

10

Maine

Through Year Assessment

GRADE
6
MATH

PRACTICE TESTS

Standards-Aligned Review
Mixed Practice & Answer Key



10 PRINTED TESTS

Realistic practice to build confidence and mastery



2 ONLINE TESTS

Extra practice for continued success



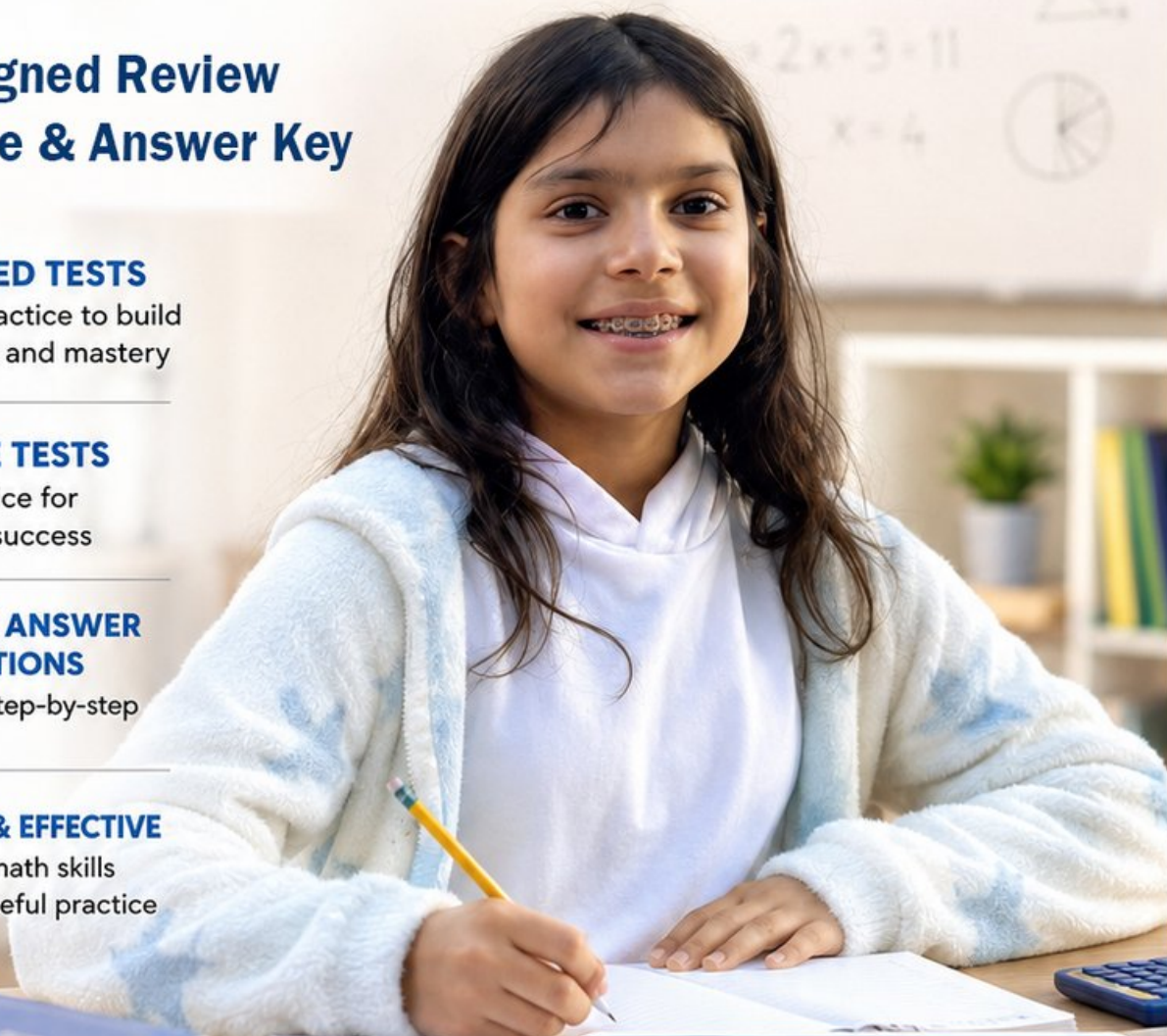
DETAILED ANSWER EXPLANATIONS

Learn with step-by-step solutions



FOCUSED & EFFECTIVE

Target key math skills with purposeful practice



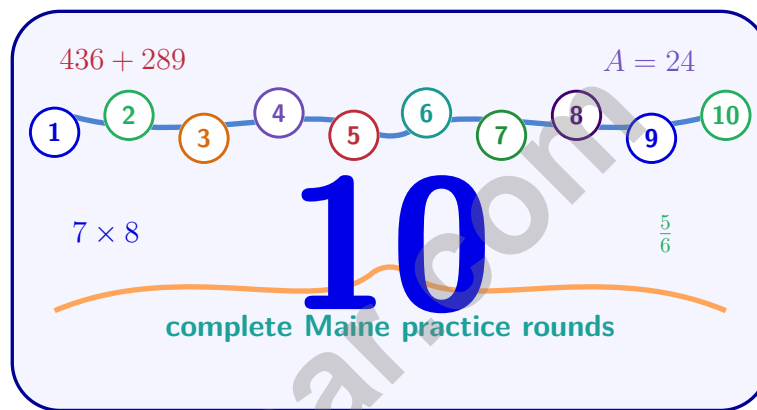
10 PRINTED TESTS
+ 2 ONLINE TESTS

Use these two additional online practice tests for extra review after the printed tests in this book.

PRACTICE • REVIEW • SUCCEED

10 Maine Through Year Assessment Grade 6 Math Practice Tests

Standards-Aligned Careful Lighthouse Thinking for Maine Through Year Assessment



Ten complete 40-question Grade 6 practice rounds for Through Year Assessment, with ratios, rational numbers, expressions, equations, geometry, statistics, answer keys, and clear explanations for every item.

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 ©

Welcome, Maine Math Explorer!

Ten steady rounds on a lighthouse review trail

This book gives you ten full Grade 6 practice tests for Through Year Assessment. Each round uses rocky coastlines, quiet forests, and clear guide lights 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

Use the labels as your guide light when a diagram appears. I will slow down for the question, circle what matters, solve one step at a time, and use mistakes as clues for getting stronger.

Read

Plan

Check

How to Use This Book

A ten-session routine for careful lighthouse thinking

1. **Preview the skills.** Read the quick review pages before the first test.
2. **Take one test at a time.** Work in a quiet place and answer all 40 questions.
3. **Mark your confidence.** Put a small star beside problems you solved with a strong plan.
4. **Check, then retry.** For missed questions, try the problem again before reading the explanation.
5. **Track your next move.** Use the growth log to name one habit and one skill for the next test.

Maine review rhythm: Test one day, correct carefully the next day, then return for the next round when your corrections feel clear.



What Is Inside?

Ten Through Year Assessment tests, 400 questions, and a full review path

| Part | What You Will Practice |
|--------------|--|
| Tests 1–3 | Warm-up rounds for ratios, rational numbers, operations, and careful reading. |
| Tests 4–6 | Skill-building rounds with expressions, equations, geometry, data, and problem models. |
| Tests 7–9 | Stamina rounds for mixed review, neat work, and flexible strategy choices. |
| Test 10 | Final Maine round to show growth across the whole book. |
| Answer Pages | Compact keys and explanations that show why each answer works. |

The tests are mixed on purpose. Careful lighthouse thinking means recognizing the skill even when the next question changes topic.

