

4

COMPLETE

West Virginia WVGSA

Grade

MATH

5

PRACTICE TESTS

Standards-Based Test Prep with
Mixed Review, Word Problems,
and **Full Answer Key**



- ✓ **4 COMPLETE PRACTICE TESTS**
Built to reflect the test format and rigor



- ✓ **COVERS ALL ESSENTIAL TOPICS**
Numbers & Operations, Fractions, Decimals, Geometry, Measurement, Data & Probability, and more



- ✓ **STRENGTHEN SKILLS & CONFIDENCE**
Mixed review, challenging questions, and strategic practice



- ✓ **FULL ANSWER KEY INCLUDED**
Detailed explanations for every question



**BUILD STRONG
MATH SKILLS
& TEST READINESS**



**IMPROVE ACCURACY,
SPEED, AND
PROBLEM SOLVING**



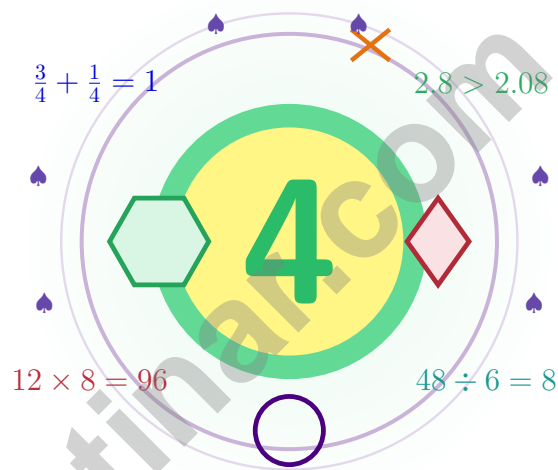
**PERFECT FOR
CLASSROOM,
HOME, OR
SELF-STUDY**



**ALIGNED TO
WEST VIRGINIA
STATE STANDARDS
(WVGSA)**

4 West Virginia WVGSA Grade 5 Math Practice Tests

Four steady test-day rehearsals, woven into one strong routine



Four full tests, a smart quick review, mission-style strategy pages, and student-tested support that help Grade 5 mathematicians from The Mountain State build calm, careful, confident habits.

Jay Daie and Reza Nazari



Copyright ©

Testinar Inc



Published by Testinar Inc

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 ©

Open the Map, West Virginia – Math Mission Time

Four practice tests woven into one calm, steady routine

Welcome Letter for West Virginia Math Crew

This book gives you four chances to read closely, solve carefully, and level up your math thinking. Math is a lot like the Appalachian ridges – they rise one careful slope at a time, and so does your thinking.

You do not need to feel perfect before you begin. You just need to stay curious, use strategies, and learn from every correction. That is how confident mathematicians are built.

See

See the whole problem
before you start the
math.

Plan

Plan one careful step
before the next.

Reflect

Reflect after each
problem to lock the
lesson in.

A strong mission habit for West Virginia: keep your work neat, estimate when it helps, label units carefully, and never let one hard question decide your mood for the whole page.

A Map of the Pages

A four-step routine that turns practice into real improvement

Step 1: Set Up

Pencil ready, distractions gone.

Wake up the big Grade 5 ideas before the test starts so your brain is already warmed up.

Step 2: Work the Test

Take a full test like the real day.

Find a calm corner, settle in, and aim for careful, honest choices before quick ones.

Step 3: Look Back

Walk through your answers without rushing.

Circle missed questions, sort out what went sideways, and notice which skills are calling for attention.

Step 4: Climb Higher

Pick one or two skills to sharpen next.

Read the explanation, fix the work, and carry that lesson into the very next test.

A Four-Week West Virginia Mission Map

Week	Mission Focus
Week 1	Take Test 1 like the first rise on an Appalachian ridge.
Week 2	Take Test 2 and lift word problems and step-showing.
Week 3	Take Test 3 to polish fractions, decimals, and conversions.
Week 4	Take Test 4 with calm, careful, mountain-steady focus.



Scan me

What These Tests Are For

What these four practice tests help Grade 5 students build

These three practice tests prepare Grade 5 students in the Mountain State for the West Virginia WVGSA with the calm strength of a New River Gorge morning. The goal is bigger than collecting right answers. Students are practicing how to read carefully, choose a strategy, solve step by step, and explain their reasoning clearly – the same way mathematicians do every day.

Selected-Response Questions

Students solve the problem and choose the best answer. Estimating first, crossing out weak choices, and checking for reasonableness can save time and points.

Constructed-Response Questions

Students show steps, explain a method, or support an answer with clear math. Strong reasoning matters because it shows how the answer was found.

