

# 3

# Wisconsin

# Forward Exam

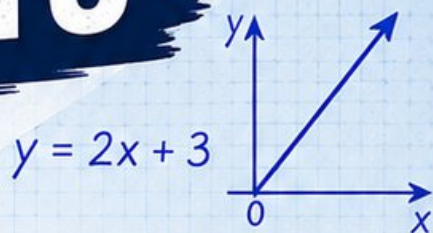
GRADE

# 6

MATH

# PRACTICE TESTS

Standards Aligned Problem Solving  
For Comprehensive Assessment Programs



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



$36\% \text{ of } 150 = ?$



## 3 | PRINTED TESTS



## 2 | ONLINE TESTS



Build  
Confidence



Master Key  
Math Skills



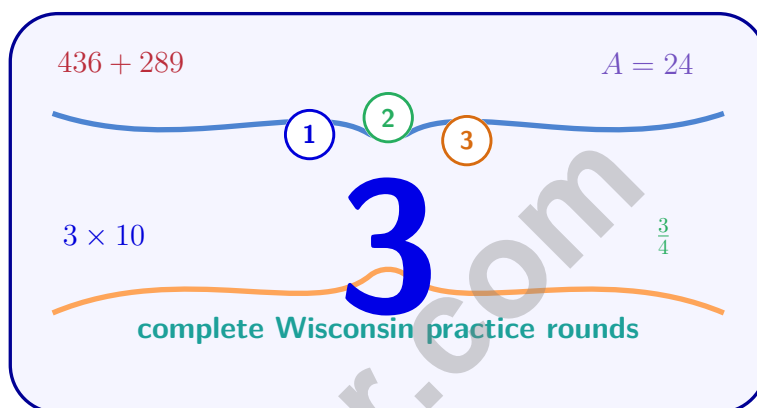
Answer Explanations  
for Every Question



Test-Taking  
Strategies That Work

# 3 Wisconsin Forward Exam Grade 6 Math Practice Tests

*Standards-Aligned Forward-Moving Review for Wisconsin Forward Exam*



Three complete 40-question Grade 6 practice rounds for Forward Exam, built for forward-moving review with ratios, rational numbers, expressions, equations, geometry, statistics, answer keys, and clear explanations for every item.

**Jay Daie and Reza Nazari**



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# Welcome, Wisconsin Math Explorer!

Three focused rounds using forward-moving review

This book gives you three full Grade 6 practice tests for Forward Exam. Each round uses lake roads, farm fields, and practical problem checks as a fresh mental backdrop while you read closely, choose a smart strategy, show your work, and check whether your answer makes sense.

## Your Wisconsin Practice Promise

Move forward with care: underline the task, solve neatly, and confirm the units.

Read

Plan

Check

# How to Use This Book

A three-session routine for forward-moving review

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.

**Wisconsin review rhythm:** Finish a round, review the missed steps, and use the next test to move forward.



## What Is Inside?

Three Forward Exam 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. Forward-moving review means recognizing the skill even when the next question changes topic, changes format, or asks for an explanation.



