

7 Oregon OSAS

7
PRINTED
TESTS
+
2
ONLINE
TESTS

Grade 6 MATH PRACTICE TESTS

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

Standards-Aligned *Steady Southern*
Problem Solving for Comprehensive
Assessment Program



7 Full-Length
Printed Tests



Standards-Aligned
Math Practice



Detailed Answer Keys
and Explanations



Build Confidence.
Achieve Success.



You've
Got
This!



PREPARE
PRACTICE
SUCCEED



PRACTICE
WITH PURPOSE



STRENGTHEN
MATH SKILLS



REVIEW, IMPROVE,
AND SUCCEED

7 Oregon OSAS Grade 6 Math Practice Tests

Standards-Aligned Forest-To-Coast Reasoning for Oregon Statewide Assessment System



Seven complete 40-question Grade 6 practice rounds for OSAS, built for forest-to-coast reasoning 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, Oregon Math Explorer!

Eight focused rounds using forest-to-coast reasoning

This book gives you seven full Grade 6 practice tests for OSAS. Each round uses coastal trails, forest paths, and careful graph reading as a fresh mental backdrop while you read closely, choose a smart strategy, show your work, and check whether your answer makes sense.

Your Oregon Practice Promise

Let the details guide the work: read scale, label units, and check the answer in context.

Read

Plan

Check

How to Use This Book

A seven-session routine for forest-to-coast reasoning

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.

Oregon review rhythm: Practice a round, review the trail of decisions, and improve one strategy next time.



What Is Inside?

Eight OSAS tests, 320 questions, and a full review path

Part	What You Will Practice
Tests 1–3	Foundation rounds for ratios, rational numbers, operations, and careful reading.
Tests 4–6	Skill-building rounds with expressions, equations, geometry, data, and problem models.
Test 7	Final stamina round for mixed review, neat work, and flexible strategy choices.
Answer Pages	Compact keys and explanations that show why each answer works.

The tests are mixed on purpose. Forest-to-coast reasoning means recognizing the skill even when the next question changes topic, changes format, or asks for an explanation.



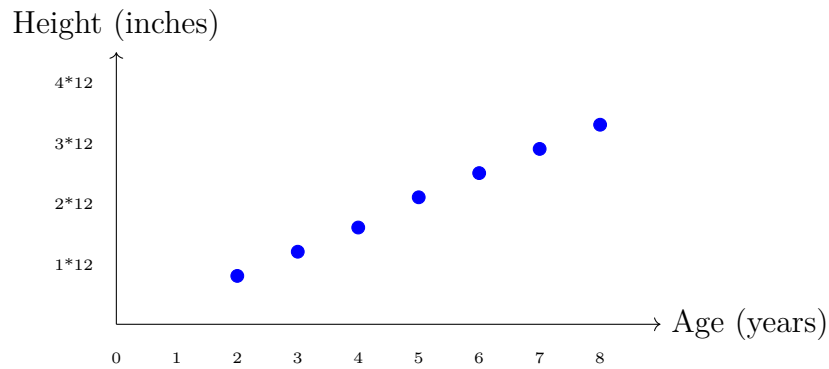
Scan me!
For more practice
& answers

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- 1) What is the distance between the points $(-3, 4)$ and $(-3, -2)$ on the coordinate plane?
- A. 4 units C. 6 units
 B. 5 units D. 7 units
- 2) Find the mean of the data set: 4, 6, 8, 10, 12.
- A. 6 C. 10
 B. 8 D. 40
- 3) For the data set 2, 4, 6, 8, the mean is 5. Calculate the MAD.
- A. 1 C. 3
 B. 2 D. 5
- 4) A histogram of test scores is skewed right. Which is most likely true?
- A. The mean is much less than the median. C. The mean is much greater than the median.
 B. The mean equals the median. D. The mode equals the mean.
- 5) A bag contains only red and green marbles. There are 12 red marbles and the probability of drawing red is $\frac{3}{5}$. How many marbles are in the bag altogether?
- A. 15 C. 20
 B. 18 D. 25





6)

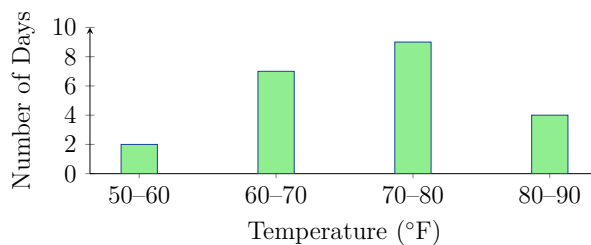
This scatter plot shows the relationship between children’s ages and heights. What type of correlation does the data show?