Grade 5 Ideas That Show Up Again and Again

- place value, comparing numbers, and rounding
- multi-digit addition, subtraction, multiplication, and division
- fractions, mixed numbers, and decimals
- perimeter, area, volume, and measurement conversions
- tables, line plots, patterns, and coordinate points
- geometry and multi-step real-world problem solving

What strong WVGSA-style work looks like: accurate math, readable steps, the right labels or units, and a final answer that really matches the question being asked.



Table of Contents

★ Practice Test 1	_____	17
★ Practice Test 2	_____	30
★ Practice Test 3	_____	46
★ Practice Test 4	_____	59
Practice Test Answer Keys	_____	74
Practice Test Answers and Explanations	_____	77

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

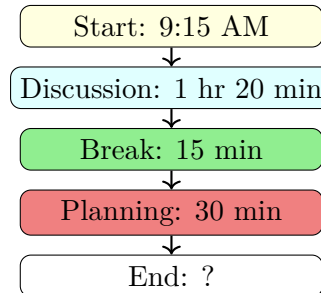
1 minute (min) = 60 seconds (sec) 1 week = 7 days

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

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



- 5) A meeting starts at 9:15 AM. It includes 1 hour 20 minutes of discussion, a 15-minute break, and 30 minutes of planning. What time does it end?



- A. 11:00 AM C. 11:20 AM
 B. 11:05 AM D. 11:30 AM
- 6) Pattern A: 0, 2, 4, 6, 8. Pattern B: 0, 4, 8, 12, 16. For the nonzero matching terms, each B value is how many times the corresponding A value?

Record your answer in the space provided.

- 7) Which division equation tells how many $\frac{1}{5}$ parts are in 1 whole?
- A. $1 \div \frac{1}{5} = 5$ C. $\frac{1}{5} \div 5 = \frac{1}{25}$
 B. $5 \div \frac{1}{5} = 25$ D. $5 + \frac{1}{5} = 5.2$
- 8) What is 43×6 ?
- A. 248 C. 268
 B. 278 D. 258



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

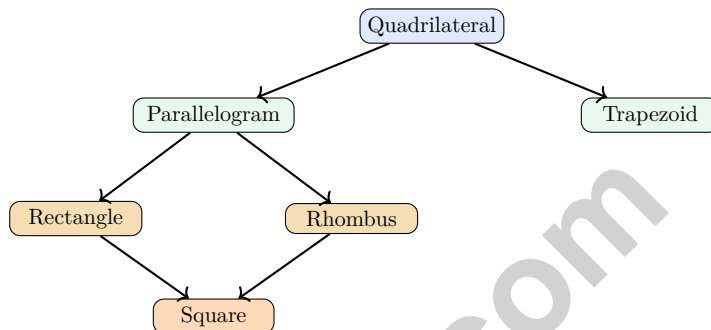
1 day = 24 hours (hr) 1 year = 52 weeks



1) Which statement about rounding is true?

- A. 14.45 rounds to 14.4 (to nearest tenth)
- B. 14.45 rounds to 14.5 (to nearest tenth)
- C. 14.45 rounds to 14.4 (to nearest hundredth)
- D. 14.45 rounds to 15 (to nearest tenth)

Quadrilateral Hierarchy



2)

According to the hierarchy, which is true?

- A. Every rectangle is a square.
 - B. Every parallelogram is a trapezoid.
 - C. Every trapezoid is a parallelogram.
 - D. Every square is a rectangle.
- 3) A painter mixed $9\frac{1}{3}$ gallons of blue paint and $4\frac{2}{3}$ gallons of red paint. How much more blue paint is there than red paint?

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

4) Without computing, which is true?

- A. $999 \times 7 > 1,000 \times 7$
- B. $999 \times 7 < 1,000 \times 7$
- C. $999 \times 7 = 1,000 \times 7$
- D. Cannot tell



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) At a fruit stand, your fruit costs \$8.62. You pay with a \$10.00 bill. How much change do you receive?
- A. \$0.63 C. \$1.38
 B. \$3.44 D. \$0.38
- 2) A pizza parlor sells large pizzas for \$16.50 and small pizzas for \$11.25. A party orders 2 large and 3 small pizzas. What is the total cost?
- A. \$75.75 C. \$66.75
 B. \$71.25 D. \$79.50
- 3) A water bottle holds $\frac{2}{3}$ liter. How much water is in 5 bottles?
- A. $\frac{10}{3}$ liters or $3\frac{1}{3}$ liters C. $\frac{10}{15}$ liters
 B. $\frac{2}{15}$ liters D. $\frac{7}{3}$ liters
- 4) Find: $945 \div 21$.

Record your answer in the space provided.

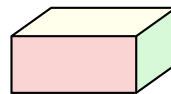
- 5) Which choice correctly distinguishes between area and volume?

