

# 4 Maine

Through Year Assessment

GRADE  
**6**  
MATH

## PRACTICE TESTS

Standards Aligned Problem Solving  
For Comprehensive Assessment Programs

4

PRINTED  
TESTS



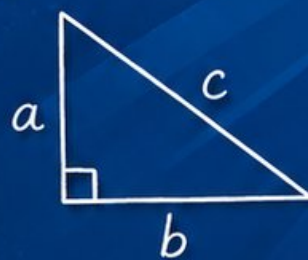
2

ONLINE  
TESTS



- ✓ Build Confidence
- ✓ Master Key Math Skills
- ✓ Answer Explanations for Every Question
- ✓ Test-Taking Strategies That Work

$$2x + 5 = 21$$
$$x = 8$$



$$\frac{3}{4} + \frac{1}{2} = \frac{5}{4}$$

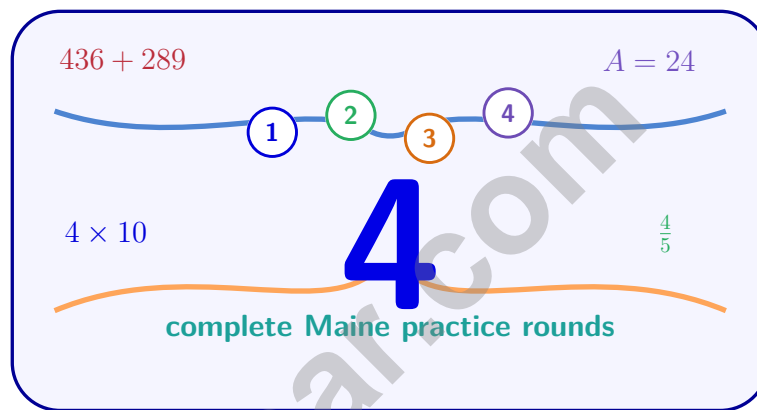


USE THESE TWO  
**ADDITIONAL ONLINE  
PRACTICE TESTS**

FOR EXTRA REVIEW AFTER  
THE PRINTED TESTS  
IN THIS BOOK.

# 4 Maine Through Year Assessment Grade 6 Math Practice Tests

*Standards-Aligned Through-Year Coastal Clarity for Maine Through Year Assessment*



Four complete 40-question Grade 6 practice rounds for Through Year Assessment, built for through-year coastal clarity 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, Maine Math Explorer!

Four focused rounds using through-year coastal clarity

This book gives you four full Grade 6 practice tests for Through Year Assessment. Each round uses rocky coastlines, forest roads, and careful year-round review as a fresh mental backdrop while you read closely, choose a smart strategy, show your work, and check whether your answer makes sense.

## Your Maine Practice Promise

Anchor each answer in evidence: read labels, build the model, and verify the result.

Read

Plan

Check

## How to Use This Book

A four-session routine for through-year coastal clarity

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.

**Maine review rhythm:** Use each test as a check-in, then let corrections guide the next review session.



## What Is Inside?

Four Through Year Assessment tests, 160 questions, and a full review path

| Part         | What You Will Practice   |
|--------------|--|
| Tests 1–2    | Foundation rounds for ratios, rational numbers, operations, and careful reading.                         |
| Tests 3–4    | Skill-building and final stamina rounds with expressions, equations, geometry, data, and problem models. |
| Answer Pages | Compact keys and explanations that show why each answer works.   |

The tests are mixed on purpose. Through-year coastal clarity means recognizing the skill even when the next question changes topic, changes format, or asks for an explanation.

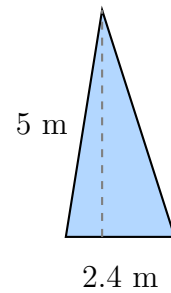


Scan me!  
For more practice  
& answers

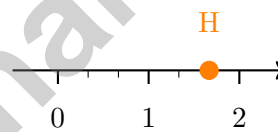
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- 1) A triangle printed on a sign has a base of 2.4 meters and a height of 5 meters. What is the area?