- A. Negative correlation
- B. Strong positive correlation
- C. No correlation
- D. Perfect negative correlation

7) A square prism (a cube with non-unit edge length) has edge length 9 cm. What is the total surface area?

- A. 324 cm²
- B. 405 cm²
- C. 486 cm²
- D. 729 cm²

8) A histogram shows the daily temperature distribution. The frequencies are: 50–60 °F: 2; 60–70 °F: 7; 70–80 °F: 9; 80–90 °F: 4. What percentage of days were in the 70–80 °F range?



- A. 18%
- B. 28%
- C. 41%
- D. 45%



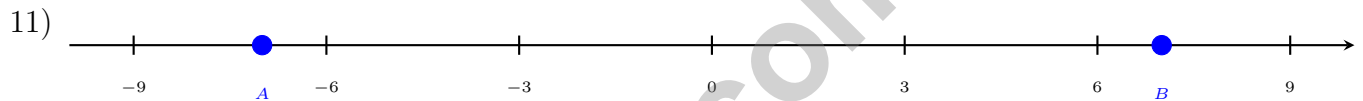
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9) The mode is the value that appears most often. In a stem-and-leaf plot, the mode occurs in which stem if we see a repeated leaf?

- A. The stem with the most leaves
- B. The largest stem
- C. The smallest stem
- D. The stem corresponding to the repeated leaf value

10) A store inventory has 900 items. The circle graph shows $\frac{2}{9}$ are on clearance. How many items are on clearance?

- A. 180
- B. 200
- C. 220
- D. 240

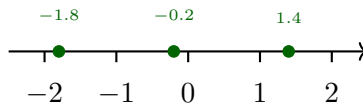


On a number line, point A is at -7 and point B is at 7 . What is the distance between them?

12) Which expression equals 9?

- A. 3^2
- B. 2^3
- C. 1^9
- D. 3×3^2

4) Which number line correctly shows points at -1.8 , -0.2 , and 1.4 ?



- A. All three points are to the left of zero
 B. All three points are to the right of zero
 C. Two points are negative and one is positive
 D. The points are equally spaced
- 5) A scale model of a swimming pool uses a scale of 1 inch = 8 feet. The model pool is a square with side length 2.5 inches. What is the actual area of the pool?
- A. 100 sq ft
 B. 6400 sq ft
 C. 800 sq ft
 D. 400 sq ft
- 6) Place-value chart of a decimal is shown. What is the number in standard form?

Ones	Tenths	Hundredths
5	4	8

- A. 548
 B. 0.548
 C. 54.8
 D. 5.48



- 1) Sophia receives \$120 allowance per month. She spends 30% on music lessons. How much does she spend on music lessons?
- A. \$36 (30% correct) C. \$84 (70% complement)
- B. \$24 (20% wrong %) D. \$40 (wrong % base)
- 2) The table below shows the cost of renting a canoe.

Hours	2	4	6
Cost (\$)	30	60	90

What is the cost per hour to rent the canoe?

- 3) Find the area of a triangle with base 25 feet and height 8 feet.

- 4) Two classes compared their test scores using a double-bar graph. Class A had a median of 82 and a range of 35 (lowest 60, highest 95). Class B had a median of 78 and a range of 28 (lowest 62, highest 90).

Which statement is TRUE based on the statistics?

- A. Class A always scored higher than Class B C. Class A's typical performance is better than Class B
- B. Class A's scores were more consistent (less spread) D. Class B has more students than Class A



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5) Which of the following does NOT represent the ratio 2 : 3?