Shape A



flat rectangle

Shape B



solid box

- A. Area is flat; volume fills space C. Volume is 2D; area is 3D
 B. Area is larger than volume D. Area and volume are the same



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

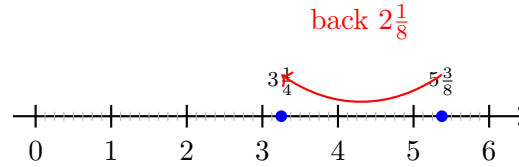
1 minute (min) = 60 seconds (sec) 1 week = 7 days

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

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



1) Use a number line to find $5\frac{3}{8} - 2\frac{1}{8}$.



A. $3\frac{1}{8}$

C. $3\frac{3}{8}$

B. $3\frac{1}{4}$

D. $4\frac{1}{8}$

2) Match: which expanded form equals 8.45?

A. $8 + 4 + 5$

C. $8 + 0.4 + 0.05$

B. $8 + 0.4 + 0.5$

D. $80 + 0.04 + 0.005$

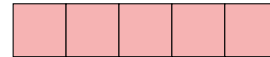
3) The bar model shows 3 groups. Each group has $(2 + 3)$ units. Which expression matches the model?



Group 1 (5 units)



Group 2 (5 units)



Group 3 (5 units)

A. $(2 + 3) + 3$

C. $3 \times 2 + 3$

B. $3 \times (2 + 3)$

D. $(3 + 3) \times 2$



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.

Testinar.com



Scan me

Practice Test Answers and Explanations

Practice Test 1 Answers and Explanations

- 1) **Choice B is correct.** (M.5.21) The correct formula is $l \times w \times h = 7 \times 5 \times 4 = 140 \text{ m}^3$, not addition.
- 2) **Choice A is correct.** (M.5.14) Six batches need $6 \times \frac{3}{4} = \frac{18}{4} = 4\frac{1}{2}$ cups.
- 3) **The correct answer is $3\frac{1}{4}$.** (M.5.11) Rewrite $4\frac{1}{2} = 4\frac{2}{4}$. Subtract: $(4 - 1) + (\frac{2}{4} - \frac{1}{4}) = 3\frac{1}{4}$.
- 4) **Choice B is correct.** (M.5.4) The tenths digit is 3, so the expression is 3×0.1 . That product gives the digit's value, 0.3.
- 5) **Choice C is correct.** (M.5.18) The meeting time is 1 hour 20 minutes + 15 minutes + 30 minutes = 2 hours 5 minutes. 9:15 AM plus 2:05 is 11:20 AM.
- 6) **The correct answer is 2.** (M.5.3) Compare: $4 = 2 \times 2$, $8 = 2 \times 4$, etc. Each B term is 2 times its A term.
- 7) **Choice A is correct.** (M.5.13) A whole divided into 5 equal parts of $\frac{1}{5}$ each is represented by $1 \div \frac{1}{5} = 5$.
- 8) **Choice D is correct.** (M.5.8) Multiply: $43 \times 6 = (40 \times 6) + (3 \times 6) = 240 + 18 = 258$.
- 9) **The correct answer is rectangle.** (M.5.26) A square has all the properties of a rectangle: four right angles and two pairs of opposite sides that are parallel. A square is a special type of rectangle.
- 10) **Choice B is correct.** (M.5.5) Dividing by 1,000 moves the decimal 3 places left: $35 \rightarrow 3.5 \rightarrow 0.35 \rightarrow 0.035$.
- 11) **Choice B is correct.** (M.5.5) $0.023 \times 100 = 2.3$ (move decimal 2 places right).
- 12) **Choice A is correct.** (M.5.10) Multiply as if the numbers were whole numbers: $36 \times 24 = 864$. The factors 3.6 and 2.4 have a total of $1 + 1 = 2$ decimal places, so place the decimal point two places from the right: $864 \rightarrow 8.64$. Therefore, $3.6 \times 2.4 = 8.64$.
- 13) **The correct answer is 6000.** (M.5.5) Multiplying by 10,000 moves the decimal point four places right: $0.6 \rightarrow 6,000$.
- 14) **Choice C is correct.** (M.5.5) $3 \times 10^3 = 3 \times 1000 = 3000$, so $n = 3$.
- 15) **Choice D is correct.** (M.5.21) $V = B \times h = 15 \times 10 = 150 \text{ cm}^3$.
- 16) **Choice A is correct.** (M.5.11) LCD = 15. $\frac{4}{5} = \frac{12}{15}$; $\frac{2}{3} = \frac{10}{15}$. $\frac{12}{15} - \frac{10}{15} = \frac{2}{15}$.
- 17) **Choice D is correct.** (M.5.15) $16 \times \frac{3}{2} = 24$ ounces. Since $\frac{3}{2}$ is greater than 1, the scaled amount is greater than the original amount.
- 18) **Choices A, B are correct.** (M.5.2) A is true because 3 copies of $(6 + 4)$ can be written as 2 copies plus 1 more copy. B is true because 10 groups of 7 are greater than 10 groups of $7 - 1$. C adds an extra 9, and D leaves out one group of 5.
- 19) **Choice A is correct.** (M.5.25) Two equal sides make the triangle isosceles. One right angle makes it a right triangle, so the name is right isosceles triangle.
- 20) **Choice D is correct.** (M.5.24) The first coordinate, 3, matches the x-axis label: visits. The second coordinate, 21, matches the y-axis label: books borrowed. So the point means books borrowed is 21 when visits is 3.
- 21) **Choice C is correct.** (M.5.22) Choose the operation from the story, then keep the unit with the answer. Multiply: $8 \times 45 = 360$ seeds. This confirms the answer.
- 22) **Choice B is correct.** (M.5.3) The outputs go 5, 7, 9, 11. Each time the input increases by 1, the output increases by 2.
- 23) **Choice B is correct.** (M.5.7) Only B is correct. For the nearest tenth, look at the hundredths digit (3). Since $3 < 5$, the tenths stays 2, giving 6.2. A names the wrong place (6.24 has two decimal places, not one). C is wrong because the tenths digit (2) is less than 5, so 6.234 rounds down to 6, not up to 7. D is wrong because the thousandths digit is 4, so the hundredths stays 3, giving 6.23 (not 6.24).
- 24) **Choice A is correct.** (M.5.25) A quadrilateral with two pairs of parallel sides and four right angles is a rectangle. Since the sides are not all the same length, it is not a square.
- 25) **Choice A is correct.** (M.5.24) The 4th input is 4 and the 4th output is 12. Put them in input-output order, so the ordered pair is (4, 12).
- 26) **Choice C is correct.** (M.5.16) The unit fraction is the amount being shared, so divide $\frac{1}{3}$ by 4. The equation is $\frac{1}{3} \div 4 = n$.
- 27) **Choice D is correct.** (M.5.12) $\frac{9}{10} \approx 1$ and $\frac{8}{11} \approx 1$. So $\frac{9}{10} + \frac{8}{11} \approx 1 + 1 = 2$ meters.
- 28) **Choice C is correct.** (M.5.19) There are two 1-yard ribbons, for 2 yards total. There is one $\frac{1}{4}$ -yard ribbon. The difference is $2 - \frac{1}{4} = 1\frac{3}{4}$ yards.



