

# 10 COMPLETE

## West Virginia

# WVGSA

# GRADE 5

# MATH

# PRACTICE TESTS

Standards-Based Review with  
Mixed Practice and Detailed Answer Key



### 10 Complete Practice Tests

Build confidence and test readiness



### Standards-Based Review

Covers key Grade 5 math standards



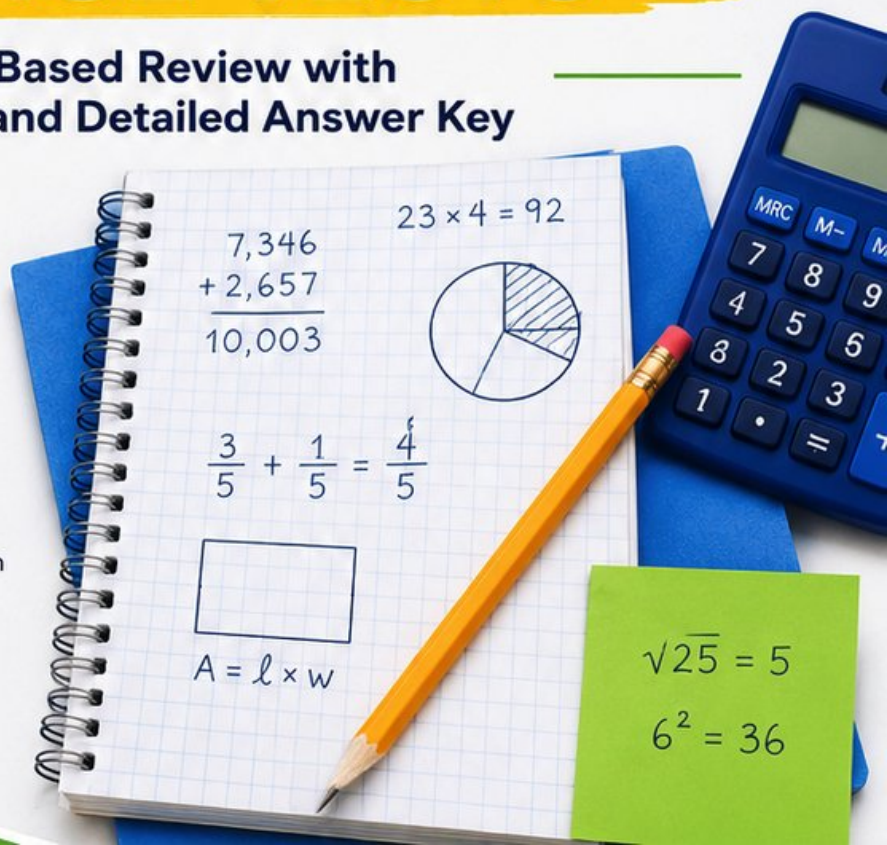
### Mixed Practice

Variety of question types to strengthen skills



### Detailed Answer Key

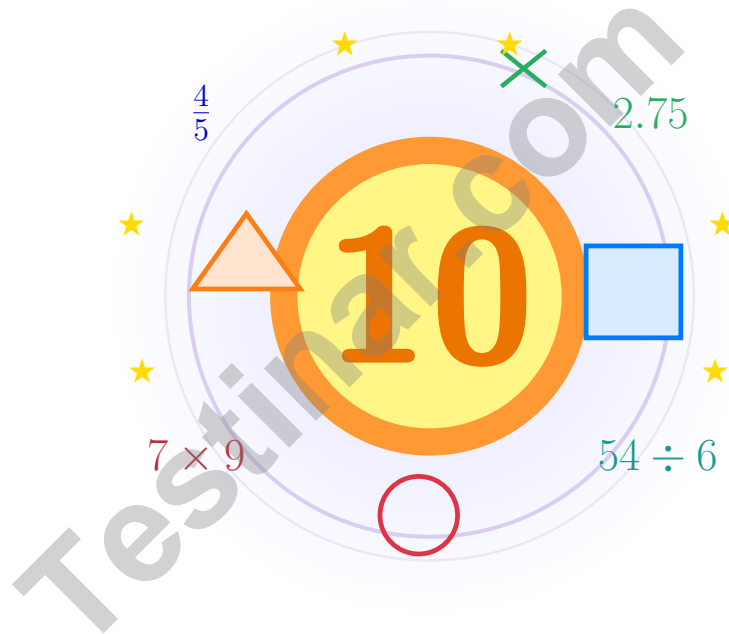
Step-by-step explanations for every question



PREPARE.  
PRACTICE.  
SUCCEED!