A. $\frac{2}{3}$

B. 4 : 6

C. 6 : 8

D. 10 : 15

6) A bakery uses vanilla and chocolate in a 7 : 3 ratio. If the bakery makes a batch with 21 units of vanilla, how much chocolate is used?

A. 3 units

B. 7 units

C. 9 units

D. 24 units

7)

Hours	1	2	3	4
Gallons	12	24	36	48

Based on the table, what is the unit rate in gallons per hour?

A. 8 gallons per hour

B. 36 gallons per hour

C. 24 gallons per hour

D. 12 gallons per hour

8) A construction team builds a wall at a constant rate. They complete $\frac{3}{4}$ of the wall in 6 hours. How many hours does it take to build the entire wall?

A. 4.5 hours

B. 8 hours

C. 9 hours

D. 10 hours

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

A. 10

B. 16

C. 14

D. 12



Oregon OSAS Practice Test Answer Keys

How to use this Oregon OSAS 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 forest-to-coast reasoning
3. rework the problem before reading the full explanation, using this reminder:
Let the details guide the work: read scale, label units, and check the answer in context.

A calm Oregon correction routine turns every missed item into useful practice. Practice a round, review the trail of decisions, and improve one strategy next time.



Scan me!
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Oregon Practice Test Answers and Explanations

Review the seven printed OSAS tests with observant, steady, and ready for the next path habits.