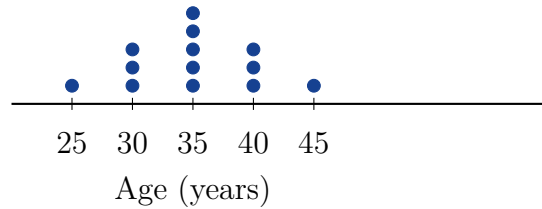


Scan me!
For more practice
& answers

Table of Contents

| | | |
|---|-------|------------|
| ★ Practice Test 1 | _____ | 15 |
| ★ Practice Test 2 | _____ | 32 |
| ★ Practice Test 3 | _____ | 48 |
| ★ Practice Test 4 | _____ | 63 |
| ★ Practice Test 5 | _____ | 77 |
| ★ Practice Test 6 | _____ | 91 |
| ★ Practice Test 7 | _____ | 108 |
| ★ Practice Test 8 | _____ | 122 |
| ★ Practice Test 9 | _____ | 135 |
| ★ Practice Test 10 | _____ | 151 |
| Practice Test Answer Keys | _____ | 166 |
| Practice Test Answers and Explanations | _____ | 172 |

- 1) A dot plot displays the ages of people at a yoga class. The distribution appears roughly symmetric with a peak at 35 years. This suggests:



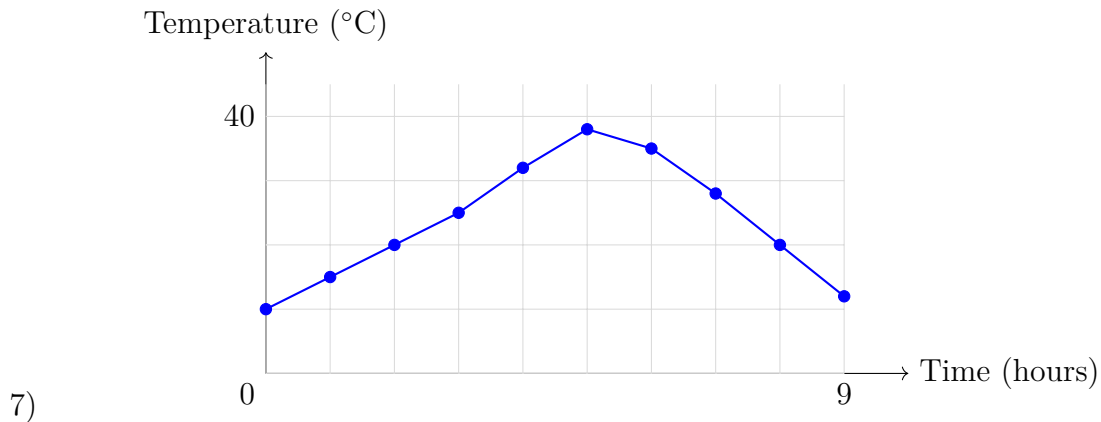
- A. The mean is less than the median
 B. The mean cannot be determined from a dot plot
 C. The mean is greater than the median
 D. The mean is approximately equal to the median
- 2) A student uses a scale drawing where 1 inch = 4 feet. She measures a desk as 3 inches in the drawing. She says the actual desk is $\frac{3}{4}$ feet long. Which is the student's error?
- A. The units are wrong; she should say inches, not feet.
 B. She divided instead of multiplied; the actual length is 12 feet.
 C. She used the scale backward; the actual length is 12 inches.
 D. The measurement of 3 inches is wrong.

- 3) Compute: $\frac{8}{9} \div \frac{4}{5}$

- A. $\frac{32}{45}$
 B. $\frac{10}{9}$
 C. $\frac{36}{40}$
 D. $\frac{9}{8}$

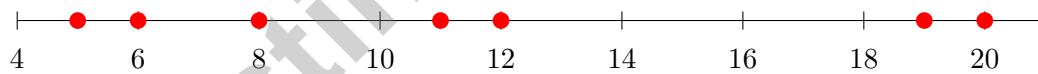


Scan me!
For more practice
& answers



This line graph shows how outdoor temperature changed from 6 AM to 3 PM. Which statement is TRUE?