# 10 West Virginia WVGSA Grade 5 Math Practice Tests

*Bright review, thoughtful practice, and steady confidence for Grade 5*



Ten full tests, a focused quick review, and student-friendly support that keeps practice clear and encouraging.

**Jay Daie and Reza Nazari**



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# Welcome!

This book is a place to practice bravely and think clearly

## Dear Grade 5 Mathematician

This book gives you ten chances to read carefully, solve thoughtfully, and build steady math confidence. Some problems will feel friendly right away. Some will take more patience. Both kinds help you grow.

The goal is not to feel perfect before you begin. The goal is to practice honest effort, learn from corrections, and notice how much stronger your thinking becomes over time.

### Read

Slow down and understand the task.

### Solve

Show clear steps and good choices.

### Learn

Use mistakes as clues for what comes next.

**A strong habit from the start:** keep your work neat, estimate when it helps, write units carefully, and do not let one hard problem decide your mood for the whole page.



# How to Use This Book

A simple routine that turns practice into real progress

## Step 1

**Warm up with the quick review.**

Spend a few minutes refreshing the ideas before the test begins.

## Step 2

**Take one full practice test.**

Work in a calm spot and aim for careful thinking before speed.

## Step 3

**Check your work honestly.**

Circle missed questions and notice which skills need another look.

## Step 4

**Fix and reflect.**

Read the explanation, repair the work, and bring that lesson into the next test.



**A Good 10-Week Rhythm**

<b>Week 1</b>	Take Test 1 and notice your starting strengths.
<b>Week 2</b>	Take Test 2 and slow down on word problems.
<b>Week 3</b>	Take Test 3 and sharpen multiplication and division checks.
<b>Week 4</b>	Take Test 4 and focus on fractions and decimals.
<b>Week 5</b>	Take Test 5 and watch your labels and units closely.
<b>Week 6</b>	Take Test 6 and practice calmer pacing.
<b>Week 7</b>	Take Test 7 and compare your habits with the earlier weeks.
<b>Week 8</b>	Take Test 8 and focus on tidy, checkable work.
<b>Week 9</b>	Take Test 9 and compare your progress with the way you worked in the earlier weeks.
<b>Week 10</b>	Take Test 10 and finish with steady, confident effort while using every strong habit you built.



# Table of Contents

★ Practice Test 1	_____	20
★ Practice Test 2	_____	34
★ Practice Test 3	_____	50
★ Practice Test 4	_____	66
★ Practice Test 5	_____	81
★ Practice Test 6	_____	96
★ Practice Test 7	_____	111
★ Practice Test 8	_____	125
★ Practice Test 9	_____	138
★ Practice Test 10	_____	150
<b>Practice Test Answer Keys</b>	_____	<b>165</b>
<b>Practice Test Answers and Explanations</b>	_____	<b>171</b>

## Grade 5 Mathematics Reference Materials

### PERIMETER AND AREA

Perimeter of Rectangle  $P = 2l + 2w$  or  $P = 2(l + w)$

Area of Rectangle  $A = l \times w$

Area of Triangle  $A = \frac{1}{2} \times b \times h$

Volume of Rectangular Prism  $V = l \times w \times h$

### LENGTH

#### Customary

1 foot (ft) = 12 inches (in.)

1 yard (yd) = 3 feet (ft)

1 yard (yd) = 36 inches (in.)

