

$\frac{2}{3}$

FULL-LENGTH

$\frac{2}{4}$

Wisconsin

$7 \times 8 =$

0,25



★★★★★
Aligned to State Standards

7×8

Forward Exam

$56 \div 7$

MATH

Grade

5

$(a+b)^2$

PRACTICE TESTS

Complete State Standards Review
with Answer Key and
Essential Math Skills Practice



3 Full-Length Practice Tests
Aligned to State Standards



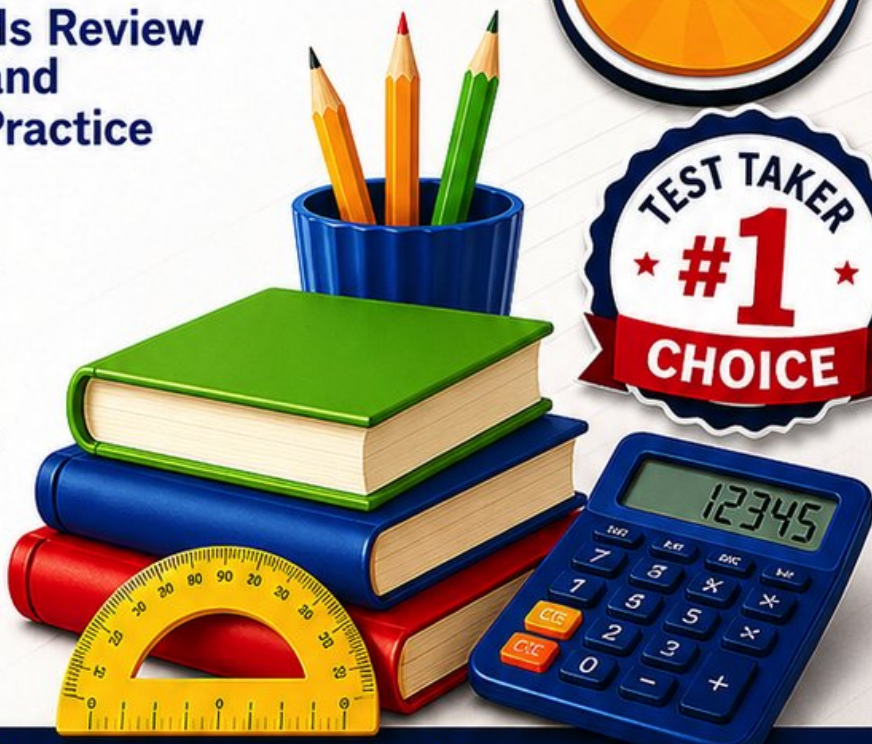
Covers All Grade 5 Math Topics
Numbers & Operations, Fractions,
Decimals, Geometry, Measurement,
Data & Problem Solving



Build Confidence
Strengthen Skills • Improve Accuracy
• Boost Test Readiness



Detailed Answer Key
Step-by-Step Explanations
for All Questions



WRITTEN FOR
GRADE 5 STUDENTS



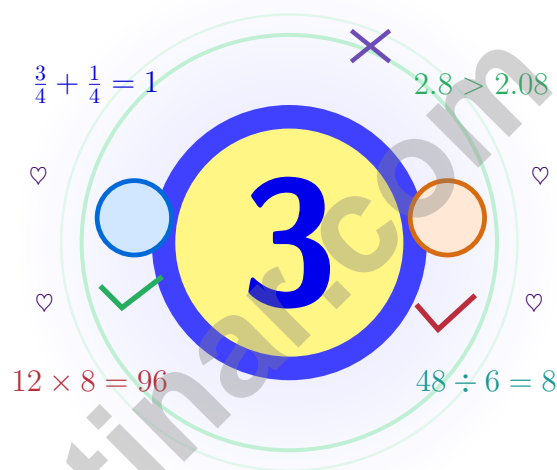
PERFECT FOR
TEST PREP & REVIEW



CLASSROOM, HOME,
OR SELF-STUDY USE

3 Wisconsin Forward Exam Grade 5 Math Practice Tests

Badger math for steady, friendly thinkers



Three full tests, a friendly quick review, smart strategy pages, and student-tested support that help Grade 5 mathematicians from The Badger State walk in ready to think.

