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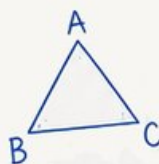
Oregon OSAS

GRADE
6
MATH

PRACTICE TESTS

Standards-Aligned
Steady Southern
Problem Solving for
Comprehensive
Assessment Program

$$2x + 3 = 11$$



$$7^2 = 49$$

BUILD SKILLS.
GAIN CONFIDENCE.
SUCCEED!



6 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



6 PRINTED TESTS + 2 ONLINE TESTS

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



PRACTICE

Sharpen skills
with targeted
practice tests



REVIEW

Understand
concepts and
strengthen skills



SUCCEED

Build confidence
and achieve
your best

6 Oregon OSAS Grade 6 Math Practice Tests

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



Six 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 six 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 six-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 1–2	Foundation rounds for ratios, rational numbers, operations, and careful reading.
Tests 3–5	Skill-building rounds with expressions, equations, geometry, data, and problem models.
Test 6	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

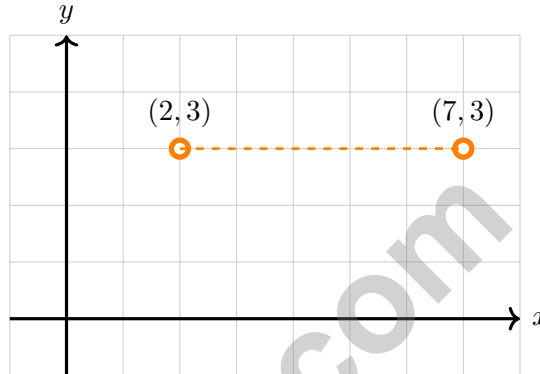
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- 1) Which multiplication has the decimal point in the correct place?
- A. $2.3 \times 5.1 = 117.3$ C. $2.3 \times 5.1 = 11.73$
 B. $2.3 \times 5.1 = 1173$ D. $2.3 \times 5.1 = 1.173$
- 2) Which pair of numbers has a GCF of 5?
- A. 15 and 25 C. 12 and 20
 B. 10 and 20 D. 14 and 35
- 3) A scuba diver descends 25 meters below sea level. Which integer represents this situation?
- A. 25 C. -50
 B. -25 D. 50
- 4) Which list shows the absolute values in order from least to greatest?
- A. $|-2|, |-5|, |6|, |-9|$ C. $|-9|, |6|, |-5|, |-2|$
 B. $|6|, |-5|, |-2|, |-9|$ D. $|-9|, |-5|, |-2|, |6|$
- 5) What are the coordinates of the origin?
- A. (1, 1) C. $(-1, -1)$
 B. (0, 0) D. (0, 1)
- 6) Order from greatest to least:
- $-2, 0.5, -0.75, 1$
- A. 1, 0.5, $-0.75, -2$ C. $-2, -0.75, 0.5, 1$
 B. 0.5, 1, $-2, -0.75$ D. 1, $-0.75, 0.5, -2$



7) After simplifying $4x + 7 + 2x - 3$, what is the coefficient of x ?



8)

What is the distance between $(2, 3)$ and $(7, 3)$?

A. 4 units

C. 6 units

B. 5 units

D. 7 units

9) Evaluate: $\frac{-72}{-9}$

A. 8

C. -63

B. -8

D. 63

10) Evaluate: $3^2 \times 2 - 4$

A. 14

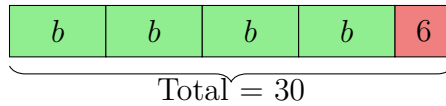
C. 32

B. 18

D. 50



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& answers



11)

The bar model represents $4b + 6 = 30$. Find b .

12) Solve for x : $x - 2.7 = 5.3$

A. $x = 2.6$

C. $x = 7.5$

B. $x = 8$

D. $x = 3$

13) Which value satisfies both $x \geq 3$ and $x \leq 7$?

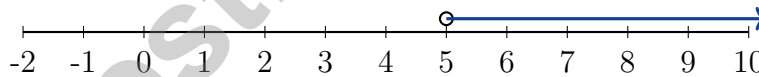
A. $x = 2$

C. $x = 8$

B. $x = 5$

D. $x = 10$

14) Examine this number line. Which inequality does it represent?



A. $x \leq 5$

C. $x > 5$

B. $x < 5$

D. $x \geq 5$

15) A student reads 12 pages per day from a novel. If d represents days and p represents total pages read, which equation is correct?