Scan me!  
For more practice  
& answers

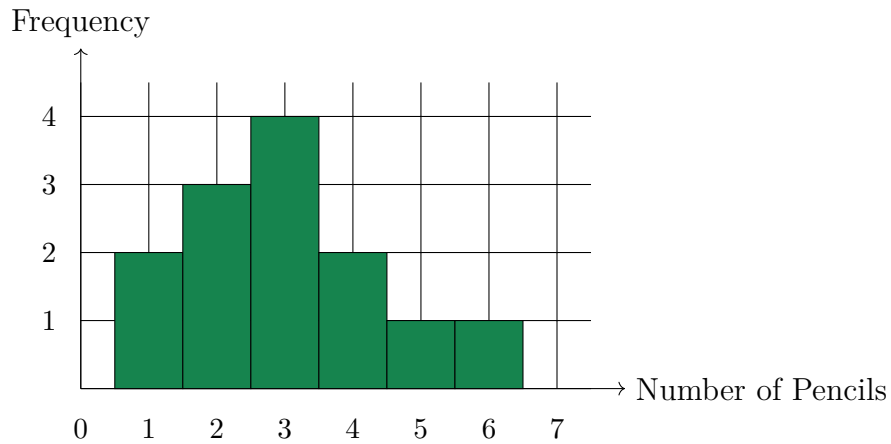
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- 1) Using the ordered data 10, 14, 16, 22, 24, 26, 30, 35, find Q1 and Q3, then compute the interquartile range.
- A. 6                                       C. 13  
 B. 12                                       D. 25
- 2) A shipping company receives 8,925 packages to distribute to 35 regional centers. How many packages per center, and how many are left over?
- A. 255 packages per center, 0 left over     C. 254 packages per center, 35 left over  
 B. 255 packages per center, 10 left over     D. 250 packages per center, 75 left over
- 3) Two test groups: Group 1 mean = 75, SD = 5; Group 2 mean = 80, SD = 8. Which statement is best?
- A. Group 1 performed better and was more consistent.     C. Both groups are identical.  
 B. Group 2 performed better but was more variable.     D. Group 1 is more variable.



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& answers



4)

A class surveyed students about how many pencils they carry. The histogram shows the frequency distribution. How many students carry 2 pencils?

- A. 1 student
- C. 3 students
- B. 2 students
- D. 4 students

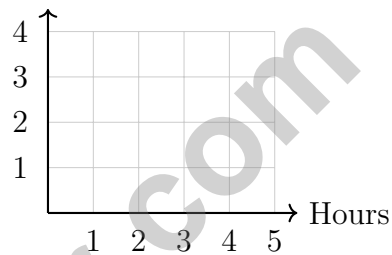
5) A smoothie recipe uses strawberries and bananas in a 5 : 3 ratio. If the recipe calls for 15 strawberries, how many bananas should be added?

- 6) A ratio table shows the relationship between hours and miles traveled at a constant speed. Which graph correctly represents the data from this table?

Hours	Miles
1	50
2	100
3	150

Looking at the coordinate plane below, which set of points matches this ratio?

Miles (each tick = 50 mi)

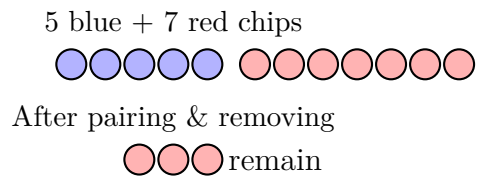


- A. (1, 1), (2, 2), (3, 3)       C. (1, 5), (2, 7), (3, 9)
- B. (1, 2), (2, 4), (3, 6)       D. (1, 3), (2, 6), (3, 9)
- 7) A machine produces 420 items in 7 hours. At this rate, how many items will the machine produce in 12 hours?

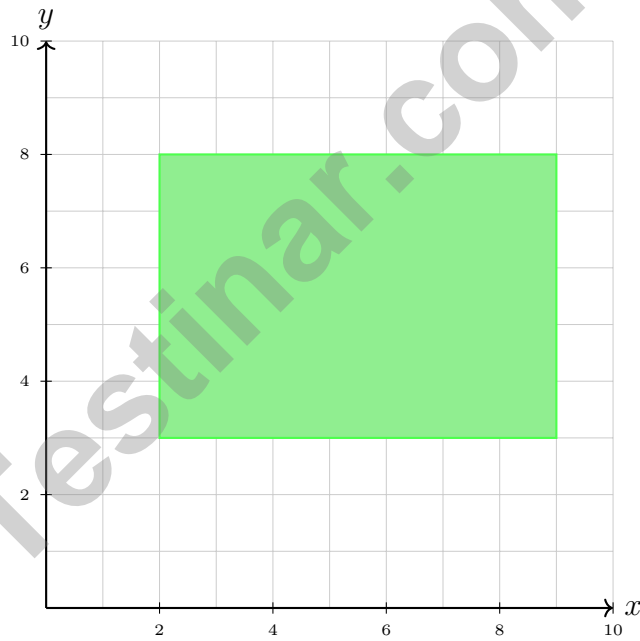


Scan me!  
For more practice  
& answers

1) Using zero pairs (a red chip and a blue chip neutralize each other), simplify: 5 blue chips + 7 red chips.



