

10

Ohio OST

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



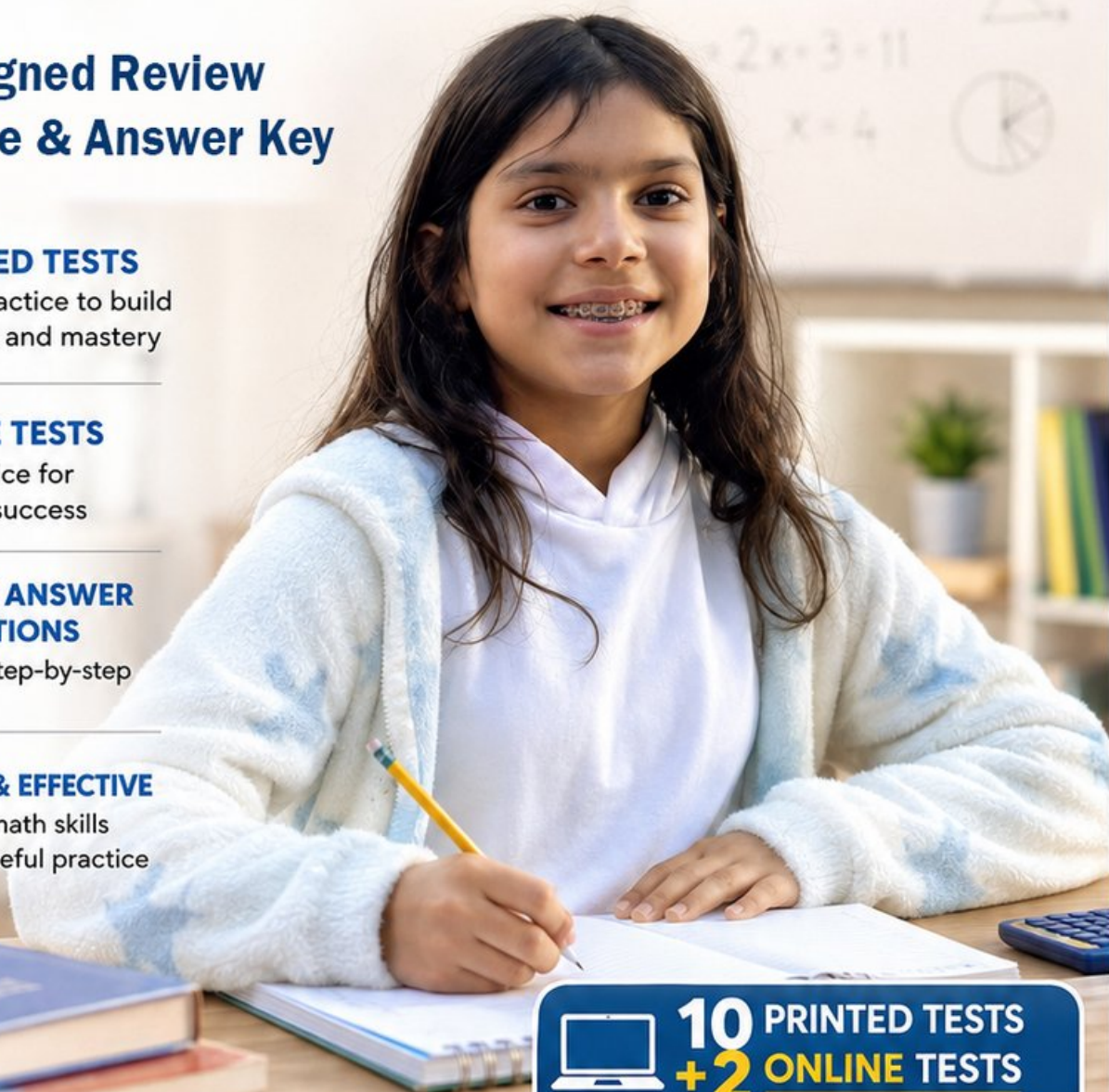
DETAILED ANSWER EXPLANATIONS

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 Ohio OST Grade 6 Math Practice Tests

Standards-Aligned Practical, Organized Reasoning for Ohio's State Tests



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

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Welcome, Ohio Math Explorer!

