8 Oregon OSAS

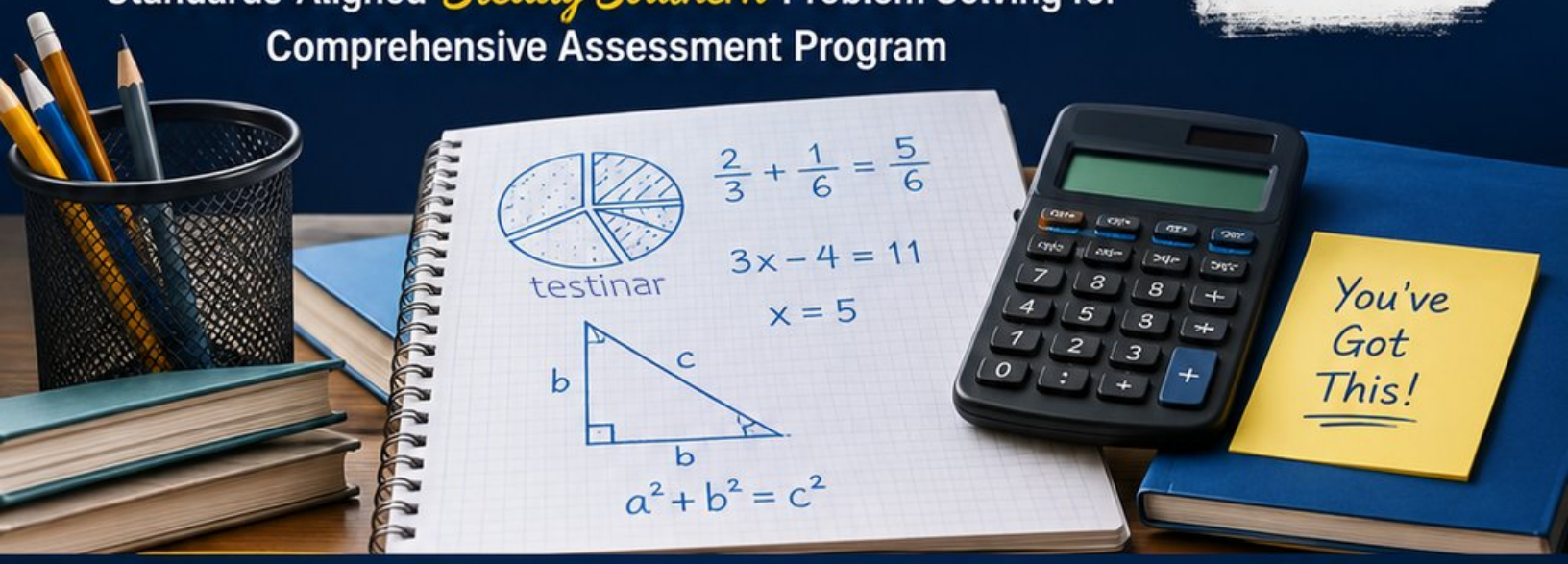
8 PRINTED TESTS + 2 ONLINE TESTS

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



BUILT FOR ACAP SUCCESS

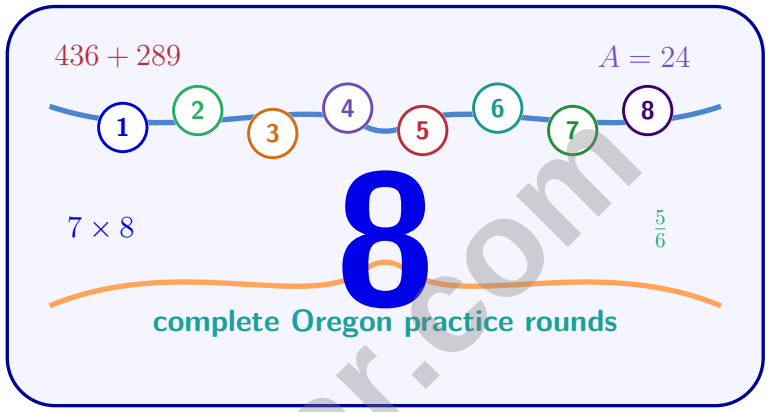
REALISTIC TESTS & QUESTION TYPES

STRENGTHEN MATH SKILLS

REVIEW, PRACTICE, AND IMPROVE

8 Oregon OSAS Grade 6 Math Practice Tests

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



Eight 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 eight 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.