Practice Test 1 Answers and Explanations

- 1) **Choice C is correct.** **(6.NS.C.8)** The x -coordinates are the same, so subtract the y -coordinates: $|4 - (-2)| = |4 + 2| = 6$ units.
- 2) **Choice B is correct.** **(6.DR.B.2)** Mean = $\frac{4 + 6 + 8 + 10 + 12}{5} = \frac{40}{5} = 8$.
- 3) **Choice B is correct.** **(6.DR.C.3)** Distances: $|2 - 5| = 3$, $|4 - 5| = 1$, $|6 - 5| = 1$, $|8 - 5| = 3$. MAD = $\frac{3+1+1+3}{4} = \frac{8}{4} = 2$.
- 4) **Choice C is correct.** **(6.DR.B.2)** Right-skewed distributions have a tail of high values that pull the mean above the median.
- 5) **Choice C is correct.** **(6.RP.A.3)** If $P(\text{red}) = \frac{3}{5}$ and there are 12 red marbles, then $\frac{12}{x} = \frac{3}{5}$. Solving: $3x = 60$, so $x = 20$.
- 6) **Choice B is correct.** **(6.DR.C.3)** The points follow a clear upward trend from left to right: as age increases, height increases. The points are closely aligned, indicating a strong relationship.
- 7) **Choice C is correct.** **(6.GM.A.4)** $SA = 6s^2 = 6(9)^2 = 6(81) = 486 \text{ cm}^2$.
- 8) **Choice C is correct.** **(6.DR.D.4)** Total days: $2 + 7 + 9 + 4 = 22$. The 70–80 bin has 9 days, so $(9/22) \times 100 \approx 40.9\%$, which rounds to 41%.
- 9) **Choice D is correct.** **(6.DR.D.4)** A repeated leaf in a particular stem indicates that value appears more than once, making it part of the mode. Repeated leaves show which stem has the mode.
- 10) **Choice B is correct.** **(6.NS.A.1)** $\frac{2}{9} = \frac{200}{900}$. So $\frac{2}{9} \times 900 = 1800 \div 9 = 200$ items.
- 11) **The correct answer is 14.** **(6.NS.C.7)** Distance is calculated as $7 - (-7) = 7 + 7 = 14$ units. Absolute value gives the magnitude: $|7 - (-7)| = 14$.
- 12) **Choice A is correct.** **(6.AEE.A.1)** $3^2 = 3 \times 3 = 9$. Option B: $2^3 = 8$. Option C: $1^9 = 1$. Option D: $3 \times 3^2 = 3 \times 9 = 27$.
- 13) **The correct answer is (3, -2).** **(6.NS.C.6)** When reflecting across the x -axis, the x -coordinate stays the same and the y -coordinate changes sign. So $(3, 2)$ becomes $(3, -2)$.
- 14) **Choice D is correct.** **(6.AEE.B.4)** Two blocks of 8 grams balance x . So $x = 8 + 8 = 16$. Also written as $x = 2 \times 8 = 16$.
- 15) **Choice A is correct.** **(6.AEE.B.7)** “More than 2” gives $s > 2$. “No more than 4” gives $s \leq 4$. Together: $s > 2$ and $s \leq 4$.
- 16) **Choice B is correct.** **(6.AEE.B.7)** $x < 7$ excludes 7 (open circle) and includes all numbers less than 7 (arrow points left).
- 17) **Choice C is correct.** **(6.AEE.C.8)** The score depends on how many questions are answered correctly. Questions correct is independent; score is dependent.
- 18) **Choice D is correct.** **(6.GM.A.1)** $75 = \frac{1}{2} \times 15 \times h \Rightarrow h = 10 \text{ cm}$.
- 19) **Choice D is correct.** **(6.RP.A.1)** The order is green to coral. Count 3 green counters and 4 coral counters, so the ratio is 3 : 4.
- 20) **Choice D is correct.** **(6.RP.A.1)** The ratio 8 : 2 means the first quantity, points, is matched with the second quantity, power-ups. So the correct phrase is “for every 8 points there are 2 power-ups.”
- 21) **The correct answer is B: 2 kg = 2000 g; C: 0.5 miles = 2640 feet.** **(6.RP.A.3)** A is incorrect: $10 \times 8 = 80 \text{ fl oz}$, not 60. B is correct: $2 \times 1000 = 2000 \text{ grams}$. C is correct: $0.5 \times 5280 = 2640 \text{ feet}$. D is incorrect: $1.5 \times 1000 = 1500 \text{ mL}$, not 150. E is incorrect: $8 \times 2 = 16 \text{ pints}$, not 32.
- 22) **Choice A is correct.** **(6.RP.A.3)** Choice A is equivalent because $\$16 \div 2 = \8 per gallon. The other choices have unit rates of \$4, \$6, and about \$6.67 per gallon.
- 23) **Choice B is correct.** **(6.RP.A.2)** $10 \div \frac{3}{2} = 10 \times \frac{2}{3} = \frac{20}{3} \approx 6.67 \text{ mph}$.
- 24) **Choice C is correct.** **(6.RP.A.3)** Scale: 1 inch = 10 miles. Distance: $3.5 \times 10 = 35 \text{ miles}$.
- 25) **Choice D is correct.** **(6.RP.A.3)** Multiply: $6 \text{ cm} \times 0.5 \text{ m/cm} = 3 \text{ m}$.



Hi, Brave Explorer!

◇ What a trip! You explored 7 full tests. You went to many math places: multiplication, fractions, area, time, and more. ◇

★ **Smart explorers know:** every trip teaches something. Through 7 tests, you learned a lot. You are a stronger math explorer now. ★

Your Explorer Tools

- **Map Reading:** You read problems carefully.
- **Trail Skills:** You take steps in the right order.
- **Backpack:** You have many math tools.
- **Brave Heart:** You explore even hard problems.

Explorer tip: on test day, use the tools you packed. You have the skills. You are ready!

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

Jay Daie

Your Math Trail Guide

MASTER TODAY. SUCCEED TOMORROW.

This Grade 6 Math Practice Tests book is designed to help students strengthen their math skills, master important concepts, and build the confidence they need to excel on comprehensive assessments.

With 7 full-length printed tests and 2 online tests, students get the review, practice, and realistic test experience they need to improve accuracy, develop 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

★ PRACTICE TODAY.
SUCCEED 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.



Deeper Understanding

Reinforce key concepts aligned with standards through meaningful practice.



Test Confidence

Become familiar 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

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.



7 FULL-LENGTH
PRINTED TESTS



STANDARDS-
ALIGNED PRACTICE



DETAILED ANSWER
KEYS & EXPLANATIONS