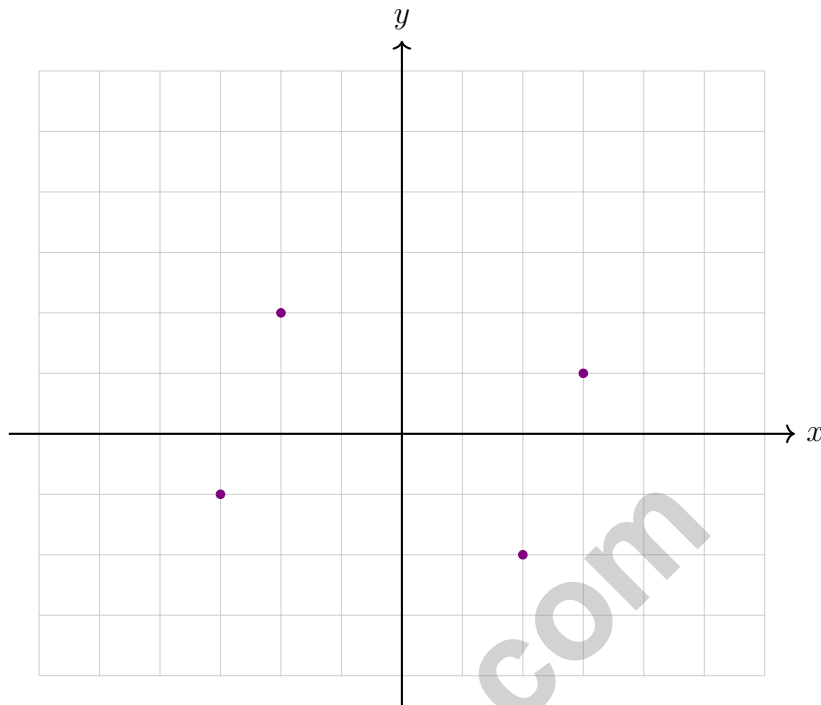
- A.  $3.4 \text{ m}^2$                        C.  $12 \text{ m}^2$   
 B.  $24 \text{ m}^2$                        D.  $6 \text{ m}^2$
- 2) The number line below shows tick marks at thirds. Point H is marked. What is the value of point H?



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



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3)

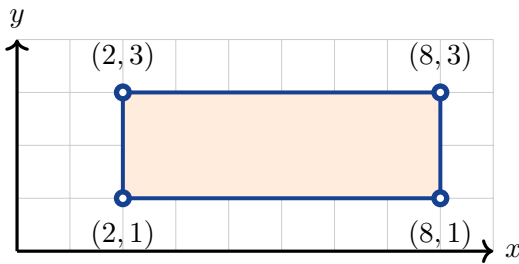
How many of the plotted points are in Quadrant I?

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

4) A student ordered  $-4.2$ ,  $-4.1$ ,  $0.3$  as:  $0.3$ ,  $-4.1$ ,  $-4.2$ . What error did the student make?

- A. Forgot that negatives are less than positives
- B. Thought  $-4.2 > -4.1$
- C. Confused decimal places
- D. Used correct order



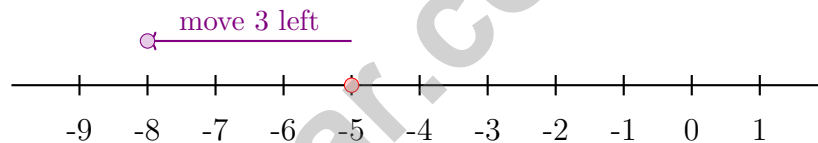


5)

What is the height (vertical length) of the rectangle with vertices at  $(2, 1)$ ,  $(8, 1)$ ,  $(8, 3)$ , and  $(2, 3)$ ?

- |                                     |                                     |
|-------------------------------------|-------------------------------------|
| <input type="checkbox"/> A. 2 units | <input type="checkbox"/> C. 6 units |
| <input type="checkbox"/> B. 4 units | <input type="checkbox"/> D. 8 units |

6) Show  $-5 + (-3)$  on a number line.



- |   |   |
|---|---|
| <input type="checkbox"/> A. Starts at $-5$ , ends at $-8$ , sum is $-8$ | <input type="checkbox"/> C. Starts at $0$ , ends at $-8$ , sum is $-8$  |
| <input type="checkbox"/> B. Starts at $-5$ , ends at $-2$ , sum is $-3$ | <input type="checkbox"/> D. Starts at $-5$ , ends at $-3$ , sum is $-2$ |

7) A trapezoid with bases of 11 m and 7 m has a height of 5 m. What is the area?

- |  |  |
|--|--|
| <input type="checkbox"/> A. $23 \text{ m}^2$ | <input type="checkbox"/> C. $90 \text{ m}^2$ |
| <input type="checkbox"/> B. $35 \text{ m}^2$ | <input type="checkbox"/> D. $45 \text{ m}^2$ |



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1) A box plot shows the distribution of test scores. The line inside the box marks the:

- A. Mean  C. Mode  
 B. Range  D. Median

2) Read the question: “What is the temperature in my room right now?”

Why is this NOT a statistical question?

- A. It does not mention many people.  D. It has one fixed answer at one moment in time.  
 B. It is asked too quickly.  
 C. Temperature is hard to measure.

3) Find the Mean Absolute Deviation for: 6, 8, 10, 12, 14.

4) Which statement describes an **unlikely** event (probability between 0 and 0.5)?

- A. The probability is 0.9.  C. The probability is 0.6.  
 B. The probability is 0.15.  D. The probability is 1.0.