How to Use This Book

A eight-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.
Tests 7–8	Final stamina rounds for mixed review, neat work, and flexible strategy choices.
Answer Pages	Compact keys and explanations that show why each answer works.

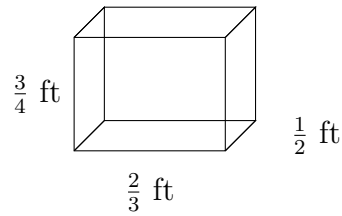
The tests are mixed on purpose. Forest-to-coast reasoning means recognizing the skill even when the next question changes topic, changes format, or asks for an explanation.

Table of Contents

1) A coordinate plane shows a rectangle with vertices at $(1, 2)$, $(7, 2)$, $(7, 8)$, and $(1, 8)$. What is the area of the rectangle?

☐ A. 30 square units
☐ B. 48 square units
☐ C. 42 square units
☐ D. 36 square units

2)



A rectangular prism has dimensions $\frac{1}{2}$ ft, $\frac{3}{4}$ ft, and $\frac{2}{3}$ ft. What is its volume in cubic feet?

☐ A. $\frac{1}{4}$ ft^3
☐ B. $\frac{1}{2}$ ft^3
☐ C. $\frac{3}{4}$ ft^3
☐ D. 1 ft^3

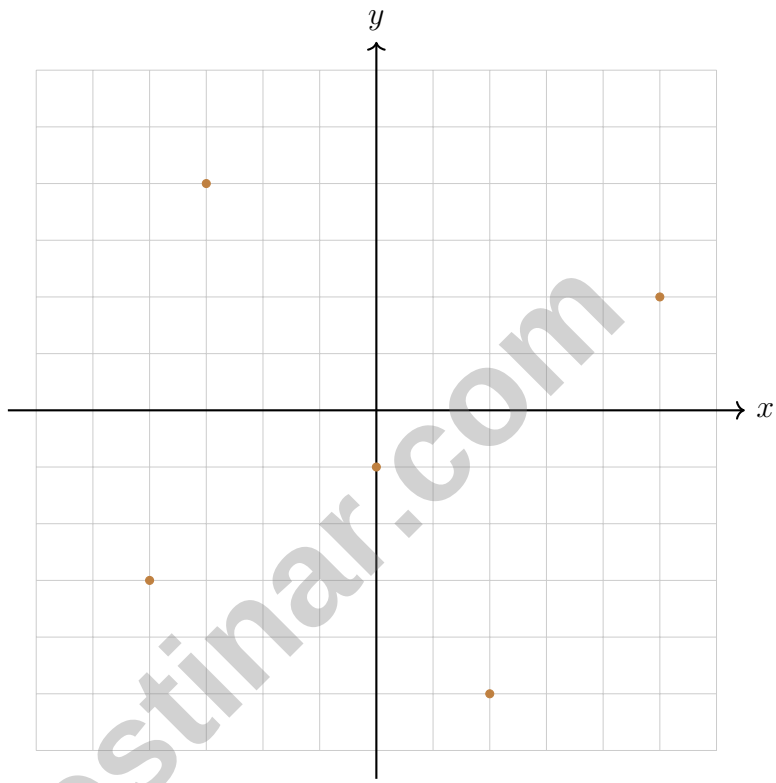
3) In a standard cross-pattern cube net (center face with one face on each of 4 sides, plus one additional face extending from the top), which two faces are opposite each other when the net is folded into a cube?

☐ A. Center and left
☐ B. Top and bottom of the cross
☐ C. Top of the cross and the extension above it
☐ D. Left and right of the cross

4) What is the opposite of -15?

☐ A. 15
☐ B. -15
☐ C. 0
☐ D. $\frac{1}{15}$

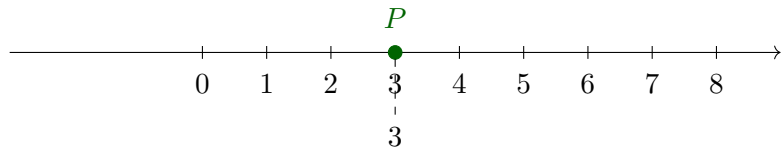
5)



How many of the plotted points lie on an axis?

