

$\frac{2}{3}$

# FULL-LENGTH

$\frac{2}{4}$

0,25

# Oregon

$7 \times 8 =$



Aligned to State Standards

## OSAS

$7 \times 8$

# MATH

$56 \div 7$

Grade

# 5

$(a+b)^2$

# PRACTICE TESTS

Complete State Standards Review  
with Answer Key and  
Essential Math Skills Practice



**3 Full-Length Practice Tests**  
Aligned to State Standards



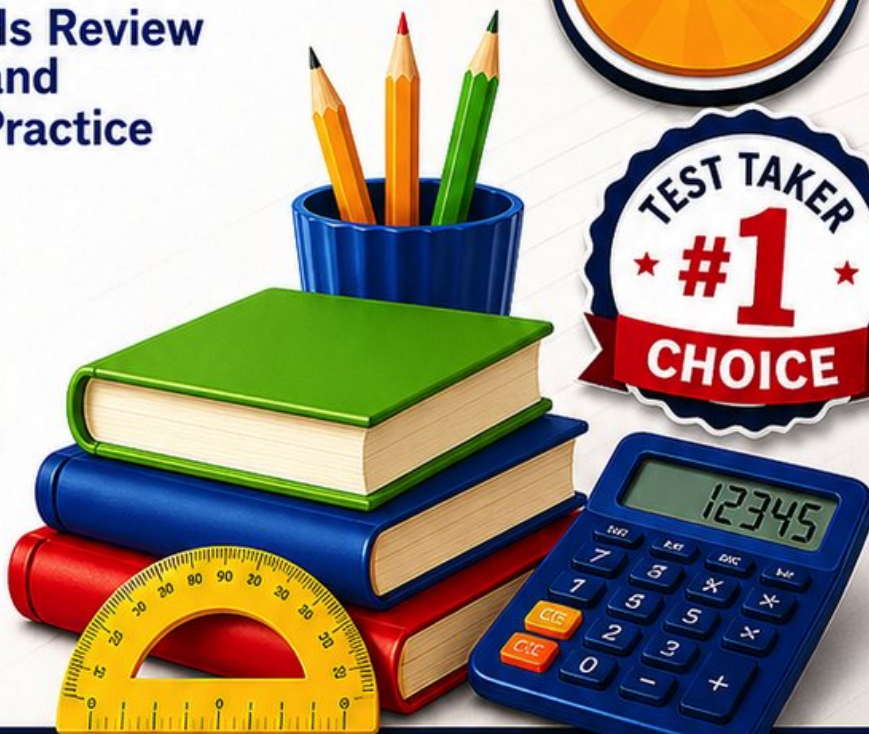
**Covers All Grade 5 Math Topics**  
Numbers & Operations, Fractions,  
Decimals, Geometry, Measurement,  
Data & Problem Solving



**Build Confidence**  
Strengthen Skills • Improve Accuracy  
• Boost Test Readiness



**Detailed Answer Key**  
Step-by-Step Explanations  
for All Questions



WRITTEN FOR  
GRADE 5 STUDENTS



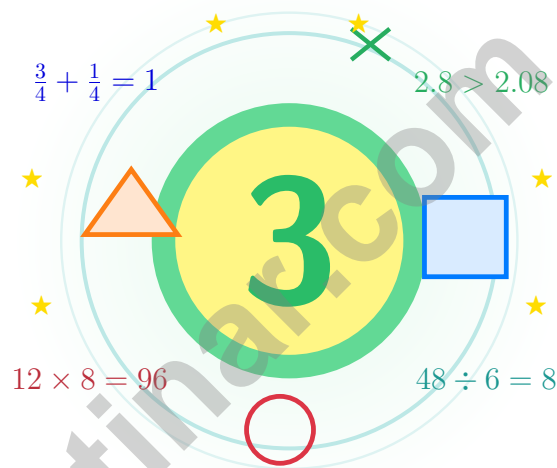
PERFECT FOR  
TEST PREP & REVIEW



CLASSROOM, HOME,  
OR SELF-STUDY USE

# 3 Oregon OSAS Grade 5 Math Practice Tests

*Evergreen math for thinkers who go deep*



Three full tests, a friendly quick review, smart strategy pages, and student-tested support that help Grade 5 mathematicians from The Beaver State walk in ready to think.