#### Metric

1 meter (m) = 100 centimeters (cm)

1 centimeter (cm) = 10 millimeters (mm)

1 kilometer (km) = 1,000 meters (m)

### CAPACITY

#### Customary

1 cup (c) = 8 fluid ounces (fl oz)

1 pint (pt) = 2 cups (c)

1 quart (qt) = 2 pints (pt)

1 gallon (gal) = 4 quarts (qt)

#### Metric

1 liter (L) = 1,000 milliliters (mL)

### WEIGHT AND MASS

#### Customary

1 pound (lb) = 16 ounces (oz)

#### Metric

1 kilogram (kg) = 1,000 grams (g)

1 gram (g) = 1,000 milligrams (mg)

### TIME

1 minute (min) = 60 seconds (sec)

1 week = 7 days

1 hour (hr) = 60 minutes (min)

1 year = 12 months

1 day = 24 hours (hr)

1 year = 52 weeks

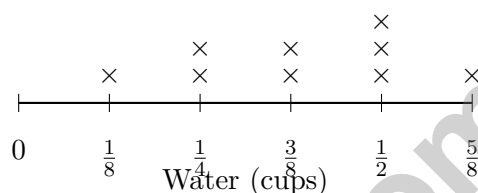


- 1) A tub holds 60 gallons. Water drains at 5 gallons per minute. Which expression gives gallons remaining after 8 minutes?

- A.  $60 - 5 \times 8$ 
 C.  $(60 - 5) \times 8$   
 B.  $5 \times 8 - 60$ 
 D.  $60 \div 5 - 8$

- 2) The line plot shows water used (in cups) to water plant seedlings:

**Water Used**



How much water did the seedlings that received  $\frac{1}{4}$  cup receive in all?

- A.  $\frac{1}{4}$  cup
  C.  $\frac{3}{4}$  cup  
 B.  $\frac{1}{2}$  cup
  D. 1 cup
- 3) At a printing company, 2,288 booklets must be packed into boxes of 52 booklets. What is the quotient and remainder?
- A. 43 R52
  C. 45 R8  
 B. 44 R0
  D. 46 R16
- 4) A graph shows hours studied on the x-axis and test scores on the y-axis. Point (5, 85) is plotted on the graph. What does this point represent?
- A. A student studied for 85 hours and scored 5 points
  C. A student scored 5 points and studied for 85 hours  
 B. A test took 5 hours and had 85 questions
  D. A student studied for 5 hours and scored 85 points





## Grade 5 Mathematics Reference Materials

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### TIME

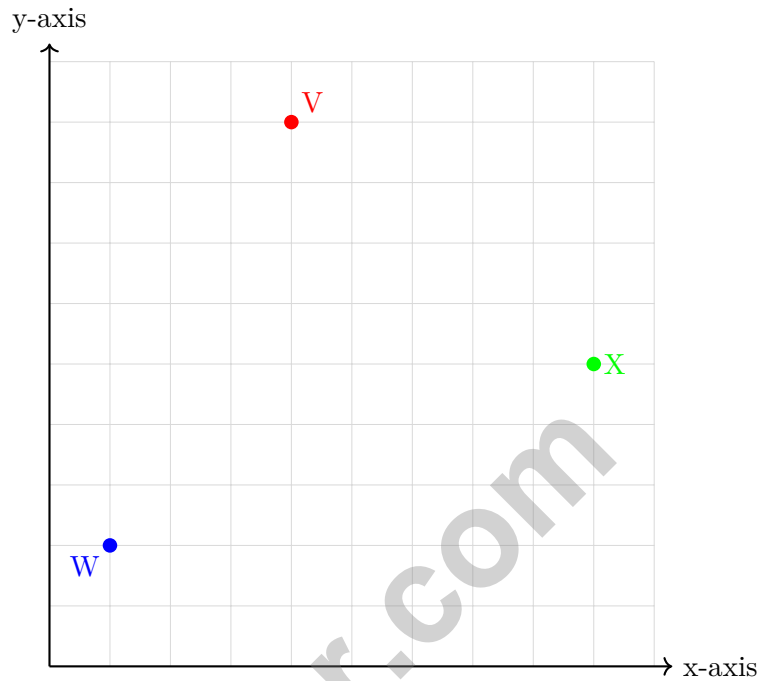
1 minute (min) = 60 seconds (sec)    1 week = 7 days

1 hour (hr) = 60 minutes (min)    1 year = 12 months

1 day = 24 hours (hr)    1 year = 52 weeks



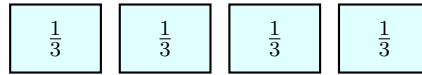
- 1) Name the ordered pair of each labeled point.