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 ©

Greetings, Young Wisconsin Mathematician

Badger math for steady, friendly thinkers

To Wisconsin Students Who Love a Puzzle

Math is like a Wisconsin lake at sunrise – calm on top, full of life underneath, and rewarding for anyone who pays attention.

Some questions will feel easy from the very first read. Others will ask you to pause, sketch, estimate, or try again. That is not a problem. That is practice doing exactly what it should do. Every honest attempt grows your math brain a little stronger.

Look

Look at the problem like a detective looks at a clue.

Test

Test your idea with one careful step at a time.

Grow

Grow stronger by reviewing exactly what tripped you up.

A Wisconsin promise to yourself: I will work my problems like a Door County morning – calm, friendly, and curious about what is underneath.

How This Book Wants to Help

A simple game plan that turns practice into real progress

Step 1: Read

Read the quick review pages first.
Wake up the big Grade 5 ideas before the test starts so your brain is already warmed up.

Step 2: Try

Try one test with full attention.
Find a calm corner, settle in, and aim for careful, honest choices before quick ones.

Step 3: Reflect

Reflect on which skills want more sunlight.
Circle missed questions, sort out what went sideways, and notice which skills are calling for more attention.

Step 4: Lift

Lift those skills with practice before test 2.
Read the explanation, fix the work, and carry that lesson forward into the next test.

A Wisconsin Three-Week Schedule

Week 1	Use Test 1 to scout the territory.
Week 2	Use Test 2 to repair the trail.
Week 3	Use Test 3 to walk it cleanly from start to finish.



Scan me

What to Expect Inside

What these practice tests help Grade 5 students build

These three practice tests prepare Grade 5 students in the Badger State for the Wisconsin Forward Exam with the steady focus of a long lakeshore walk. The goal is bigger than getting answers right. Students are practicing how to read with care, choose a strategy, solve step by step, and explain their reasoning clearly – the same way mathematicians do every single day.

Selected-Response Questions

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

Constructed-Response Questions

Students show their steps, explain a method, or back up an answer with clear math. Clean reasoning matters because it shows how the answer was actually 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
- line plots, tables, numerical patterns, and coordinate points
- geometry and multi-step real-world problems

What strong work looks like on the Forward Exam: the math is correct, the steps are readable, the labels and units match the problem, and the final answer truly answers the question being asked.



Table of Contents

★ Practice Test 1	_____	22
★ Practice Test 2	_____	36
★ Practice Test 3	_____	51
Practice Test Answer Keys	_____	66
Practice Test Answers and Explanations	_____	69

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

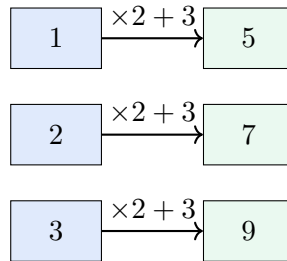
1 minute (min) = 60 seconds (sec) 1 week = 7 days

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

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



1) Use the rule shown in the arrow diagram to find which input gives 13.



Which input would give an output of 13?

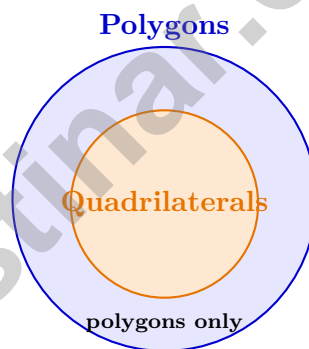
A. 4

C. 7

B. 5

D. 8

2) A Venn diagram has a large circle for polygons and a smaller circle inside it for quadrilaterals. Where should a pentagon be placed?