Ten steady rounds on a Buckeye State skills route

This book gives you ten full Grade 6 practice tests for OST. Each round uses river cities, open fields, and organized practice habits as a fresh mental backdrop while you read closely, choose a smart strategy, show your work, and check whether your answer makes sense.

Your Ohio Practice Promise

Write the rule or relationship before calculating. 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 practical, organized reasoning

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.

Ohio 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 OST 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 Ohio 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. Practical, organized reasoning means recognizing the skill even when the next question changes topic.



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1) What is the median of the data set: 3, 7, 9, 12, 15?

A. 9

C. 12

B. 7

D. 10.2

2) How many $\frac{1}{4}$ -cup servings are in 2 cups?

A. 6

C. $\frac{1}{2}$

B. 8

D. 4

3) Which fraction is equivalent to 72%?

A. $\frac{72}{1000}$

C. $\frac{100}{72}$

B. $\frac{28}{100}$

D. $\frac{72}{100}$

4) A worker saves 15% of her salary. If she saves \$180 per month, what is her monthly salary?

Savings: 15% =\$180	Rest = 85%
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Total Salary = ?

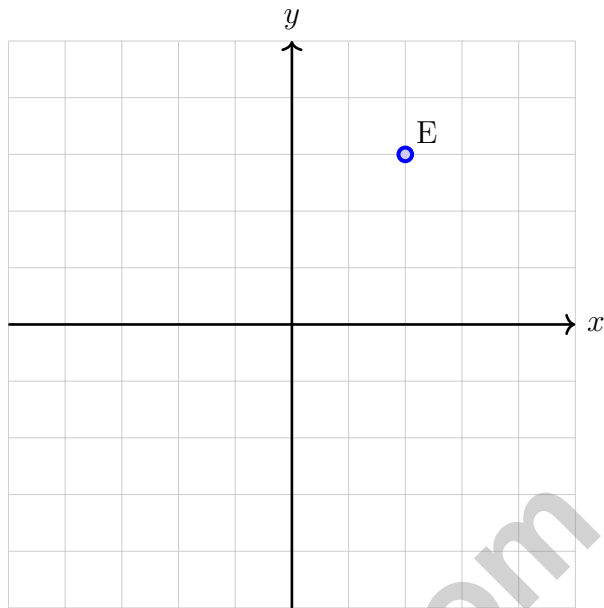
A. \$1000

C. \$1400

B. \$1800

D. \$1200





9)

Point E is located at $(2, 3)$. If it is translated 3 units to the right and 2 units down, what are the coordinates of its image E' ?



1) What is $-7 + 3$?

A. -10

C. 4

B. -4

D. 10

2) A bakery sells cookies for c cents each. A customer buys 6 cookies. Which expression shows the total cost in cents?

A. $c + 6$

C. $c - 6$

B. $6c$

D. $\frac{c}{6}$

3) A water tank fills at a rate of 8 gallons per minute. If m is the number of minutes and g is the total gallons filled, write an equation.

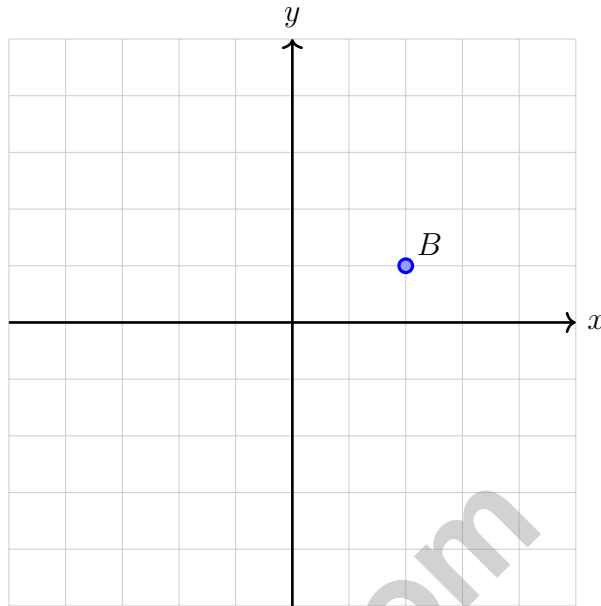
A. $m = 8g$

C. $g = m + 8$

B. $m = g + 8$

D. $g = 8m$





4)

A point B at $(2, 1)$ is reflected over the y -axis. What are the coordinates of B' ?

