer Explanations for Every Question



Test-Taking Strategies That Work

USE THESE TWO  
ADDITIONAL ONLINE  
PRACTICE TESTS  
FOR EXTRA REVIEW AFTER  
THE PRINTED TESTS  
IN THIS BOOK.

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

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

$436 + 289$   $A = 24$

1 2 3

$3 \times 10$   $\frac{3}{4}$

complete New Mexico practice rounds

Three 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**



# Copyright ©

## Testinar Inc



Published by Testinar Inc

[Testinar.com](http://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 ©*

# Welcome, New Mexico Math Explorer!

Three focused rounds using high-desert math clarity

This book gives you three 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 three-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?

Three NM-MSSA 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. 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

# Table of Contents

|  |       |    |
|--|-------|----|
| ★ Practice Test 1                      | _____ | 14 |
| ★ Practice Test 2                      | _____ | 27 |
| ★ Practice Test 3                      | _____ | 43 |
| Practice Test Answer Keys              | _____ | 60 |
| Practice Test Answers and Explanations | _____ | 63 |

1) Which ordered pair has an  $x$ -coordinate of  $-5$  and shares the same  $y$ -coordinate as the point  $(2, 8)$ ?

A.  $(-5, 8)$

C.  $(-5, 2)$

B.  $(8, -5)$

D.  $(-5, -8)$

2) A model airplane is 24 inches long. How many feet long is the model? (Use 1 foot = 12 inches.)

A. 1 foot

C. 2 feet

B. 1.5 feet

D. 3 feet

3) A jar contains red and blue marbles. The ratio of red to blue is  $3 : 5$ . If there are 18 red marbles, how many blue marbles are in the jar?

4) A histogram shows weights of 20 students. The shape is roughly symmetric. Which summary best describes the center?

A. The mean, because symmetric data has  $\text{mean} \approx \text{median}$ .

C. The mode, because it is the most common value.

B. The median, because it is resistant to outliers.

D. The range, because it spans the entire data.



5) A standard die is rolled. What is the probability of rolling a 1 or a 2?

A.  $\frac{1}{6}$   
 B.  $\frac{1}{3}$

C.  $\frac{1}{2}$   
 D.  $\frac{2}{3}$

6) A coordinate plane shows points representing a proportional relationship between yards and meters. One point is (3, 2.74) and another is (6, 5.48).

Are these points on the same proportional line? Which statement is correct?

A. No, because the x-coordinates are different

C. No, because both coordinates must be whole numbers

B. No, because the y-coordinates are different

D. Yes, because  $\frac{2.74}{3} \approx \frac{5.48}{6} \approx 0.91$

7) A delivery truck travels 360 miles in 9 hours. Find the unit rate in miles per hour.

8) A soccer team won 80% of its games. Which decimal represents this percent?

A. 0.008

C. 8.0

B. 0.80

D. 80.0

9) A restaurant bill comes to \$45. The customer wants to leave a 20% tip. How much is the tip?

A. \$4.50

C. \$18.00

B. \$9.00

D. \$27.00



Scan me!  
For more practice  
& answers

- 10) Which ratio is equivalent to 6 : 9?
- A. 2 : 3                       C. 4 : 6  
 B. 3 : 4                       D. 8 : 10
- 11) Sarah opens a savings account with \$500 earning a simple interest rate of 4% per year. Using the formula  $I = P \times r \times t$ , how much interest will she earn in 2 years?
- A. \$20                       C. \$80  
 B. \$100                       D. \$40
- 12) Two storage plans charge monthly fees: Plan P: No upfront cost, \$8 per month Plan Q: \$20 upfront, then \$3 per month  
After 6 months, which plan shows a proportional relationship to the time elapsed?
- A. Plan P only                       C. Both plans are proportional  
 B. Plan Q only                       D. Neither plan is proportional
- 13) A company allocates a budget as follows: \$3000 for operations, \$2000 for marketing, \$1500 for salaries, and \$1500 for equipment. If revenue is \$10000, what percent of revenue is unallocated?
- A. 10%                       C. 30%  
 B. 40%                       D. 20%
- 14) A student has a scale of 1 cm = 6 m for a model. The actual object is 24 m long. The student calculates the drawing length as  $24 \times 6 = 144$  cm. What is the student's error?
- A. The answer is correct.                       C. The student only changed the unit label to meters.  
 B. The student multiplied instead of dividing; the correct answer is 4 cm.                       D. The student used the wrong scale entirely.



1) What is the LCM of 10 and 15?

A. 30

C. 40

B. 25

D. 150

2) A parallelogram has a base of 15 inches and a height of 8 inches. What is the area of the parallelogram?

3) A toy box has a rectangular base with area 15 square inches. If the volume is 75 cubic inches, what is the height of the box in inches?

4) A rectangular prism has dimensions  $6\text{ m} \times 4\text{ m} \times 2\text{ m}$ . Which expression correctly computes its surface area?