A. $d = 12p$

C. $p = d + 12$

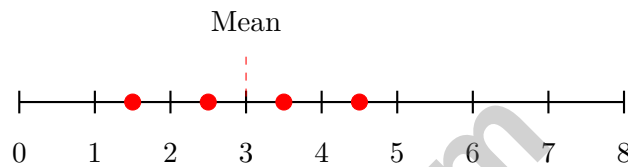
B. $d = p - 12$

D. $p = 12d$



- 1) A museum survey of 720 visitors asked about favorite exhibit. The circle graph shows 19% prefer nature. How many visitors prefer the nature exhibit?
- A. 130 C. 143
 B. 152 D. 137

- 2) Find the mean of the values shown on the number line:



- A. 2.5 C. 3.5
 B. 3 D. 4
- 3) A data set has minimum value 12, $Q_1 = 18$, median = 25, $Q_3 = 32$, and maximum value 40. What is the interquartile range?
- A. 7 C. 28
 B. 14 D. 32
- 4) Two datasets: A: {5, 6, 7, 8, 9}; B: {2, 5, 8, 11, 14}. Compare the spreads.
- A. Dataset A has greater spread. C. Both have the same spread.
 B. Cannot compare without IQR. D. Dataset B has greater spread.
- 5) A jar contains 20 marbles of different colors. The probability of drawing a purple marble is 0.20. How many purple marbles are in the jar?
- A. 2 C. 5
 B. 10 D. 4

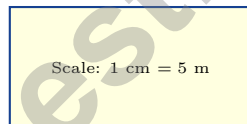


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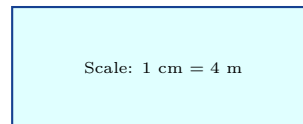
- 6) A bakery made a stem-and-leaf plot of daily cookie sales: Stem 2: Leaf 1, 3, 5, 8
Stem 3: Leaf 0, 4, 7 Stem 4: Leaf 2, 6

What is the MODE (most frequent value) of the cookie sales?

- A. 30 C. 42
 B. 25 D. No mode
- 7) A recipe calls for 2 cups of flour for every 3 cups of sugar. Which fraction represents the ratio of flour to the total amount of flour and sugar?
- A. $\frac{2}{3}$ C. $\frac{2}{5}$
 B. $\frac{3}{5}$ D. $\frac{3}{2}$
- 8) A recipe for 4 servings uses 2 cups of rice. How much rice is needed for 10 servings?
- A. 4 cups C. 5 cups
 B. 4.5 cups D. 6 cups
- 9) Two rectangles are drawn using different scales. Rectangle 1 is 4 cm by 2 cm with scale 1 cm = 5 m. Rectangle 2 is 5 cm by 2 cm with scale 1 cm = 4 m. Which rectangle represents a larger actual area?



Rect 1: 4×2 cm



Rect 2: 5×2 cm

- A. Rectangle 1 has a larger actual area. D. There is not enough information to decide.
 B. Rectangle 2 has a larger actual area.
 C. Both rectangles have the same actual area.



1) Which phrase shows a price rate?

- A. Ten students in a class C. Four players on a team
 B. Seventy cents per pound D. Six wheels on a car

2)

Item	Boys	Girls
Votes	28	21

What is the ratio of girls' votes to boys' votes in simplest form?

- A. 28 : 21 C. 3 : 4
 B. 21 : 28 D. 4 : 3
- 3) Two recipes use olive oil and vinegar. The diagram shows the two recipes side by side.



Which statement is true?

- A. Recipe A has an oil-to-vinegar ratio of 4 : 3. C. Recipe B has an oil-to-vinegar ratio of 3 : 6.
 B. The recipes cannot be compared using ratios. D. Both recipes have the same oil-to-vinegar ratio.

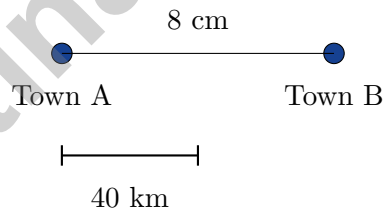


- 4) Two soccer teams buy water bottles for practice. Compare the unit prices.

Team	Quantity	Total Cost
Team A	30 bottles	\$45.00
Team B	25 bottles	\$35.00

Which team got the better unit price per bottle?

- A. Team A at \$1.50/bottle C. Team B at \$1.40/bottle
 B. Team A at \$1.40/bottle D. Team B at \$1.30/bottle
- 5) In a classroom, the ratio of boys to girls is 4 : 3. If there are 8 boys, how many girls are there?
- A. 4 C. 8
 B. 6 D. 12
- 6) A map shows two towns with a distance between them. The scale bar below indicates the distance.



What is the actual distance between the towns?