A. Inside quadrilaterals

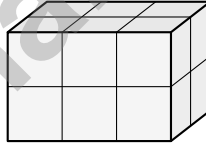
D. In the intersection of polygons and quadrilaterals

B. Outside polygons

C. Inside polygons only



- 3) Which expression would produce a result 10 times as much as $24 \div 4$?
- A. $24 \div 4 + 10$ C. $24 \div (4 + 10)$
 B. $10 \times (24 \div 4)$ D. $(24 - 10) \div 4$
- 4) A science kit box measures 8 meters long, 5 meters wide, and 4 meters tall. What is its volume?
- A. 40 cubic meters C. 20 cubic meters
 B. 32 cubic meters D. 160 cubic meters
- 5) A baker needs $\frac{3}{4}$ cup of flour and $\frac{1}{5}$ cup of sugar. Estimate the total.
- A. Less than $\frac{1}{2}$ cup C. About $1\frac{1}{2}$ cups
 B. About 1 cup D. More than 2 cups
- 6) A rectangular prism is 3 units long, 2 units wide, and 2 units tall. How many unit cubes fit inside it?



- A. 7 unit cubes C. 10 unit cubes
 B. 12 unit cubes D. 8 unit cubes
- 7) A painting studio is shaped like a rectangular prism. It measures 10 m long, 8 m wide, and 4 m tall. What is the volume of the studio?
- A. 72 cubic meters C. 320 cubic meters
 B. 144 cubic meters D. 544 cubic meters



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) Convert 5,000 milliliters to liters.

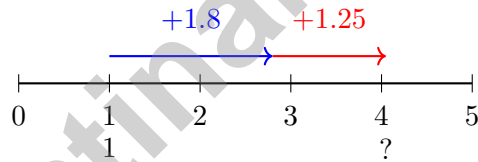
- A. 0.5 L C. 50 L
 B. 500 L D. 5 L

2) Four athletes' sprint times (in seconds) are shown. Who ran the fastest (shortest time)?

Athlete	Time (seconds)
Alex	12.45
Jordan	12.54
Casey	12.35
Morgan	12.40

- A. Alex C. Casey
 B. Jordan D. Morgan

3) A number line visual for adding decimals:



What is $1 + 1.8 + 1.25$?

- A. 4.05 C. 4.25
 B. 4.15 D. 5.05
- 4) Which expression equals 0.042?
- A. $42 \div 10$ C. $42 \div 100$
 B. $4.2 \div 10$ D. $4.2 \div 100$



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

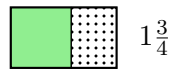


- 1) A group of friends buys 4 sandwiches for \$6 each and 4 drinks for \$2 each. They pay with a \$50 bill. Which expression shows how much change they should receive?

- A. $50 - (4 \times 6 + 4 \times 2)$
 C. $(50 - 4) \times (6 + 2)$
 B. $50 - (4 + 6 + 4 + 2)$
 D. $4 \times (50 - 6 - 2)$

- 2) Add three fractions: $\frac{1}{2} + \frac{1}{4} + \frac{1}{8}$

- A. $\frac{3}{14}$
 C. $\frac{3}{8}$
 B. $\frac{7}{8}$
 D. $\frac{1}{2}$


 $1\frac{3}{4}$

 $2\frac{1}{2}$

- 3)

Add: $1\frac{3}{4} + 2\frac{1}{2}$

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

- 4) A tank has 3 gallons of paint. Each bucket holds one sixth gallon. Which division equation matches the situation?

- A. $\frac{1}{6} \div 3 = n$
 C. $3 + \frac{1}{6} = n$
 B. $3 \times \frac{1}{6} = n$
 D. $3 \div \frac{1}{6} = n$

- 5) Which whole number divided by $\frac{1}{2}$ gives 16?