A.  $2(6 + 4 + 2)$

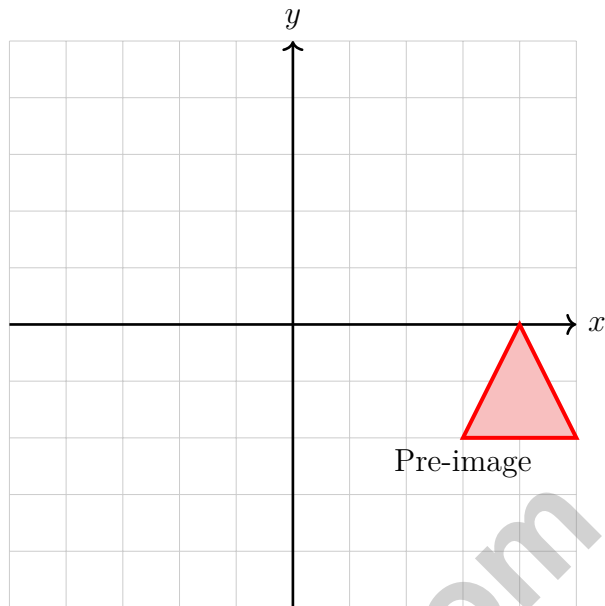
C.  $2(6 \times 4) + 2(6 \times 2) + 2(4 \times 2)$

B.  $6 + 4 + 2 + 6 + 4 + 2$

D.  $6 \times 4 \times 2$



Scan me!  
For more practice  
& answers



5)

A triangle with vertices at  $(3, -2)$ ,  $(5, -2)$ , and  $(4, 0)$  is translated 4 units left and 2 units up. What will be the image of the vertex originally at  $(5, -2)$ ?

- A.  $(1, 0)$ 
 C.  $(1, -4)$   
 B.  $(9, -4)$ 
 D.  $(9, 0)$

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

- A.  $15.7 \text{ cm}^2$ 
 C.  $78.5 \text{ cm}^2$   
 B.  $31.4 \text{ cm}^2$ 
 D.  $314 \text{ cm}^2$

7) A coach asks: "What is the typical running speed of students on the track team?" Why is this a statistical question?

- A. Because running is an athletic activity.
  D. Because different team members run at different speeds, and data must be collected.  
 B. Because the coach is a teacher.
  C. Because the word "typical" is used.



1) A family budgets \$1500 per month but has actual expenses of \$1700. What is the shortfall (amount over budget)?

A. \$100

C. \$300

B. \$200

D. \$400

2) If a triangle has an area of  $54 \text{ in}^2$  and a height of 9 inches, what is the length of the base?

A. 6 in

C. 27 in

B. 48 in

D. 12 in

3) Which decimal is equivalent to  $-\frac{7}{10}$ ? Write your answer as a decimal.

4) A parallelogram has an area of  $84 \text{ cm}^2$  and a height of 7 cm. What is the length of the base?

A. 6 cm

C. 14 cm

B. 12 cm

D. 21 cm

5) A rectangular prism has a base with length 7 in and width 4 in. Its height is 5 in. Find the volume using  $V = Bh$ .

A.  $140 \text{ in}^3$

C.  $58 \text{ in}^3$

B.  $99 \text{ in}^3$

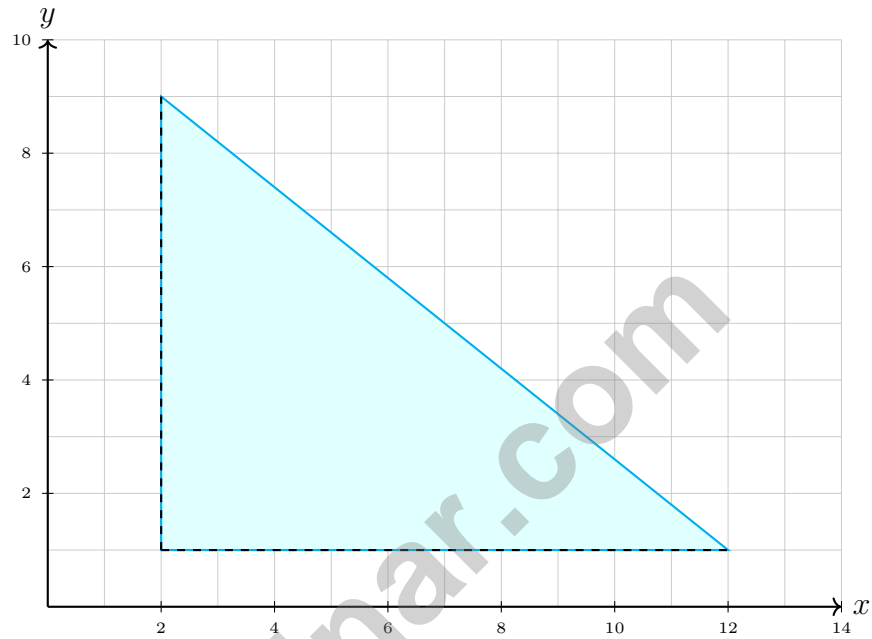
D.  $280 \text{ in}^3$



Scan me!  
For more practice  
& answers

6) What is the area of a rectangle with length 9 units and width 6 units?