- A.  $V(9, 4)$ ,  $W(2, 1)$ ,  $X(5, 9)$
- B.  $V(4, 9)$ ,  $W(1, 2)$ ,  $X(9, 5)$
- C.  $V(4, 9)$ ,  $W(2, 1)$ ,  $X(5, 9)$
- D.  $V(9, 5)$ ,  $W(1, 2)$ ,  $X(4, 9)$
- 2) A triangle has angles  $50^\circ$ ,  $60^\circ$ , and  $70^\circ$ . Classify the triangle by its angles.
- A. Acute triangle
- B. Right triangle
- C. Obtuse triangle
- D. Scalene triangle
- 3) Without calculating, which comparison is correct?
- A.  $15 \times 8 > 16 \times 8$
- B.  $24 \times 6 < 24 \times 5$
- C.  $9 \times 14 = 14 \times 9$
- D.  $30 \times 3 > 30 \times 4$



40) A bar model shows 4 copies of  $\frac{1}{3}$ .



4 groups of  $\frac{1}{3}$

What is  $4 \times \frac{1}{3}$ ?

- A.  $\frac{1}{12}$   
 B.  $\frac{4}{3}$

- C.  $\frac{4}{12}$   
 D.  $1\frac{2}{3}$

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### End of Practice Test

Nice work. Pause, breathe, and check your answers with care.



Grade 5 Mathematics

10

Questions: 40 Duration: No time limit

Calculator Policy: Calculators are not allowed



## Practice Test Answer Keys

### How to use this section:

1. check your answer
2. circle missed questions
3. rework them before reading the explanation

**Good correction habits build strong scores.**

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## Practice Test Answers and Explanations

### Practice Test 1 Answers and Explanations

- 1) **Choice A is correct.** (M.5.2) In 8 minutes, the tub loses  $5 \times 8$  gallons. Subtract that amount from the starting 60 gallons:  $60 - 5 \times 8$ .
- 2) **Choice B is correct.** (M.5.19) There are 2 X marks above  $\frac{1}{4}$ , so the total is  $\frac{1}{4} + \frac{1}{4} = \frac{1}{2}$  cup.
- 3) **Choice B is correct.** (M.5.9)  $2,288 \div 52 = 44$  remainder 0 (divides evenly). Check:  $52 \times 44 = 2,288$ .
- 4) **Choice D is correct.** (M.5.24) The x-coordinate represents hours studied (5 hours) and the y-coordinate represents the test score (85 points). So the point (5, 85) means a student studied for 5 hours and earned a score of 85.
- 5) **Choice A is correct.** (M.5.18) Since 1 pound = 16 ounces, 3 pounds =  $3 \times 16 = 48$  ounces. Carlos is correct.
- 6) **The correct answer is 3 sides.** (M.5.25) An equilateral triangle has 3 equal sides and 3 vertices. A square has 4 sides and 4 vertices, so the number of sides or vertices tells the shapes apart.
- 7) **Choice C is correct.** (M.5.4) A digit in the tenths place ( $0.6 = \frac{6}{10}$ ) is 10 times greater than the same digit in the hundredths place ( $0.06 = \frac{6}{100}$ ).
- 8) **Choice C is correct.** (M.5.24) The rule says to multiply the input by 3. For input 4,  $3 \times 4 = 12$ , so the ordered pair is (4, 12).
- 9) **Choice D is correct.** (M.5.6) Read the place value to decide whether the decimal uses tenths, hundredths, or thousandths.  $\frac{3}{10} = 0.3$ . This confirms the answer.
- 10) **Choice C is correct.** (M.5.5) A power of 10 tells how many factors of 10 to use.  $10^3 = 10 \times 10 \times 10 = 1000$ . This confirms the answer.
- 11) **Choice C is correct.** (M.5.22) Double the flour:  $2.5 \times 2 = 5.0$  cups of flour.
- 12) **Choice A is correct.** (M.5.13) One sector is  $\frac{1}{5}$ . Divided by 2:  $\frac{1}{5} \div 2 = \frac{1}{10}$ .
- 13) **Choice C is correct.** (M.5.5) Think of 20 as 2 tens and 50 as 5 tens. Since  $2 \times 5 = 10$ , the product becomes 1,000, which has 3 zeros.
- 14) **Choice C is correct.** (M.5.16) The unit fraction is the amount being shared, so divide  $\frac{1}{7}$  by 2. The equation is  $\frac{1}{7} \div 2 = n$ .
- 15) **Choice C is correct.** (M.5.5) A, B, D are all true. C is FALSE:  $8.4 \div 10 = 0.84$ , not 8.4. (Dividing doesn't leave the number unchanged.)
- 16) **Choice D is correct.** (M.5.16)  $\frac{2}{3} \times 1\frac{1}{2} = \frac{2}{3} \times \frac{3}{2} = \frac{6}{6} = 1$  cup.
- 17) **Choice A is correct.** (M.5.10)  $0.75 - 0.24 = 0.51$ . After removing the 24 darker squares from the 75 shaded squares, 51 shaded squares remain, which equals 0.51.
- 18) **Choices A, B are correct.** (M.5.5)  $500 \div 10 = 50$  and  $7,000 \div 1,000 = 7$ . C should be 90, and D should be 40.
- 19) **Choice B is correct.** (M.5.16) Count thirds in 5 pounds:  $5 \div \frac{1}{3} = 5 \times 3 = 15$  bags.
- 20) **Choice C is correct.** (M.5.21) C is correct:  $6 \times 5 \times 4 = 120$  cubic units. A: volume is 60. B: volume uses cubic units. D: doubling one dimension doubles the volume.
- 21) **Choice B is correct.** (M.5.8) Multiply:  $31 \times 24 = 31 \times (20 + 4) = (31 \times 20) + (31 \times 4) = 620 + 124 = 744$  balls.
- 22) **Choice C is correct.** (M.5.24) The point is 3 units right on the x-axis and 6 units up on the y-axis, so the coordinates are (3, 6).
- 23) **Choice D is correct.** (M.5.20) A cube with side length 4 has 4 cubes along each edge. Multiply the three dimensions:  $4 \times 4 \times 4 = 64$  cubic units.
- 24) **Choice B is correct.** (M.5.12)  $1\frac{3}{8} \approx 1$  and  $2\frac{7}{10} \approx 3$ . So  $1\frac{3}{8} + 2\frac{7}{10} \approx 1 + 3 = 4$  cups.
- 25) **Choice A is correct.** (M.5.15)  $\frac{4}{5} < 1$ , so multiplying 35 by it gives a smaller result.
- 26) **Choice B is correct.** (M.5.12)  $\frac{2 \times 3}{5 \times 3} = \frac{6}{15}$ .
- 27) **Choice B is correct.** (M.5.10) Grid 1 has 25 shaded (0.25); Grid 2 has 18 shaded (0.18). Total:  $25 + 18 = 43$  shaded squares = 0.43.
- 28) **Choice C is correct.** (M.5.18) 1 centimeter = 10 millimeters. Multiply:  $85 \times 10 = 850$  mm.