- A. 4
 C. 12
 B. 8
 D. 32



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.** (5.OA.B.3) Using the rule $\times 2 + 3$: when input is 5, output = $5 \times 2 + 3 = 13$.
- 2) **Choice C is correct.** (5.G.B.4) A pentagon is a polygon with 5 sides. It is not a quadrilateral because it does not have 4 sides.
- 3) **Choice B is correct.** (M.5.OA.A.2) To make an expression 10 times as much, multiply the entire expression by 10. That is why $10 \times (24 \div 4)$ matches.
- 4) **Choice D is correct.** (M.5.MD.C.5) Use the rectangular-prism volume formula: $8 \times 5 \times 4 = 160$. So the volume is 160 cubic meters.
- 5) **Choice B is correct.** (M.5.NF.B.6) $\frac{3}{4}$ is close to 1, and $\frac{1}{5}$ is close to 0. So $\frac{3}{4} + \frac{1}{5} \approx 1 + 0 = 1$ cup.
- 6) **Choice B is correct.** (5.MD.C.4) To find how many unit cubes fit in the prism, we multiply the dimensions: $3 \times 2 \times 2 = 12$ unit cubes.
- 7) **Choice C is correct.** (M.5.MD.C.3b) Volume measures the space inside the studio. Multiply the three dimensions: $10 \times 8 \times 4 = 320$ cubic meters.
- 8) **Choice C is correct.** (M.5.MD.C.5a) Volume = $4 \times 3 \times 5 = 60$ unit cubes.
- 9) **Choice C is correct.** (5.MD.B.2) Add the ribbon lengths shown by the marks: $(1 \times 3) + (3 \times 2) + (5 \times 3) + (7 \times 1) = 31$ inches. Sharing 31 inches equally among 4 posters gives $31 \div 4 = 7\frac{3}{4}$ inches per poster.
- 10) **Choice C is correct.** (M.5.MD.C.5) Multiply: $1,200 \times 12 = 14,400$ dollars annually.
- 11) **The correct answer is $\frac{1}{2}$.** (M.5.NF.B.5a) Multiply across: $\frac{2 \times 3}{3 \times 4} = \frac{6}{12}$. Then simplify $\frac{6}{12}$ to $\frac{1}{2}$.
- 12) **Choice C is correct.** (5.NF.B.5) Since $\frac{1}{4} < \frac{1}{2}$, the product $10 \times \frac{1}{4}$ is smaller. $10 \times \frac{1}{4} = 2\frac{1}{2}$ and $10 \times \frac{1}{2} = 5$.
- 13) **Choice C is correct.** (M.5.OA.A.2) Splitting the whole sum into 5 equal parts gives the same result as splitting 40 into 5 equal parts, splitting 60 into 5 equal parts, and then adding.
- 14) **The correct answer is 5.26.** (5.NBT.A.1) Dividing by 10 moves the decimal point one place left: $52.6 \rightarrow 5.26$.
- 15) **The correct answer is 24.** (5.MD.A.1) $6 \times 4 = 24$ quarts. Each gallon has 4 quarts, so 6 gallons has six groups of 4 quarts.
- 16) **The correct answer is 9 units up.** (5.G.A.1) In (3, 9), the second coordinate is the y -coordinate. It tells how far up the point is from the origin.
- 17) **Choice A is correct.** (M.5.MD.C.5a) One prism: $4 \times 5 \times 3 = 60 \text{ in}^3$. Three prisms: $60 \times 3 = 180 \text{ in}^3$.
- 18) **Choice A is correct.** (5.NBT.A.2) $9 \times 100 = 900$ (two zeros) is true, but $9 \times 1000 = 9000$ (three zeros), not 900.
- 19) **Choice C is correct.** (M.5.NBT.A.4) To round 3.765 to the nearest hundredth, look at the thousandths digit. It is 5, so the hundredths digit rounds up from 6 to 7, giving 3.77 m.
- 20) **Choices A, B are correct.** (5.G.B.4) Every square is a rectangle, and every rectangle is a parallelogram. Choices C and D reverse or overstate the hierarchy.
- 21) **Choice C is correct.** (5.G.B.3) A slanted parallelogram has two acute angles and two obtuse angles. The smaller opposite corners are the acute angles, so there are 2 acute angles.
- 22) **Choice A is correct.** (5.NF.A.2) Shipped: $\frac{1}{4} + \frac{1}{3} = \frac{3}{12} + \frac{4}{12} = \frac{7}{12}$. Remaining: $1 - \frac{7}{12} = \frac{5}{12}$.
- 23) **The correct answer is 114 in^3 .** (5.MD.C.5c) Add the three non-overlapping volumes: $54 + 36 + 24 = 114$ cubic inches. Each cubic inch is counted once.
- 24) **Choice B is correct.** (5.NBT.A.2) Multiplying by 100 shifts the digits in 50 two places to greater place values: $50 \times 100 = 5,000$.
- 25) **Choice C is correct.** (5.MD.A.1) 1 km = 1,000 m. Multiply: $280 \times 1000 = 280,000$ m.
- 26) **Choice D is correct.** (5.NBT.A.2) To change 3.82 into 382, the decimal moves two places right. A two-place move to the right means multiplying by 100.
- 27) **Choice B is correct.** (5.NBT.B.5) $1.2 \times 0.5 = 0.6$, which is less than 1.2. Multiplying by a number less than 1 makes the result smaller.
- 28) **Choice B is correct.** (5.NBT.A.2) When dividing by 10, each digit moves to a place with one-tenth the value, so 640 becomes 64.
- 29) **Choice C is correct.** (M.5.MD.A.1) Total fencing: $180 + 165 + 225 = 570$ meters. Cost: $570 \times 12 = 6,840$ dollars.