☐ A. 0
☐ B. 3
☐ C. 2
☐ D. 1

6)



Which number is less than P?

- ☐ A. 5
- ☐ B. 4
- ☐ C. 2
- ☐ D. 6

7) Compute: $(-5) \times (-7)$

- ☐ A. -35
- ☐ B. 35
- ☐ C. 12
- ☐ D. -12

8) Solve for x: $x + 11 = 24$

- ☐ A. $x = 13$
- ☐ B. $x = 35$
- ☐ C. $x = 2.18$
- ☐ D. $x = 264$

9) Which value does NOT satisfy $n \geq 4$?

- ☐ A. $n = 4$
- ☐ B. $n = 6$
- ☐ C. $n = 3$
- ☐ D. $n = 10$

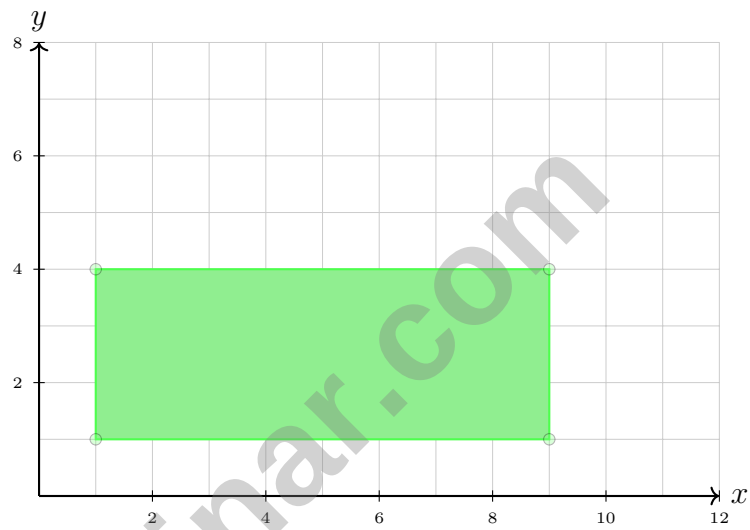
10) A video streaming service charges \$8 per month. If m is months and T is total cost, the equation is $T = 8m$. What does the number 8 in the equation represent?

- ☐ A. The total cost
- ☐ B. The monthly charge
- ☐ C. The number of months
- ☐ D. The type of service

1) A plant must grow to a height of more than 12 inches to be considered mature. Which inequality represents the height h?

☐ A. $h \geq 12$
☐ B. $h \leq 12$
☐ C. $h < 12$
☐ D. $h > 12$

2)



A garden plot is rectangular with vertices at $(1, 1)$, $(9, 1)$, $(9, 4)$, and $(1, 4)$. What is the area of the garden?

☐ A. 18 square units
☐ B. 21 square units
☐ C. 24 square units
☐ D. 27 square units

3) A dot plot has values 1 mile: 2 students; 2 miles: 5; 3 miles: 8; 4 miles: 4; 5 miles: 1. Find the mean miles run.

4) A student is trying to identify which face is missing from an incomplete cube net. The net shows 5 faces: a center square, with four squares attached to the four sides. Which position should the 6th face be attached to form a valid cube net?

☐ A. One of the four outer sides of the outer squares
☐ B. Any position that adds 1 face
☐ C. Directly above one of the outer squares
☐ D. It cannot form a valid cube net with only one more face

5) What is the range of the data set: $12, 28, 5, 45, 19$?