Notes From the Math Gardener

Dear Math Gardener,

◇ Look at how much you've grown! 4 practice tests is like 4 seasons of planting and harvesting. Each problem was a seed, each effort was water, and each "aha!" was sunshine. Your math garden is strong now—and it shows. ◇

★ **What gardeners know:** growth is steady, not sudden. You don't see roots growing, but they are. You don't always feel yourself getting smarter, but you are. The proof is in the questions you can solve today that felt impossible 4 tests ago. ★

Garden Inspection Report

- **Roots (foundation):** DEEP! Your basic skills are solid.
- **Stems (structure):** STURDY! Your problem-solving steps hold up.
- **Leaves (skills):** LUSH! You have many strategies to draw on.
- **Flowers (confidence):** BLOOMING! You believe in your skills.

Gardener's wisdom: keep watering your math garden long after the test. Every habit you built (read carefully, plan, check) will grow with you for years. The test is just one harvest. Your garden keeps growing.

If you want to share a proud moment or ask a question, please email me at jay@testinar.com. I'd love to hear from you!

Jay Daie

Your Math Gardener (Keep Growing!)

4 COMPLETE TESTS. CONFIDENCE. SUCCESS.



Give your child the practice and confidence they need to excel in **Grade 5 Math**. This book includes **4 full-length** practice tests designed to build skills, improve test readiness, and help students reach their full potential.

WHAT'S INSIDE:



4 COMPLETE PRACTICE TESTS

Full-length tests that reflect real test format and rigor.



COVERS ALL GRADE 5 TOPICS

Numbers & Operations, Fractions, Decimals, Geometry, Measurement, Data & Probability, and more.



MIXED REVIEW & WORD PROBLEMS

Build problem-solving skills with mixed review questions and real-world word problems.



DETAILED ANSWER KEY

Step-by-step explanations for every question to help students learn and improve.



BUILD CONFIDENCE & IMPROVE SCORES

Practice consistently, reduce test anxiety, and achieve your best score!



PRACTICE SMART. LEARN MORE. ACHIEVE YOUR BEST.



Strengthen
Math Skills



Improve
Accuracy
& Speed



Master
Essential
Concepts



Boost
Confidence
on Test Day



Visit testinar.com/math5
for more Grade 5 math resources
and practice materials!



Testinar

Smart Practice. Stronger Results.