5) Raw data: 71, 78, 75, 82, 79, 81, 76, 83. If organized in a stem-and-leaf plot, what is the value of the 4th data point when listed in order?

- A. 76  C. 79  
 B. 78  D. 81



6) A school cafeteria serves 400 lunches. The circle graph shows  $\frac{3}{8}$  are vegetarian. How many lunches are vegetarian?

A. 120

C. 150

B. 100

D. 175

7) For 3, 4, 5, 4, 6, 5, 7, 4, find the mean absolute deviation. The mean is 4.75.

8) Which characteristic is MOST important when deciding to use a dot plot instead of a histogram?

A. You need to show the median only

C. The dataset is large (over 100

B. The dataset is small and you want

points)

to see each value

D. The data represents categories, not numbers

9) A restaurant bill is \$32. You want to leave a 15% tip. How much should the tip be?

A. \$3.20

C. \$4.80

B. \$4.00

D. \$5.50

10) Reduce the ratio 16 : 24 : 40 to lowest terms by dividing by the greatest common factor (GCF).

A. 4 : 6 : 10

C. 8 : 12 : 20

B. 2 : 3 : 10

D. 2 : 3 : 5



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& answers

1) Simplify  $15z - 8z + 2z - z$ .

A.  $6z$

C.  $24z$

B.  $7z$

D.  $8z$

2) A builder needs 3,675 nails distributed equally among 25 construction projects. How many nails per project?

A. 147

C. 155

B. 150

D. 160

3) Which multiplication has the decimal point in the correct place?

A.  $2.3 \times 5.1 = 117.3$

C.  $2.3 \times 5.1 = 11.73$

B.  $2.3 \times 5.1 = 1173$

D.  $2.3 \times 5.1 = 1.173$

4) Find the LCM of 4 and 6.

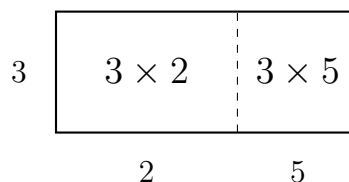
A. 12

C. 24

B. 10

D. 8

5) The area model below shows a rectangle divided into two parts. Which expression does it represent?



A.  $3(2 + 5)$

C.  $5(3 + 2)$

B.  $2(3 + 5)$

D.  $(3 + 2)(3 + 5)$



6) A point is on the  $y$ -axis between Quadrants I and II. Which of the following could be its coordinates?

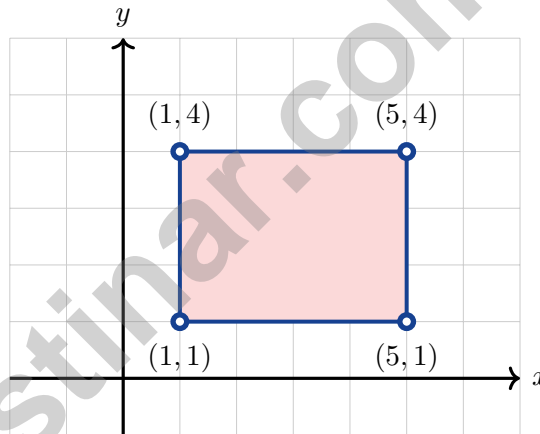
A.  $(0, -3)$

C.  $(4, 0)$

B.  $(0, 4)$

D.  $(-4, 0)$

7) The table shows  $h = 2, 4, 6$  and  $s = 8, 16, 24$ . What is the constant of proportionality?



8)

What is the width (horizontal length) of the rectangle with vertices at  $(1, 1)$ ,  $(5, 1)$ ,  $(5, 4)$ , and  $(1, 4)$ ?

A. 3 units

C. 5 units

B. 6 units

D. 4 units



Scan me!  
For more practice  
& answers

## Maine Through Year Assessment Practice Test Answer Keys

**How to use this Maine Through Year Assessment 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 through-year coastal clarity
3. rework the problem before reading the full explanation, using this reminder: Anchor each answer in evidence: read labels, build the model, and verify the result.

**A calm Maine correction routine turns every missed item into useful practice. Use each test as a check-in, then let corrections guide the next review session.**



Scan me!  
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& answers

## Maine Practice Test Answers and Explanations

Review the four printed Through Year Assessment tests with anchored, observant, and ready for the next checkpoint habits.