Math Athlete, Listen Up!

◇ 3 practice tests done. That's serious training. Your math muscles are strong, your endurance is high, and your reflexes (recognizing problem types) are quick. You're in great shape for the big test. ◇

★ **Trainer's wisdom:** muscle memory is real, even in math. The more you do something, the more your brain knows how to do it without thinking. You've built that muscle memory over 3 tests. Now it's automatic. ★

Athlete's Performance Card

- **Endurance:** TOP-TIER! You can finish a long test without burnout.
- **Strength:** STRONG! You handle multi-step problems with power.
- **Speed:** SHARP! You move efficiently from question to question.
- **Recovery:** GREAT! You bounce back fast from tough questions.

Trainer's tip: on test day, hydrate, breathe deeply, and warm up with the easier questions first. Build your rhythm. Your training will carry you the rest of the way.

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

Reza Nazari & Jay Daie

Your Math Trainer (You're In Great Shape)

Build Skills. Boost Confidence. Excel on the Grade 5 Math Test.

Help your child succeed with confidence! This book includes **3 full-length Grade 5 Math practice tests** aligned to state standards. With a focus on essential skills, problem solving, and test readiness, it's the perfect resource for classroom, home, or on-the-go practice.



WHAT'S INSIDE:



3 Full-Length Grade 5 Math Practice Tests

Realistic test format to build familiarity and confidence.



Covers All Essential Math Topics

Fractions, decimals, geometry, measurement, data, number operations, and more.



Build Strong Math Skills

Strengthen understanding and problem-solving through varied question types.



Detailed Answer Key

Step-by-step explanations to help your child learn from mistakes and improve.



Track Progress & Improve

Use score trackers to identify strengths and focus on areas that need more practice.



The Smarter Way to Prepare!

Consistent practice builds stronger skills, sharper thinking, and test-day success.

- ✓ Reinforce classroom learning
- ✓ Improve accuracy and speed
- ✓ Reduce test anxiety
- ✓ Achieve your best score!



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