- A. $(2, -1)$
- B. $(-2, 1)$
- C. $(2, 1)$
- D. $(-2, -1)$

5) A circular clock face has a diameter of 10 inches. Using $\pi \approx 3.14$, what is the approximate area of the clock face?

- A. 31.4 in^2
- B. 62.8 in^2
- C. 78.5 in^2
- D. 314 in^2

6) Which question is BEST written as a statistical question?

- A. What is the area of a rectangle with length 5 and width 3?
- B. How many books are in our school library?
- C. What is the average number of pages in novels written in the past 10 years?
- D. Who is the principal of my school?



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1) Divide: $15.6 \div 2$

A. 7.8

C. 13.6

B. 78

D. 31.2

2) A graph shows the relationship between the number of soccer practice hours and the number of goals scored. The points (2, 6) and (5, 15) are on the line.

What is the unit rate (goals per practice hour)?

A. 2 goals per hour

C. 5 goals per hour

B. 6 goals per hour

D. 3 goals per hour

3) A warehouse contains 800 boxes. Of these, 37.5% are marked fragile. How many boxes are marked fragile?

A. 300

C. 200

B. 250

D. 500

4) A model airplane is built at a scale of 1 : 200. If the real airplane is 60 meters long, how long is the model in centimeters?

A. 15 cm

C. 25 cm

B. 20 cm

D. 30 cm

5) A tape measure shows a width of 90 centimeters. How many millimeters is this? (Use 1 centimeter = 10 millimeters.)

A. 900 mm

C. 9,000 mm

B. 9 mm

D. 0.9 mm



6) What is the GCF of 27, 36, and 54?

A. 9

C. 27

B. 18

D. 54

7) Which expression shows the distributive property correctly?

A. $5(2 + 8) = 10 + 8$

C. $5(2 + 8) = 5 + 2 + 5 + 8$

B. $5(2 + 8) = 10 + 40$

D. $5(2 + 8) = 50$

8) A golf player's score relative to par is tracked as: hole 1 is -2 (two under par), hole 2 is $+1$ (one over par), hole 3 is -1 (one under par). What is the total score relative to par after three holes?

A. $+2$

C. $+4$

B. 0

D. -2

9) A construction crew pours concrete at a constant rate. The table shows their progress. How many hours are needed to pour 300 cubic yards?

Concrete (cu yd)	Time (hours)
50	4
300	?



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Ohio OST 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.

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Practice Test Answers and Explanations

