

# 4

**COMPLETE**

# Wisconsin Forward Exam

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  
WISCONSIN  
STATE STANDARDS  
(FORWARD EXAM)**

# 4 Wisconsin Forward Exam Grade 5 Math Practice Tests

*Four full practice tests and the habits that carry you to the real one*



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

**Jay Daie and Reza Nazari**



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# Wisconsin Grade 5: Mission Briefing

A four-test journey for Wisconsin Grade 5 thinkers

## Just for Wisconsin Grade 5 Mission Specialists

This book gives you four chances to read closely, solve carefully, and level up your math thinking. Math is like a Wisconsin lake at sunrise – calm on top, full of life underneath, and rewarding for anyone who pays attention.

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.

### Watch

Watch what the question really wants from you.

### Try

Try a strategy that fits the size of the numbers.

### Polish

Polish your steps, units, and the final answer.

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

# Your Step-by-Step Plan

A four-step routine that turns practice into real improvement

## Step 1: Open

**Open the warm-up review and use it.**

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

## Step 2: Test

**Take the test with steady focus.**

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

## Step 3: Reflect

**Notice what was sharp and what was shaky.**

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

## Step 4: Sharpen

**Practice the shaky skills before the next round.**

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

## A Four-Week Wisconsin Mission Map

Week	Mission Focus
Week 1	Take Test 1 like a Door County sunrise – steady, calm, curious.
Week 2	Take Test 2 and lift word problems and clear writing.
Week 3	Take Test 3 to polish fractions, decimals, and conversions.
Week 4	Take Test 4 with calm, careful, friendly focus.



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## Meet the Four Tests

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



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## 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)

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

### WEIGHT AND MASS

#### Customary

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### TIME

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1) Place-value chart for 3.915: identify the digit in the tenths place.

Ones	Tenths	Hundredths	Thousandths
3	9	1	5

- A. 3
- B. 9
- C. 1
- D. 5
- 2) What is  $\frac{1}{4} \div 2$ ?
- A.  $\frac{3}{8}$
- B.  $\frac{1}{2}$
- C.  $\frac{1}{8}$
- D.  $\frac{4}{2}$
- 3) “Add 7 and 3. Multiply the result by 5. Subtract 20.” Which expression shows these steps?
- A.  $7 + 3 \times 5 - 20$
- B.  $(7 + 3) \times 5 - 20$
- C.  $(7 + 3 \times 5) - 20$
- D.  $7 + (3 \times 5 - 20)$
- 4) Which expression is NOT equal to the others?
- A.  $6 \times (2 + 1)$
- B.  $(3 + 3) \times 3$
- C.  $9 + 9$
- D.  $2 \times 2 \times 2 \times 2 - 2$
- 5) Pattern: 6, 11, 16, 21, ... What’s the rule?
- A. Add 5
- B. Multiply by 2
- C. Add 4
- D. Subtract 5



6) Which benchmark list is correct?

Row	Fraction	Closest Benchmark
A	$\frac{4}{7}$	$\frac{1}{2}$
B	$\frac{9}{10}$	1
C	$\frac{1}{11}$	0
D	$\frac{8}{9}$	1

A. Row A only

B. Rows C and D

C. Rows A and C

D. All rows correct

7) Which statement is true?

A.  $3,200 \div 10 = 32$

B.  $3,200 \div 100 = 3,200$

C.  $3,200 \div 1,000 = 32$

D.  $3,200 \div 100 = 32$

8) Find:  $\frac{4}{5} \times 12$ .

*Record your answer in the space provided.*



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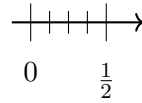
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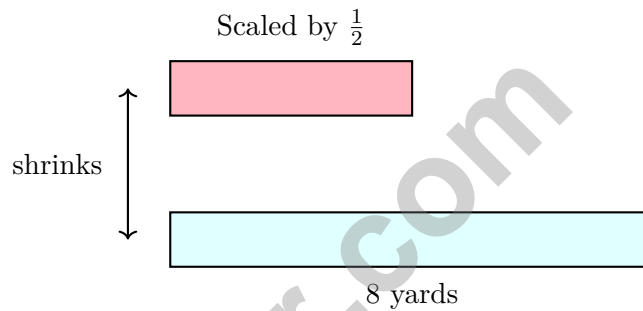
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- 1) A number line from 0 to  $\frac{1}{2}$  is divided into 4 equal segments. What is the length of each segment?



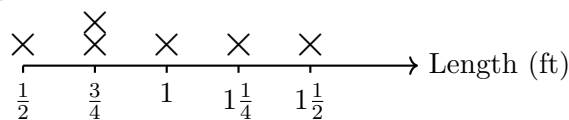
- A.  $\frac{1}{8}$ 
 C.  $\frac{1}{4}$   
 B.  $\frac{1}{6}$ 
 D.  $\frac{1}{2}$



- 2) A fabric length of 8 yards is scaled by  $\frac{1}{2}$ . What is the new length?