### Practice Test 1 Answers and Explanations

- Choice D is correct. **(6.G.A.1)**  $A = \frac{1}{2} \times 2.4 \times 5 = 6 \text{ m}^2$ .
- Choice A is correct. **(6.NS.C.6c)** Point H is located  $\frac{2}{3}$  of the way from 1 to 2, which is  $1\frac{2}{3}$ .
- Choice A is correct. **(6.NS.C.8)** Only the point (3, 1) has both positive  $x$  and positive  $y$  coordinates, placing it in Quadrant I.
- Choice A is correct. **(6.NS.C.7b)** The correct order is  $-4.2 < -4.1 < 0.3$ . Negatives are always less than positive numbers.
- Choice A is correct. **(6.NS.C.8)** Height is the vertical distance:  $|3 - 1| = 2$  units.
- Choice A is correct. **(6.NS.B.3)**  $-5 + (-3) = -8$ . Start at  $-5$  and move 3 units left, landing at  $-8$ .
- Choice D is correct. **(6.G.A.1)** Area =  $\frac{1}{2}(11 + 7) \times 5 = \frac{1}{2}(18)(5) = 45 \text{ m}^2$ .
- Choice C is correct. **(6.G.A.2)**  $V = 3.5 \times 2 \times 1.5 = 7 \times 1.5 = 10.5 \text{ ft}^3$ .
- Choice D is correct. **(6.G.A.1)** Width:  $10 - 2 = 8$  units. Height:  $6 - 2 = 4$  units. Area =  $8 \times 4 = 32$  square units.
- Choice A is correct. **(6.G.A.4)** The net has a  $4 \times 6$  rectangle (one face) surrounded by four rectangles of dimensions  $1 \times 6$  and  $1 \times 4$  (the other faces). This corresponds to a prism with dimensions  $1 \times 4 \times 6$ .
- Choice A is correct. **(6.NS.C.8)** Translate left by subtracting from  $x$ :  $3 - 4 = -1$ . Translate down by subtracting from  $y$ :  $5 - 2 = 3$ . So  $A' = (-1, 3)$ .
- Choice D is correct. **(6.EE.A.1)** Parentheses first:  $10 - 5 = 5$ . Exponent next:  $2^2 = 4$ . Then multiply:  $5 \times 4 = 20$ .
- Choice A is correct. **(6.EE.B.6)**  $3j + 5 = 20$ , so  $3j = 15$  and  $j = 5$ .
- Choice C is correct. **(6.G.A.3)** Side length = 4 units. Perimeter =  $4 \times 4 = 16$  units.
- Choice D is correct. **(6.SP.B.4)**  $Q_3 = Q_1 + \text{IQR} = 32 + 18 = 50$ .
- Choice C is correct. **(6.EE.C.9)** For  $c = 12j$ , the line passes through (0, 0), (5, 60), (10, 120), and (15, 180). The constant rate is \$12 per jersey, so this represents a proportional relationship.
- Choice C is correct. **(6.AR.EA.2)** Shortfall: 15% of \$20000 =  $0.15 \times 20000 = \$3000$ .
- Choice C is correct. **(6.RP.A.3)** Multiply the drawing width by the scale:  $3.5 \times 4 = 14$  feet.
- The correct answer is The unit rate is 25 items per hour, and the y-value when  $x = 1$  is 25. **(6.RP.A.3a)** A is correct because  $50 \div 2 = 25$  items per hour. D is correct because when  $x = 1$ ,  $y = 25$ . Choice B is false for a proportional relationship, Choice C should be  $y = 25x$ , and Choice E is false.
- The correct answer is 52%. **(6.RP.A.3c)** A  $10 \times 10$  grid has 100 squares total. If 52 are shaded, the percent is  $\frac{52}{100} = 52\%$ .
- Choice C is correct. **(6.NS.A.1)**  $\frac{7}{8} \times \frac{4}{1} = \frac{28}{8} = \frac{7}{2} = 3\frac{1}{2}$ .
- The correct answer is 120. **(6.RP.A.3c)** 25% of 480 =  $0.25 \times 480 = 120$  products were sold online.
- Choice A is correct. **(6.NS.B.2)** Use long division or estimation:  $24 \times 50 = 1,200$ , leaving 48. Then  $48 \div 24 = 2$ , so  $1,248 \div 24 = 52$ .
- Choice A is correct. **(6.NS.B.3)** Multiply both by 10:  $8.4 \div 7 = 1.2$ .
- Choice A is correct. **(6.NS.B.4)** Multiples of 10: 10, 20, 30, 40, ... Multiples of 15: 15, 30, 45, ... The least common multiple is 30.
- Choice B is correct. **(6.NS.B.4)** GCF of 15 and 10 is 5. Thus  $15 + 10 = 5(3 + 2)$ . Choice A uses factor 3 (not the greatest); Choice C uses 2 (not a common factor of both); Choice D uses 10 but yields 30, not 25.
- The correct answer is 4. **(6.RP.A.3)** Ratio 2 : 5 with flour = 10 cups: each part is  $10 \div 5 = 2$  cups. Sugar:  $2 \times 2 = 4$  cups.



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Lab Notes for a Young Scientist

## Hi, Curious Scientist!

◇ 4 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 4 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:

**4** 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)**  
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PRACTICE  
REGULARLY



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