- A. Temperature peaked around noon (5 hours after start)
 - B. Temperature decreased continuously all day
 - C. Temperature was highest at 6 AM
 - D. Temperature was constant throughout the day
- 8) The data set 8, 12, 5, 19, 11, 6, 20 is displayed on a number line. What is the range?



- A. 5
 - B. 12
 - C. 15
 - D. 20
- 9) Two recipes both use raisins and almonds. Recipe A has a ratio of raisins to almonds of 3 : 5. Recipe B has a ratio of raisins to almonds of 6 : 10. Which statement is true?
- A. Recipe A and Recipe B have different proportions; you cannot use them interchangeably.
 - B. Recipe A has more almonds per raisin than Recipe B.
 - C. Recipe B has more raisins per almond than Recipe A.
 - D. Recipe A and Recipe B have the same proportion of raisins to almonds.



Scan me!
For more practice & answers

1) Which data set would be best displayed in a stem-and-leaf plot?

- A. Names of students
- B. Favorite colors
- C. Test scores ranging from 50 to 100
- D. Types of fruits

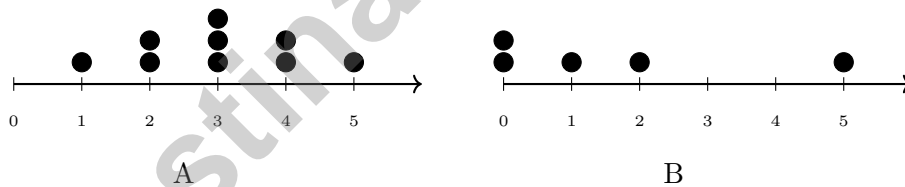
2) A concert venue has seating for at most 2,500 people. Which inequality represents the capacity c ?

- A. $c > 2,500$
- B. $c \geq 2,500$
- C. $c < 2,500$
- D. $c \leq 2,500$

3) A climate scientist collects temperature data from 100 cities. What is the population?

- A. The 100 cities sampled
- B. All cities on Earth
- C. The temperature readings
- D. The countries represented

4) Which dot plot shows data with a symmetric distribution?



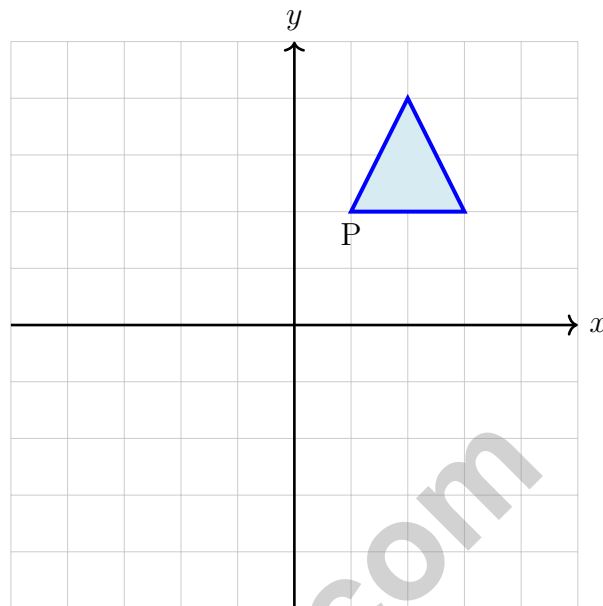
- A. Plot A (symmetric)
- B. Plot B (skewed)
- C. Both are symmetric
- D. Neither is symmetric

5) For which data set is the mean equal to the median?

- A. 1, 2, 3, 4, 20
- B. 2, 4, 6, 8, 10
- C. 1, 2, 2, 2, 10
- D. 5, 10, 15, 20, 100



Scan me!
For more practice
& answers



1)

A triangle has vertices at $P(1, 2)$, $Q(3, 2)$, and $R(2, 4)$. If the triangle is translated 3 units right and 1 unit up, what are the coordinates of the image vertex P' ?

- A. (4, 3) C. (-2, 1)
 B. (4, 5) D. (1, 3)

2) A recipe calls for \$12 worth of ingredients. The ingredients are on sale for 25% off. How much will the ingredients cost?