- A. 2 yards
  C. 8 yards  
 B. 4 yards
  D. 12 yards

- 3) The line plot shows lengths of wire pieces, in feet:



What is the total length of the pieces that are at least 1 foot long?

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



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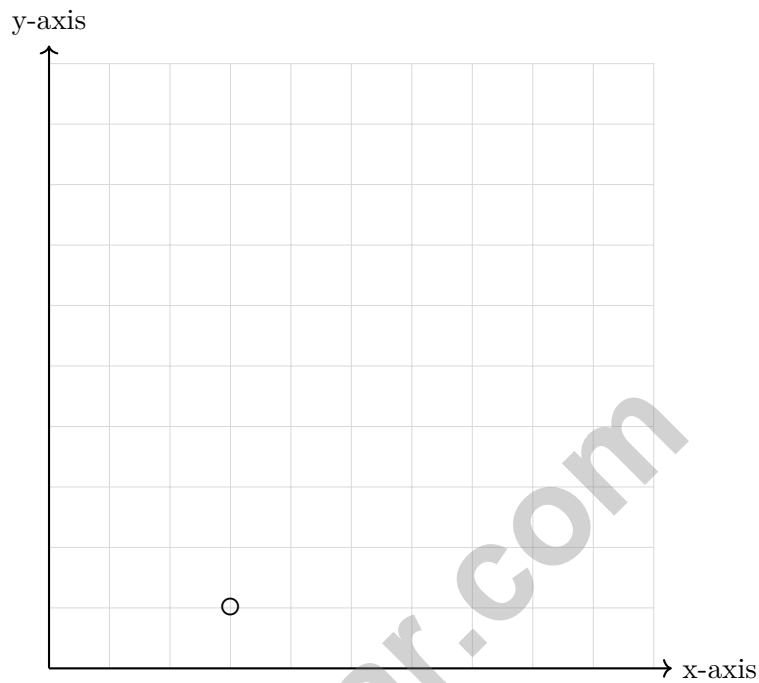
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- 1) Label the point that is 3 units right and 1 unit up from the origin.



- A. (3, 1)                       C. (4, 0)
- B. (1, 3)                       D. (0, 4)
- 2) A recipe calls for 6.75 cups of flour. You have already mixed 2.43 cups. How many more cups do you need?
- A. 4.32 cups                       C. 4.12 cups
- B. 4.42 cups                       D. 3.92 cups



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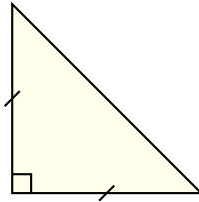
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- 1) This shape has 2 congruent sides and 1 right angle. What is it?



- A. Scalene triangle
- B. Isosceles right triangle
- C. Equilateral triangle
- D. Obtuse triangle
- 2) A cube is built from unit cubes, with 6 unit cubes along each edge. How many unit cubes are needed to fill the cube?

*Record your answer in the space provided.*

- 3) A rectangular prism has dimensions 13 m, 2 m, and 4 m. What is its volume?

- A.  $104 \text{ m}^3$
- B.  $19 \text{ m}^3$
- C.  $52 \text{ m}^3$
- D.  $26 \text{ m}^3$
- 4) Pattern 5, 10, 20, 40, 80, ... What is the 7th term?
- A. 160
- B. 320
- C. 640
- D. 1,280