- |                                |                               |
|--------------------------------|-------------------------------|
| <input type="checkbox"/> A. -5 | <input type="checkbox"/> C. 2 |
| <input type="checkbox"/> B. -2 | <input type="checkbox"/> D. 5 |



2)

A rectangle has vertices at (2, 3), (9, 3), (9, 8), and (2, 8). What is its area in square units?

- |   |   |
|---|---|
| <input type="checkbox"/> A. 28 square units | <input type="checkbox"/> C. 35 square units |
| <input type="checkbox"/> B. 32 square units | <input type="checkbox"/> D. 40 square units |

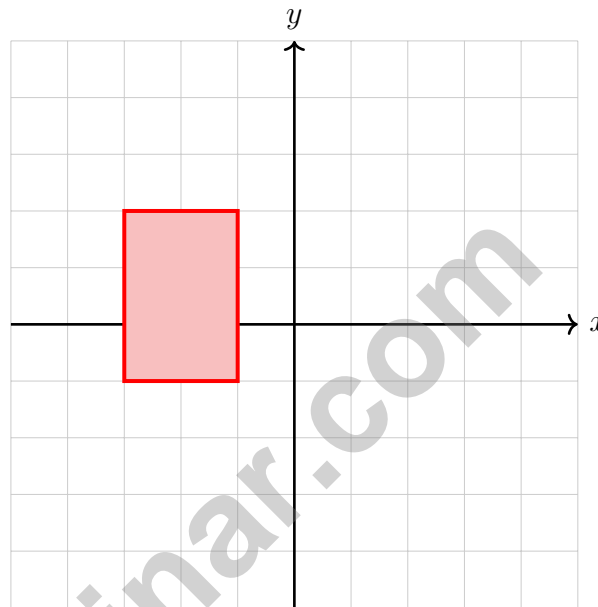
3) A rectangular prism's net shows a  $4 \times 6$  rectangle surrounded by four  $1 \times 6$  rectangles and two  $1 \times 4$  rectangles. What are the dimensions of the prism?

A.  $1 \times 4 \times 6$

C.  $4 \times 6 \times 8$

B.  $2 \times 4 \times 6$

D.  $4 \times 4 \times 6$



4)

A quadrilateral has vertices at  $(-3, -1)$ ,  $(-1, -1)$ ,  $(-1, 2)$ , and  $(-3, 2)$ . If it is reflected over the  $y$ -axis, what will be the image of  $(-1, 2)$ ?

A.  $(1, 2)$

C.  $(-1, 2)$

B.  $(-1, -2)$

D.  $(1, -2)$

5) A circle has an approximate area of  $50.24 \text{ cm}^2$ . Using  $\pi \approx 3.14$ , what is the radius?

A. 2 cm

C. 8 cm

B. 4 cm

D. 16 cm



Scan me!  
For more practice  
& answers

1) A store sells 8 notebooks for \$6.40. What is the unit price per notebook?

- A. \$0.50 per notebook                       C. \$0.80 per notebook  
 B. \$0.70 per notebook                       D. \$1.00 per notebook

2) The table shows an input-output relationship.

<b>Input (<math>x</math>)</b>	1	2	3	4
<b>Output (<math>y</math>)</b>	7	14	21	28

Which equation represents this relationship?

- A.  $y = x + 6$                                        C.  $y = x + 7$   
 B.  $y = 7x$      D.  $y = 14x$

3) The base of a triangle is 15 inches. What height is needed to create an area of  $90 \text{ in}^2$ ?

- A. 6 in     C. 15 in  
 B. 12 in     D. 30 in

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) Prism A has dimensions 2 m, 3 m, and  $\frac{5}{2}$  m. Prism B has dimensions 2.5 m, 2 m, and 3 m. Which statement is true?