Practice Test 1 Answers and Explanations

- 1) **Choice A is correct.** **(6.NS.7d)** The data is already ordered. The median is the middle value: 9.
- 2) **Choice B is correct.** **(6.SP.5d)** You are counting how many $\frac{1}{4}$ -cup servings fit inside 2 cups—that's a division problem: $2 \div \frac{1}{4}$. Rewrite as 2×4 , which equals 8 servings.
- 3) **Choice D is correct.** **(6.G.1)** Percent means "per 100." So $72\% = \frac{72}{100}$.
- 4) **Choice D is correct.** **(6.SP.2)** If 15% of salary is \$180, then salary = $\$180 \div 0.15 = \1200 .
- 5) **Choice C is correct.** **(6.SP.5c)** Actual dimensions: $5 \times 2 = 10$ m and $3 \times 2 = 6$ m. Perimeter: $2(10 + 6) = 32$ m.
- 6) **Choice A is correct.** **(6.RP.1)** $3,744 \div 16 = 234$. The restaurant received 234 boxes.
- 7) **Choice C is correct.** **(6.NS.2)** $\frac{5}{26} \times 520 = \frac{2600}{26} = 100$ observations.
- 8) **The correct answer is 44.** **(6.NS.3)** $V = 5.5 \times 2 \times 4 = 11 \times 4 = 44 \text{ m}^3$.
- 9) **The correct answer is (5, 1).** **(6.NS.8)** Translate right: add 3 to the x -coordinate: $2 + 3 = 5$. Translate down: subtract 2 from the y -coordinate: $3 - 2 = 1$. So $E' = (5, 1)$.
- 10) **Choice D is correct.** **(6.NS.3)** The bars for 2 visits and 3 visits have heights of 3 and 4 respectively. Total: $3 + 4 = 7$ students.
- 11) **Choice D is correct.** **(6.EE.8)** Look at the lengths in the bar: red takes 2 equal units and blue takes 3 equal units. Red to blue is 2 : 3.
- 12) **Choice C is correct.** **(6.SP.2)** Simplify 5 : 15 by dividing both parts by 5 to get 1 : 3. That matches the phrase "for every 1 apple there are 3 oranges," so both statements describe the same ratio.
- 13) **Choice D is correct.** **(6.SP.4)** The unit rate is $3 \div 5 = 0.60$ dollars per ticket. Statements A, B, and C are all correct: one ticket at \$0.60, five tickets at \$3.00, and twenty-five tickets at \$15.00.
- 14) **Choice A is correct.** **(6.NS.6c)** Unit price is total cost divided by number of units: $\$12 \div 8 = \1.50 per pound.
- 15) **Choice A is correct.** **(6.NS.7d)** Row A is 4 : 12, which simplifies to 1 : 3 by dividing both terms by 4. All rows show equivalent ratios that simplify to 1 : 3.
- 16) **Choice A is correct.** **(6.EE.2c)** A proportional relationship with unit rate 3 means $y = 3x$. Option A has points (1, 3), (2, 6), (3, 9), which satisfy $y = 3x$. The other options do not have this constant ratio.
- 17) **Choice D is correct.** **(6.EE.2b)** 60% of 15 = $0.60 \times 15 = 9$ kg.
- 18) **The correct answer is The area is $A = 10 \times 6 = 60 \text{ cm}^2$ using the formula $A = \text{base} \times \text{height}$.** **(6.EE.2c)** Statements D and E are correct. Statement A is wrong ($10 \times 7 \neq 70$, and the slanted side should not be used). Statement B is wrong because the slanted side is not part of the area formula. Statement C is wrong because the height is perpendicular to the base, not the slanted side length.
- 19) **Choice C is correct.** **(6.EE.6)** Unit rate: 1 dollar = 0.85 euros. For \$50: $50 \times 0.85 = 42.5$ euros.
- 20) **Choice A is correct.** **(6.EE.9)** Since 1 foot = 12 inches, 8 inches = $\frac{8}{12} = \frac{2}{3}$ feet.
- 21) **Choice B is correct.** **(6.NS.4)** Net income: $\$3000 - \$400 - \$150 - \$100 = \$2350$.
- 22) **Choice C is correct.** **(6.G.1)** 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.
- 23) **Choice D is correct.** **(6.G.2)** This is a GCF problem. The GCF of 35 and 49 is 7. So they can make 7 rows with 5 tomato and 7 pepper plants per row.
- 24) **Choice A is correct.** **(6.NS.3)** Distributive property: $4(7 + 8) = 4 \cdot 7 + 4 \cdot 8 = 28 + 32 = 60$. Choice A shows the expanded form.
- 25) **Choice A is correct.** **(6.NS.8)** Opposites are two numbers that are the same distance from zero but on opposite sides of zero. 3 is 3 units right of zero, and -3 is 3 units left of zero.
- 26) **Choice A is correct.** **(6.RP.1)** The opposite of a positive number is its negative. The opposite of 7 is -7 , equidistant from zero on the other side.
- 27) **Choice D is correct.** **(6.SP.4)** To be between -0.6 and -0.5 , a number must satisfy $-0.6 < x < -0.5$. The value -0.5 is the endpoint, not strictly between the two values.



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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.



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