☐ A. 5
☐ B. 12
☐ C. 40
☐ D. 45

6) A stem-and-leaf plot of student test scores is given:

Stem	Leaf
6	5, 8
7	1, 3, 4, 6, 9
8	0, 2, 5, 7
9	1, 4, 8

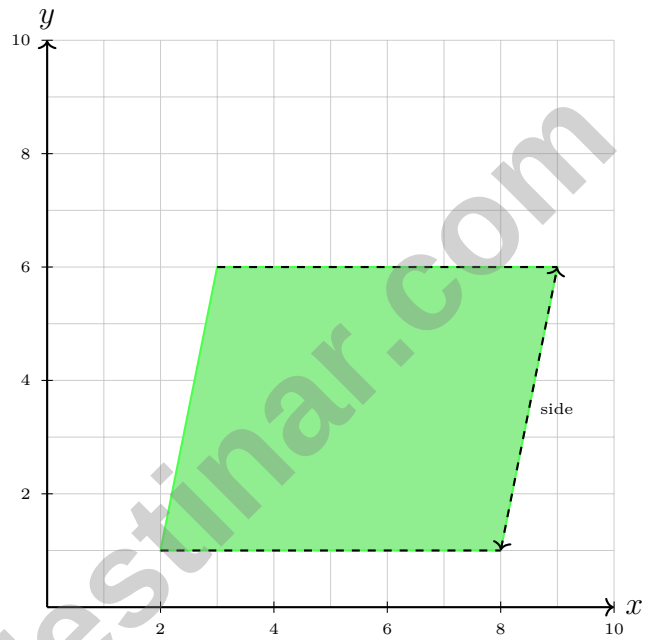
What is the mode of the test scores?

☐ A. 70
☐ B. 74
☐ C. 80
☐ D. No single mode

1) Which of the following transactions uses a credit card?

☐ A. Paying with money from your bank account
☐ B. Borrowing money to pay now and paying back later
☐ C. Using a card linked directly to your bank account
☐ D. Withdrawing cash from an ATM

2)



A parallelogram has vertices at $(2, 1)$, $(8, 1)$, $(9, 6)$, and $(3, 6)$. The base is 6 units and the height is 5 units. What is its area?

☐ A. 30 square units
☐ B. 35 square units
☐ C. 40 square units
☐ D. 42 square units

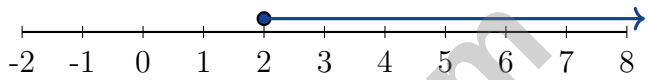
3) Evaluate: $\frac{32}{-4}$

☐ A. 8
☐ B. -8
☐ C. 28
☐ D. 36

4) Solve for x: $5x = 40$

☐ A. $x = 8$
☐ B. $x = 35$
☐ C. $x = 45$
☐ D. $x = 200$

5) Which number line represents $x \geq 2$?



☐ A. Closed circle at 2, arrow left
☐ B. Open circle at 2, arrow right
☐ C. Closed circle at 2, arrow right
☐ D. Open circle at 2, arrow left

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.