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## Authors' Notes

### From a Friend Who Believes in You

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#### Hi, Brilliant Friend!

◇ I have to tell you something important: I am proud of you. You completed 10 full practice tests. That takes time, focus, and heart. Many students never push themselves like that. You did. That tells me everything about your work ethic. ◇

★ **Here's a friendly reminder:** a test does not measure your worth. It measures one slice of your skills on one day. You are much more than a score. The work you put in to grow—that is the real win. ★

#### Things I Want You to Remember

- **You are capable.** Every test you finished proves it.
- **You are resilient.** You worked through hard problems.
- **You are growing.** Every mistake taught you something new.
- **You are ready.** The skills are inside you.

**One last thing:** when you sit down on test day, take a deep breath, smile a tiny smile, and remember that someone (me!) believes in you. You've got this.

If you'd like to share your experience or have questions, please email me at [reza@testinar.com](mailto:reza@testinar.com). I'd love to hear from you!

**Reza Nazari & Jay Daie**

Your Math Friend (Always in Your Corner)

# PRACTICE TODAY. MASTER TOMORROW.

Give your child the confidence to excel in **Grade 5 Math!**  
This book includes **10 complete practice tests** designed to build strong skills, improve test readiness, and achieve success.



# 10

COMPLETE  
PRACTICE  
TESTS

- ✓ Realistic. Rigorous.
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Familiar, focused practice reduces anxiety and boosts self-belief.



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- ✓ Measurement & Data
- ✓ Graphing & Data Analysis
- ✓ Number Patterns
- ✓ Word Problems
- ✓ Ratio & Proportion
- ✓ Perimeter, Area & Volume
- ✓ And More!



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