## 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

- Choice B is correct.** (5.NBT.A.3a) The tenths place is the first position after the decimal point. In 3.915, the tenths digit is 9.
- Choice C is correct.** (M.5.NF.B.7c) Dividing by 2 splits the fraction in half:  $\frac{1}{4} \div 2 = \frac{1}{8}$ .
- Choice B is correct.** (M.5.OA.A.2) The words give the order: add 7 and 3 first, so use parentheses. Then multiply that result by 5, and finally subtract 20.
- Choice D is correct.** (M.5.OA.A.1) A, B, and C all have a value of 18. Choice D is  $2 \times 2 \times 2 \times 2 - 2 = 16 - 2 = 14$ , so it is not equal to the others.
- Choice A is correct.** (M.5.OA.B.3) Look at how much the pattern changes each time:  $11 - 6 = 5$ ,  $16 - 11 = 5$ , and  $21 - 16 = 5$ . The repeated difference is 5, so the rule is add 5.
- Choice D is correct.** (M.5.NF.B.6)  $\frac{4}{7} \approx \frac{1}{2}$ ,  $\frac{9}{10}$  is close to 1,  $\frac{1}{11} \approx 0$ , and  $\frac{8}{9} \approx 1$ . All fit their benchmarks.
- Choice D is correct.** (5.NBT.A.2) Only D is true.  $3,200 \div 10 = 320$ ,  $3,200 \div 1,000 = 3.2$ , and  $3,200 \div 100 = 32$ .
- The correct answer is  $9\frac{3}{5}$ .** (5.NF.B.5)  $\frac{4}{5} \times 12 = \frac{48}{5} = 9\frac{3}{5}$ . Since  $\frac{4}{5} < 1$ , the product is a little less than 12.
- Choice D is correct.** (M.5.G.A.2) The x-coordinate (3) is hours worked, and the y-coordinate (90) is miles driven. This means 3 hours of work resulted in 90 miles driven.
- Choice C is correct.** (5.G.B.4) The definition of a trapezoid is a quadrilateral with exactly one pair of parallel sides. The other shapes all have two pairs of parallel sides.
- Choice C is correct.** (M.5.NBT.A.4) The tenths digit is 9. The hundredths digit is 5. Since  $5 \geq 5$ , round tenths up from 9 to 10, which rolls over to 8.0 (ones digit increases by 1).
- Choice B is correct.** (5.G.A.2) Use the rule on each input.  $1 + 10 = 11$ ,  $2 + 10 = 12$ , and  $3 + 10 = 13$ , so the outputs are 11, 12, 13.
- Choice A is correct.** (5.G.A.2) The second coordinates follow 2, 5, 8, 11, adding 3 each step. The plotted points are (1,2), (2,5), (3,8), and (4,11), so they match.
- Choice B is correct.** (5.NBT.A.3b)  $0.53 > 0.35$  because 5 tenths  $>$  3 tenths. The plant grew more in week 2.
- Choice C is correct.** (M.5.NF.B.7b)  $5 \div \frac{1}{3} = 5 \times 3 = 15$ . She uses 15 batches.
- Choice C is correct.** (5.NBT.A.2) 300 has two zeros and 20 has one zero. Since  $3 \times 2 = 6$ , the product is 6,000.
- Choice B is correct.** (M.5.NF.A.1) Add:  $2\frac{3}{4} + 1\frac{1}{4} = 3\frac{4}{4} = 4$  cups.
- The correct answer is  $\frac{7}{12}$ .** (M.5.MD.C.5) LCD = 12.  $\frac{9}{12} - \frac{2}{12} = \frac{7}{12}$ .
- Choices A, B are correct.** (5.NBT.A.2)  $3.65 \times 10 = 36.5$  and  $0.365 \times 100 = 36.5$ . C and D both give 365.
- Choice B is correct.** (M.5.NBT.B.7) LCM(9,6) = 18.  $\frac{1}{9} = \frac{2}{18}$  and  $\frac{1}{6} = \frac{3}{18}$ .  $\frac{2}{18} + \frac{3}{18} = \frac{5}{18}$ .
- Choice C is correct.** (5.NF.B.7c) Start with one unit fraction,  $\frac{1}{3}$ , and share it into 6 equal parts. Each part is  $\frac{1}{3} \div 6 = \frac{1}{18}$  of the whole.
- Choice A is correct.** (M.5.NF.B.5a)  $\frac{1}{7} \times \frac{3}{4} = \frac{1 \times 3}{7 \times 4} = \frac{3}{28}$ .
- Choice B is correct.** (5.NF.B.5) The factors increase from  $\frac{99}{100}$  to 1 to  $1\frac{1}{100}$ , so the products increase: 99, 100, 101.
- The correct answer is 5.75.** (M.5.NBT.B.7) Write  $9.40 - 3.65$ . Regroup 1 tenth as 10 hundredths, then subtract by place value:  $9.40 - 3.65 = 5.75$ .
- Choice B is correct.** (5.G.A.1) In an ordered pair  $(x, y)$ , the  $x$  represents the horizontal distance (how far right) from the origin.
- Choice C is correct.** (5.NF.B.7c) The one-eighth strip is the amount being shared. So the matching equation is  $\frac{1}{8} \div 2 = n$ .
- The correct answer is isosceles.** (M.5.G.B.4) Two side lengths are equal, so Triangle P is isosceles.
- Choice B is correct.** (M.5.OA.A.1) The parentheses come first:  $25 - 10 = 15$ . Then divide,  $15 \div 5 = 3$ , and add 8 to get 11.
- The correct answer is  $2\frac{1}{4}$  ft.** (5.MD.B.2) Sum with LCD 8:  $\frac{3}{8} + \frac{4}{8} + \frac{5}{8} + \frac{6}{8} = \frac{18}{8} = \frac{9}{4} = 2\frac{1}{4}$  ft. Accept equivalent forms.



**Personal Trainer Wrap-Up**

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**Math Athlete, Listen Up!**

◇ 4 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 4 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](mailto:reza@testinar.com). I'd love to hear from you!

**Reza Nazari & Jay Daie**

Your Math Trainer (You're In Great Shape)

# 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



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