Oregon Practice Test Answers and Explanations

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

Practice Test 1 Answers and Explanations

1) **Choice D is correct.** 6.GM.A.1 Width: $7-1=6$ units. Height: $8-2=6$ units. Area $=6\times 6=36$ square units.
2) **Choice A is correct.** 6.GM.A.2 $V=\frac{1}{2}\times\frac{3}{4}\times\frac{2}{3}=\frac{6}{24}=\frac{1}{4}$ ft^3.
3) **Choice D is correct.** 6.GM.A.4 In a cross-pattern cube net, the faces on opposite sides of the center (left and right) fold to become opposite faces of the cube. The extension (face above the top of the cross) becomes opposite to the bottom face, not the top.
4) **Choice A is correct.** 6.NS.C.7 The opposite of a negative number is its positive version. The opposite of -15 is 15.
5) **Choice D is correct.** 6.NS.C.6 Only the point $(0,-1)$ lies on an axis (the y-axis, since $x=0$). The other points have both coordinates non-zero.
6) **Choice C is correct.** 6.NS.C.7 $P=3$. Since $2<3$, the number 2 is less than P.
7) **Choice B is correct.** 6.NS.B.2 Negative times negative is positive: $(-5)\times(-7)=35$.
8) **Choice A is correct.** 6.AEE.B.4 Subtract 11 from both sides: $x=24-11=13$.
9) **Choice C is correct.** 6.AEE.B.7 $n\geq 4$ requires n to be 4 or greater. Since $3<4$, it does not satisfy the inequality.
10) **Choice B is correct.** 6.AEE.C.8 In the equation $T=8m$, the number 8 (multiplied by m) represents \$8 per month, the monthly charge.
11) **The correct answer is** 144. 6.NS.B.2 $4{,}032\div 28=144$. Students should perform long division and verify their answer by multiplying back: $28\times 144=4{,}032$.
12) **Choice B is correct.** 6.GM.A.1 For a right triangle, $A=\frac{1}{2}\times 9\times 16=72$ m^2.
13) **The correct answer is** 101. 6.AEE.B.7 The least whole number greater than 100 is 101.
14) **Choice B is correct.** 6.RP.A.1 The larger pizza has radius 7 in, so its area is about $3.14\times 49=153.86$ in^2. The smaller pizza has radius 5 in, so its area is about $3.14\times 25=78.5$ in^2. The difference is $153.86-78.5=75.36$ in^2.
15) **Choice D is correct.** 6.DR.A.1 This question would produce the most variability: different students have different numbers of siblings (0, 1, 2, 3, etc.). The other questions have fixed or nearly-fixed answers across a group.
16) **Choice C is correct.** 6.DR.C.3 Maximum is 20, minimum is 5. Range $=20-5=15$.
17) **Choice D is correct.** 6.DR.D.4 Adding a value of 45 (larger than the current max of 40) directly changes the maximum from 40 to 45. The other quartiles and median are determined by position and would not change with one additional data point.
18) **Choice C is correct.** 6.DR.B.2 The spacing increases toward the right (gaps: $3,4,3,3,4,6$), with a longer tail on the right side.
19) **Choice C is correct.** 6.RP.A.3 Total squares $=100$. Blue squares $=60$. Probability $=\frac{60}{100}=\frac{3}{5}$.
20) **The correct answer is The graph is a straight line through the origin, and the ratio of y to x is always constant.** 6.NS.C.6 Statements A and B correctly describe proportional relationships. C is wrong because b must equal 0 for proportionality. D is wrong because proportional equations have the form $y=kx$, not $y=k/x$. E is wrong because a proportional relationship must start at the origin.
21) **Choice A is correct.** 6.DR.C.3 Bar graphs excel at comparing values across categories (sports in this case). Line graphs show trends over time; circle graphs show parts of a whole; box plots display quartiles.
22) **Choice C is correct.** 6.RP.A.1 Use the ratio as a recipe: for every 1 cup of juice, there are 4 cups of water. With 8 cups of juice, multiply $8\times 4=32$ cups of water.
23) **Choice A is correct.** 6.RP.A.1 The phrase gives flour first and sugar second. So "for every 2 cups of flour there are 3 cups of sugar" translates directly to $2:3$.
24) **Choice B is correct.** 6.RP.A.3 Divide eggs by servings: $3\div 2=\frac{3}{2}$ eggs per serving (or 1.5 eggs per serving).
25) **The correct answer is** $(2,1)$. 6.NS.C.6 Translate: $(4,0)\to(4-2,0+1)=(2,1)$.

Hi, Math Gardener!

◇ Look at how much you grew! 8 tests is like 8 weeks of taking care of your math garden. Every problem was a seed. Every try was water. ◇

⋆ **Gardeners say:** growth takes time. You can't see roots, but they are there. You can't always feel smarter, but you are. Your math garden is full! ⋆

Garden Check-Up

- **Roots:** STRONG! Your basic math is solid.
- **Stems:** STURDY! You can do step-by-step problems.
- **Leaves:** GREEN! You have lots of math tools.
- **Flowers:** BRIGHT! You feel proud of your work.

Gardener tip: keep watering your math garden long after the test. Every habit you built will grow with you for years!

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

Jay Daie

Your Math Gardener

MASTER MATH. ACE YOUR TESTS.

This Grade 6 Math Practice Tests book is designed to help students build confidence, strengthen math skills, and excel on comprehensive assessments.

With 8 full-length printed tests and 2 online tests, this resource provides realistic practice, a variety of question types, and detailed answer explanations to help students achieve their best.

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

8 PRINTED TESTS

+

2 ONLINE TESTS

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.

Understand Key Concepts
Reinforce important math ideas 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.

8 FULL-LENGTH PRACTICE TESTS

2 ONLINE PRACTICE TESTS

DETAILED ANSWER EXPLANATIONS