- A. 30 square units                       C. 60 square units  
 B. 45 square units                       D. 54 square units



7)

A right triangle has vertices at  $(2, 1)$ ,  $(12, 1)$ , and  $(2, 9)$ . What is its area?

- A. 36 square units                       C. 42 square units  
 B. 50 square units                       D. 40 square units

8) Which value is least:  $\frac{1}{2}$ ,  $-1.5$ ,  $0.5$ , or  $-\frac{1}{2}$ ?

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

### Practice Test 1 Answers and Explanations

- Choice A is correct.** (6.NS.C.8) The point (2, 8) has  $y = 8$ . A point with  $x = -5$  and the same  $y$ -coordinate is  $(-5, 8)$ .
- Choice C is correct.** (6.RP.A.3d) Divide:  $24 \div 12 = 2$  feet.
- The correct answer is 30.** (6.RP.A.3) 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 A is correct.** (6.SP.B.5) For symmetric distributions, mean and median are nearly equal and both represent the center well.
- Choice B is correct.** (6.NS.B.3) Favorable outcomes: 1 and 2 (two outcomes). Total outcomes: 6. Probability  $= \frac{2}{6} = \frac{1}{3}$ .
- Choice D is correct.** (6.RP.A.3a) Both points have the same unit rate (constant of proportionality):  $\frac{2.74}{3} \approx 0.913$  meters per yard and  $\frac{5.48}{6} \approx 0.913$  meters per yard. The points are collinear and proportional.
- The correct answer is 40 miles per hour.** (6.RP.A.3d) Divide distance by time:  $360 \div 9 = 40$  miles per hour.
- Choice B is correct.** (6.RP.A.3c)  $80\% = \frac{80}{100} = 0.80$ .
- Choice B is correct.** (6.RP.A.3c) 20% of \$45 =  $0.20 \times 45 = \$9.00$ .
- Choice A is correct.** (6.RP.A.3) 6 : 9 simplifies by dividing both by 3:  $6 \div 3 = 2$  and  $9 \div 3 = 3$ , giving 2 : 3.
- Choice D is correct.** (6.NS.C.7d)  $I = \$500 \times 0.04 \times 2 = \$40$ .
- Choice A is correct.** (6.NS.C.7d) Plan P: cost =  $8m$  (proportional, passes through origin). Plan Q: cost =  $20 + 3m$  (not proportional, has initial constant term).
- Choice D is correct.** (6.EE.C.9) Total allocated:  $\$3000 + \$2000 + \$1500 + \$1500 = \$8000$ . Unallocated:  $\$10000 - \$8000 = \$2000 = 20\%$  of \$10000.
- Choice B is correct.** (6.RP.A.3) To find drawing length from actual length, divide by the scale factor:  $24 \text{ m} \div 6 \text{ m/cm} = 4 \text{ cm}$ . The student confused the direction of the ratio.
- Choice A is correct.** (6.NS.A.1)  $2 \times \frac{5}{2} = \frac{10}{2} = 5$ .
- Choice A is correct.** (6.NS.B.2)  $9,504 \div 32 = 297$  exactly. Verify:  $32 \times 297 = 9,504$ .
- Choice A is correct.** (6.NS.B.3) Align the decimal points. In the tenths place, 6 is smaller than 8, so regroup one whole as ten tenths: the 5 becomes 4 and the tenths become 16. Then  $16 - 8 = 8$  tenths,  $4 - 3 = 1$  one, and  $2 - 1 = 1$  ten, so the result is 11.8.
- Choice B is correct.** (6.NS.B.4) Factors of 4: 1, 2, 4. Factors of 6: 1, 2, 3, 6. GCF is 2. Multiples of 4: 4, 8, 12, ... Multiples of 6: 6, 12, ... LCM is 12. The teacher reversed them.
- The correct answer is 12 gal/min.** (6.RP.A.3b)  $144 \div 12 = 12$  gallons per minute.
- The correct answer is 6.** (6.RP.A.3) The ratio is 3 : 600 or 1 : 200. For 1200 square feet:  $1200 \div 200 = 6$  gallons.
- Choice A is correct.** (6.NS.B.4) Treat  $(4+5)$  like a chunky variable and slide it outside:  $3(4+5) + 2(4+5) = (3+2)(4+5)$ . Choice B totals 45, but shows every miniature product—not one clean factored form. Choice C mistakenly multiplies by 14, and Choice D chops the parentheses.
- The correct answer is 4 : 6 = 2 : 3 (dividing by 2) and 4 : 6 = 8 : 12 (multiplying by 2)..** (6.RP.A.1) Nice checking: Choice A works because 4 : 6 simplifies to 2 : 3, and Choice B works because multiplying both parts of 4 : 6 by 2 gives 8 : 12. The other choices change the relationship.
- Choice A is correct.** (6.NS.C.5) On a number line,  $-8$  is to the left of  $-4$ , so  $-8 < -4$ . The student confused absolute value magnitudes with signed comparisons. The correct inequality is  $-4 > -8$ .



Scan me!  
For more practice  
& answers

## Hi, Math Champion!

◇ You trained hard! 3 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 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!**