- A. \$3 C. \$9
 B. \$6 D. \$12



Scan me!
For more practice
& answers

3) If $\frac{2}{3} = \frac{8}{x}$, what is x ?

A. 10

C. 14

B. 16

D. 12

4) A ribbon is 36 inches long. How many yards is the ribbon? (Use 1 yard = 36 inches.)

A. 1 yard

C. 3 yards

B. 2 yards

D. 12 yards

5) A video game costs \$60 this year. Next year, the price increases by 10%. What will the new price be?

A. \$64

C. \$70

B. \$66

D. \$72

6) In a group of 200 people, 50 are left-handed. What percent are left-handed?



Maine Through Year Assessment Practice Test Answer Keys

How to use this section with a Grade 6 student:

1. check the answer first
2. mark questions to try again
3. rework the problem before reading the full explanation

A calm correction routine turns every missed item into useful practice.

Testinar.com



Practice Test Answers and Explanations

Practice Test 1 Answers and Explanations

- Choice D is correct.** (6.SP.A.2) For a symmetric distribution, the mean and median are roughly equal, both clustering near the center peak at 35 years.
- Choice B is correct.** (6.G.A.4) To find the actual length from a drawing length, multiply by the scale factor: 3 inches \times 4 feet per inch = 12 feet. The student divided ($3 \div 4 = \frac{3}{4}$) instead of multiplying.
- Choice B is correct.** (6.QR.EA.1) $\frac{8}{9} \times \frac{5}{4} = \frac{40}{36} = \frac{10}{9}$.
- Choice A is correct.** (6.SP.B.4) The table shows apples to oranges as 6 : 9. Divide both parts by 3 to get the equivalent simplified ratio 2 : 3.
- Choice A is correct.** (6.SP.A.2) Table ratio: 25 : 5 = 5 : 1 (divide by 5). Farmer's ratio: 150 : 30 = 5 : 1 (divide by 30). The two ratios are equivalent, so the farmer is using the correct proportional relationship.
- Choice B is correct.** (6.SP.B.4) A proportional relationship has a constant ratio between variables. Its graph is a straight line through the origin, and the constant ratio is the constant of proportionality.
- Choice A is correct.** (6.SP.B.5) The graph shows the line reaching its highest point at the 5-hour mark, which corresponds to noon. The other statements contradict the visual data.
- Choice C is correct.** (6.RP.A.3) Maximum is 20, minimum is 5. Range = $20 - 5 = 15$.
- Choice D is correct.** (6.EE.C.9) Simplify Recipe B: 6 : 10 = 3 : 5 (divide by 2). Since both ratios simplify to 3 : 5, they are equivalent and have the same proportion.
- Choice A is correct.** (6.NS.B.3) Nice comparison: find each unit price. Option A is $4.80 \div 6 = 0.80$ dollars per apple, and Option B is $6.40 \div 8 = 0.80$ dollars per apple. Neither is lower; they cost the same per apple.
- Choice A is correct.** (6.NS.B.3) Honey Flakes cost $3.60 \div 12 = \$0.30$ per ounce. Crispy Oats cost $5.12 \div 16 = \$0.32$ per ounce. Honey Flakes has the lower unit price.
- Choice A is correct.** (6.QR.EA.3) 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).
- Choice A is correct.** (6.SP.B.4) $\frac{7}{20} = \frac{35}{100} = 0.35 = 35\%$ (multiply numerator and denominator by 5).
- Choice C is correct.** (6.NS.C.7b) 65% of 200 = $0.65 \times 200 = 130$ gallons.
- Choice C is correct.** (6.NS.B.4) Unit price: $12 \div \frac{3}{4} = 12 \times \frac{4}{3} = 16$ dollars per pound.
- Choice A is correct.** (6.NS.C.8) Multiply: $8 \times 8 = 64$ fl oz.
- Choice B is correct.** (6.QR.EA.3) Assets: $\$250 + \$400 + \$150 = \800 . Net worth: $\$800 - \$200 = \$600$.
- The correct answer is Statements B, C, and E are correct: Time is the independent variable (you choose how long to run); the equation is $d = 8t$; and the constant rate is 8 mph.** (6.EE.A.1) Correct: B (time is independent—you control it), C (equation $d = 8t$ is correct), and E (the rate is indeed 8 mph). Incorrect: A (distance depends on time), D (reverses the relationship).
- Choice C is correct.** (6.EE.A.2b) Rent is 30% of income: $0.30 \times 2000 = \$600$.
- The correct answer is 100.** (6.EE.B.6) $A = \frac{1}{2} \times 25 \times 8 = 100 \text{ ft}^2$.
- Choice A is correct.** (6.EE.B.8) $8,925 \div 35 = 255$ exactly. Verify: $35 \times 255 = 8,925$.
- Choice A is correct.** (6.NS.B.2) When we divide 20 by each number: $20 \div 1 = 20$, $20 \div 2 = 10$, $20 \div 4 = 5$, $20 \div 5 = 4$, $20 \div 10 = 2$, $20 \div 20 = 1$. All these are factors.
- Choice A is correct.** (6.EE.C.9) Distributive property: $6(2 + 9) = 6 \cdot 2 + 6 \cdot 9 = 12 + 54 = 66$. Choice A shows the expanded form before simplifying.
- Choice C is correct.** (6.G.A.1) On a number line, -3 is to the right of -8 , so -3 is greater than -8 . The fewer negative units from zero, the greater the number.
- Choice C is correct.** (6.G.A.2) Both $|5| = 5$ and $|-5| = 5$. Numbers equidistant from zero on opposite sides have the same absolute value.
- Choice D is correct.** (6.RP.A.3) Statement D is false. -1.5 is actually LESS than -1.4 (further to the left on the number line). The others are all true.