- A. 80 km C. 160 km
 B. 120 km D. 200 km



Scan me!
For more practice
& answers

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

Practice Test 1 Answers and Explanations

- Choice C is correct.** **(6.NS.B.3)** $23 \times 51 = 1173$. We have $1 + 1 = 2$ decimal places total, so 11.73 is correct.
- Choice A is correct.** **(6.NS.B.4)** Factors of 15: 1, 3, 5, 15. Factors of 25: 1, 5, 25. Common factors: 1, 5. GCF is 5. For option B, GCF is 10; for C, GCF is 4; for D, GCF is 7.
- Choice B is correct.** **(6.NS.C.5)** Below sea level is represented by a negative integer. A depth of 25 meters below sea level is -25 meters.
- Choice A is correct.** **(6.NS.C.7)** Computing: $|-2| = 2$, $|-5| = 5$, $|6| = 6$, $|-9| = 9$. In order: $2 < 5 < 6 < 9$.
- Choice B is correct.** **(6.NS.C.6)** The origin is the intersection of the x -axis and y -axis, located at the coordinates $(0, 0)$.
- Choice A is correct.** **(6.NS.C.7)** Greatest to least: positives first ($1 > 0.5$), then negatives ($-0.75 > -2$).
- The correct answer is 6.** **(6.AEE.A.3)** Combine like terms: $4x + 2x = 6x$.
- Choice B is correct.** **(6.NS.C.8)** Same y -coordinate (3): $|7 - 2| = 5$ units.
- Choice A is correct.** **(6.NS.B.2)** Negative divided by negative is positive: $\frac{-72}{-9} = 8$.
- Choice A is correct.** **(6.AEE.A.1)** Exponent first: $3^2 = 9$. Then multiply: $9 \times 2 = 18$. Finally subtract: $18 - 4 = 14$.
- The correct answer is 6.** **(6.AEE.B.5)** Subtract 6 to get $4b = 24$, then divide by 4 to get $b = 6$.
- Choice B is correct.** **(6.AEE.B.4)** Add 2.7 to both sides: $x = 5.3 + 2.7 = 8$.
- Choice B is correct.** **(6.AEE.B.7)** $x \geq 3$ means x is at least 3. $x \leq 7$ means x is at most 7. Only 5 falls in the range $[3, 7]$.
- Choice C is correct.** **(6.AEE.B.7)** The open circle at 5 indicates 5 is not included. The arrow points right (toward greater values), so $x > 5$.
- Choice D is correct.** **(6.AEE.C.8)** Pages read equals pages per day multiplied by number of days. The equation is $p = 12d$.
- Choice A is correct.** **(6.GM.A.3)** Width $= 24 \div 8 = 3$ units. Perimeter $= 2(8 + 3) = 2(11) = 22$ units.
- Choice B is correct.** **(6.GM.A.1)** The formula for a triangle is Area $= \frac{1}{2} \times \text{base} \times \text{height}$. The student multiplied base and height but forgot the $\frac{1}{2}$ factor. The correct area $= \frac{1}{2} \times 8 \times 6 = 24$ square units.
- Choice A is correct.** **(6.NS.C.6)** Reflection over the y -axis negates the x -coordinate: $(-2, 4) \rightarrow (2, 4)$.
- Choice B is correct.** **(6.RP.A.1)** Radius $r = \frac{6}{2} = 3$ cm. Area $= \pi r^2 \approx 3.14 \times 3^2 = 3.14 \times 9 = 28.26$ cm².
- The correct answer is Equivalent-fraction divide and reciprocal multiply.** **(6.NS.A.1)** B uses a common denominator so you are dividing same-size chunks: $\frac{15}{18} \div \frac{6}{18} = \frac{15}{6} = \frac{5}{2}$. C keeps $\frac{5}{6}$ and multiplies by the reciprocal of $\frac{1}{3}$, which is $\frac{3}{1}$ —that is $\frac{5}{6} \times \frac{3}{1}$, also simplifying to $\frac{5}{2}$. A never flips $\frac{1}{3}$, D mixes random numbers together, and E flips $\frac{5}{6}$ instead of flipping the divisor.
- Choice D is correct.** **(6.DR.C.3)** Uniform distributions have roughly equal frequencies across all values/intervals. Plot B has consistent heights; Plot A is uneven.
- The correct answer is 130.** **(6.GM.A.1)** Square area: $10 \times 10 = 100$ cm². Triangle area: $\frac{1}{2} \times 10 \times 6 = 30$ cm². Total: $100 + 30 = 130$ cm².
- Choice B is correct.** **(6.DR.B.2)** Mean $= \frac{2 + 4 + 6 + 8 + 10}{5} = \frac{30}{5} = 6$.
- Choice A is correct.** **(6.DR.C.3)** For 6 values, the median is between positions 3 and 4 (values 8 and 10, median = 9). Lower half: 4, 6, 8. Q1 = 6. Upper half: 10, 12, 14. Q3 = 12.
- Choice B is correct.** **(6.DR.D.4)** IQR $= Q_3 - Q_1 = 18 - 10 = 8$.



Hi, Brave Explorer!

◇ What a trip! You explored 6 full tests. You went to many math places: multiplication, fractions, area, time, and more. ◇

★ **Smart explorers know:** every trip teaches something. Through 6 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

PRACTICE 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 6 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.

6
PRINTED
TESTS

+
2
ONLINE
TESTS

PERFECT FOR:

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

★ BUILD SKILLS.
GAIN CONFIDENCE.
SUCCEED!

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.



6 FULL-LENGTH
PRINTED TESTS



2 ONLINE
PRACTICE TESTS



DETAILED ANSWER
EXPLANATIONS