- A. Prism A has larger volume                       D. Cannot be determined without more info  
 B. Prism B has larger volume  
 C. Both have the same volume



Scan me!  
For more practice  
& answers

6) A trapezoid has parallel sides of length 5 units and 7 units. The height is 4 units. What is its area?

- A. 16 square units                       C. 24 square units  
 B. 20 square units                       D. 28 square units

7) A park ranger uses a map where  $(5, 3)$  marks the trail start and  $(5, 9)$  marks the trail end. The scale is 1 unit = 150 meters. What is the length of the trail in meters?

- A. 600 m                                       C. 900 m  
 B. 750 m                                       D. 1050 m

8) An error was made: a student computed  $8 \times (-6)$  and got 48. What is the correct answer?

- A. 48 (correct)                               C. 2 (student should divide)  
 B.  $-48$  (positive times negative is negative)                       D. 14 (student should add)

9) If  $|x| = 25$ , list both possible values of  $x$ .

10) On a number line from 0 to 3 divided into tenths, point P is at 1.4 and point Q is at 2.8. What is the distance between points P and Q?



**Wisconsin Forward Exam Practice Test Answer Keys**

**How to use this Wisconsin Forward Exam 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 forward-moving review
3. rework the problem before reading the full explanation, using this reminder:  
Move forward with care: underline the task, solve neatly, and confirm the units.

**A calm Wisconsin correction routine turns every missed item into useful practice. Finish a round, review the missed steps, and use the next test to move forward.**



Scan me!  
For more practice  
& answers

## Wisconsin Practice Test Answers and Explanations

Review the three printed Forward Exam tests with practical, steady, and ready to keep moving habits.