Hi, Math Champion!

◇ You trained hard! 10 full practice tests is real practice. Your math game is way better now than when you started. ◇

★ **Coach's truth:** kids who practice get better. You practiced. You got better. That's how it works!
★

Your Game Stats

- **Energy:** HIGH! You can finish a long test.
- **Smart Plays:** You know lots of strategies.
- **Calm Head:** You stay cool with hard problems.
- **Game-Day Ready:** You feel strong and prepared.

Coach's tip: the night before the test, get good sleep. Eat a good breakfast. Bring a sharp pencil. Trust your training!

If you want to share something or ask a question, please email me at jay@testinar.com.

Jay Daie

Your Math Coach

PRACTICE MORE. ACHIEVE MORE. SUCCEED!

This **Grade 6 Math Practice Tests** book is designed to help students build strong math skills, deepen their understanding of key concepts, and gain the confidence they need to succeed on any test.

With 10 full-length printed tests and 2 online tests, students get the review, practice, and realistic test experience they need to improve accuracy, strengthen problem-solving abilities, and reach their full potential.

Perfect for classroom use, homework, test preparation, and extra practice at home.

PERFECT FOR:

- ✓ Classroom Practice
- ✓ Homework & Review
- ✓ Independent Learning
- ✓ Test Preparation
- ✓ Skill Reinforcement
- ✓ Building Confidence



**CONFIDENCE TODAY.
SUCCESS TOMORROW!**

WHAT STUDENTS WILL GAIN



Stronger Math Skills

Build a solid foundation through targeted practice and review.



Better Problem Solving

Develop logical thinking and effective solution strategies.



Deepen Understanding

Reinforce key math concepts aligned with standards.



Test Confidence

Get familiar with test formats and improve accuracy.



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

Extra online practice to reinforce learning and build confidence.

MORE PRACTICE. GREATER RESULTS.

Give your child the tools needed to develop strong math skills, confidence, and a positive attitude toward learning.



10 PRINTED
PRACTICE TESTS



2 ONLINE
PRACTICE TESTS



DETAILED ANSWER
EXPLANATIONS