### Practice Test 1 Answers and Explanations

- 1) **Choice C is correct.** (M.6.SP.B.5c, 6.SP.B.5c) Split the ordered data into two halves. The lower half is 10, 14, 16, 22, so  $Q1 = \frac{14+16}{2} = 15$ . The upper half is 24, 26, 30, 35, so  $Q3 = \frac{26+30}{2} = 28$ . The IQR is  $28 - 15 = 13$ .
- 2) **Choice A is correct.** (M.6.NS.B.2, 6.NS.B.2)  $8,925 \div 35 = 255$  exactly. Verify:  $35 \times 255 = 8,925$ .
- 3) **Choice B is correct.** (M.6.SP.B.5) Group 2 has a higher mean ( $80 > 75$ ), indicating better performance, but also a higher SD ( $8 > 5$ ), indicating more variability.
- 4) **Choice D is correct.** (M.6.SP.B.4) The bar centered at 2 pencils has a height of 4, meaning 4 students carry 2 pencils.
- 5) **The correct answer is 9.** (6.RP.A.3) Strawberries are the 5-part amount. Since  $15 \div 5 = 3$ , each part is 3, and bananas are 3 parts:  $3 \times 3 = 9$ .
- 6) **Choice A is correct.** (M.6.NS.C.6c) The vertical axis is scaled in groups of 50 miles. So 50 miles is shown as 1, 100 miles as 2, and 150 miles as 3, giving the points (1, 1), (2, 2), and (3, 3).
- 7) **The correct answer is 720 items.** (6.RP.A.1) First, find the unit rate:  $420 \div 7 = 60$  items per hour. Then multiply by 12 hours:  $60 \times 12 = 720$  items.
- 8) **Choice B is correct.** (6.RP.A.3) A  $10 \times 10$  grid has 100 squares. A percent is a ratio out of 100. So 35 out of 100 squares shaded =  $\frac{35}{100} = 35\%$ .
- 9) **Choice D is correct.** (6.RP.A.3) 20% of \$24 =  $0.20 \times 24 = \$4.80$ . Final price is  $\$24 - \$4.80 = \$19.20$ .
- 10) **Choice B is correct.** (6.RP.A.3, M.6.RP.A.3) Ratio 4 : 3 with 8 boys means multiply by 2:  $4 \times 2 = 8$  boys,  $3 \times 2 = 6$  girls.
- 11) **The correct answer is 12 gal/min.** (6.RP.A.2)  $144 \div 12 = 12$  gallons per minute.
- 12) **Choice D is correct.** (6.RP.A.3) Divide:  $2000 \div 1000 = 2$  liters.
- 13) **Choice B is correct.** (M.6.NS.C.7d) Interest:  $I = \$800 \times 0.025 \times 1 = \$20$ . Total:  $\$800 + \$20 = \$820$ .
- 14) **Choice B is correct.** (M.6.NS.C.7d) Using  $d = 60t$  with  $t = 2.5$ :  $d = 60 \times 2.5 = 150$  miles.
- 15) **Choice C is correct.** (M.6.EE.C.9) Budget A total:  $\$900 + \$300 + \$200 + \$100 = \$1500$ . Budget B total:  $\$700 + \$250 + \$200 + \$100 = \$1250$ . Difference:  $\$1500 - \$1250 = \$250$ .
- 16) **Choice C is correct.** (6.RP.A.3) Multiply the model height by the scale:  $10 \text{ cm} \times 0.8 \text{ m/cm} = 8 \text{ m}$ .
- 17) **The correct answer is 10.** (6.RP.A.3, M.6.RP.A.3) The ratio is 2.5 : 1. For 4 batches:  $2.5 \times 4 = 10$  cups of flour.
- 18) **Choice D is correct.** (M.6.NS.A.1) Keep the first fraction, invert the second, and multiply.
- 19) **Choice A is correct.** (M.6.NS.B.3, 6.NS.B.3) Add:  $2.25 + 3.75 = 6.0 \text{ km}$ .
- 20) **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.
- 21) **Choice A is correct.** (M.6.NS.B.4, 6.NS.B.4) This is a GCF problem. The GCF of 30 and 45 is 15. So she can make 15 bracelets with 2 beads of one color and 3 of the other in each.
- 22) **Choice C is correct.** (M.6.NS.B.4) Factors of 18: 1, 2, 3, 6, 9, 18. Factors of 24: 1, 2, 3, 4, 6, 8, 12, 24. Common factors: 1, 2, 3, 6. GCF is 6.
- 23) **Choice C is correct.** (M.6.NS.C.5, 6.NS.C.5) Opposites are numbers that are the same distance from zero but on opposite sides. 6 is 6 units right of zero, and  $-6$  is 6 units left of zero, making them opposites.
- 24) **Choice D is correct.** (M.6.NS.C.7c) Error analysis: Jordan confused absolute value with the original number. Absolute value  $|-7| = 7$  represents distance, which is always non-negative.
- 25) **Choice D is correct.** (M.6.NS.C.6c, 6.NS.C.6c) Distance from  $-1.4$  to 0 is  $|0 - (-1.4)| = 1.4$  units.
- 26) **Choice D is correct.** (M.6.NS.C.8, 6.NS.C.8) Points on an axis must have at least one coordinate equal to zero. The point (2,  $-4$ ) has both non-zero coordinates, so it is not on an axis.



---

Lab Notes for a Young Scientist

## Hi, Curious Scientist!

◇ 3 tests. So many experiments! You tested ideas. You watched what worked. You learned a lot. That's how scientists work—and how you work! ◇

★ **Scientists know:** mistakes are facts, not failures. Every problem you missed taught you something. You used those facts to do better next time. ★

### Lab Results

- **Hypothesis:** CONFIRMED! Practice makes you better.
- **Method:** STRONG! You try, watch, and adjust.
- **Data:** CAREFUL! You read and copy numbers right.
- **Conclusion:** READY! You can do this test.

**Scientist tip:** on test day, stay curious. Ask, "What is this asking?" Then experiment with your math tools. You will find the answer!

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 Scientist

# 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



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BRIGHTLY

PREPARE TODAY. **SUCCEED TOMORROW!**