**Jay Daie and Reza Nazari**



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# Oregon, Step Inside Your Math Workshop

Evergreen math for thinkers who go deep

## For Every Curious Brain in Oregon

Math thinking is like Crater Lake – it looks calm on the surface, and goes a long way down once you start exploring.

Some questions will feel easy from the very first read. Others will ask you to pause, sketch, estimate, or try again. That is not a problem. That is practice doing exactly what it should do. Every honest attempt grows your math brain a little stronger.

### Notice

Look closely at what the problem says, shows, and asks.

### Try

Pick a plan and step through it carefully.

### Grow

Use every correction as a clue for what to master next.

**An Oregon promise to yourself:** I will let my thinking go as deep as a Pacific lake – calm on the surface, careful all the way down.

# Three Tests, Three Lessons

A simple game plan that turns practice into real progress

## Step 1: Preview

**Begin with the quick review.**

Wake up the big Grade 5 ideas before the test starts so your brain is already warmed up.

## Step 2: Practice

**Take one full practice test.**

Find a calm corner, settle in, and aim for careful, honest choices before quick ones.

## Step 3: Reflect

**Check your work honestly.**

Circle missed questions, sort out what went sideways, and notice which skills are calling for more attention.

## Step 4: Level Up

**Repair and retry.**

Read the explanation, fix the work, and carry that lesson forward into the next test.

## Three Weeks, Three Tests, Three Wins

<b>Week 1</b>	Take Test 1 to learn your starting strengths – not just your starting score.
<b>Week 2</b>	Take Test 2 and give extra attention to the spots where reading carefully or showing work can lift your score.
<b>Week 3</b>	Take Test 3 and bring everything forward: calm focus, smart checking, stronger habits.



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## Three Tests, Up Close

### What these practice tests help Grade 5 students build

These three practice tests prepare Grade 5 students in the Beaver State for the Oregon OSAS with the steady focus of an evergreen morning. The goal is bigger than getting answers right. Students are practicing how to read with care, choose a strategy, solve step by step, and explain their reasoning clearly – the same way mathematicians do every single day.

#### Selected-Response Questions

Students solve the problem and choose the best answer. Estimating first, ruling out weak choices, and checking for reasonableness can save both time and points.

#### Constructed-Response Questions

Students show their steps, explain a method, or back up an answer with clear math. Clean reasoning matters because it shows how the answer was actually found.

#### Grade 5 Ideas That Show Up Again and Again

- place value, comparing numbers, and rounding
- multi-digit addition, subtraction, multiplication, and division
- fractions, mixed numbers, and decimals
- perimeter, area, volume, and measurement conversions
- line plots, tables, numerical patterns, and coordinate points
- geometry and multi-step real-world problems

**What strong work looks like on the OSAS:** the math is correct, the steps are readable, the labels and units match the problem, and the final answer truly answers the question being asked.



# Table of Contents

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## Grade 5 Mathematics Reference Materials

### PERIMETER AND AREA

Perimeter of Rectangle  $P = 2l + 2w$  or  $P = 2(l + w)$

Area of Rectangle  $A = l \times w$

Area of Triangle  $A = \frac{1}{2} \times b \times h$

Volume of Rectangular Prism  $V = l \times w \times h$

### LENGTH

#### Customary

1 foot (ft) = 12 inches (in.)

1 yard (yd) = 3 feet (ft)

1 yard (yd) = 36 inches (in.)

#### Metric

1 meter (m) = 100 centimeters (cm)

1 centimeter (cm) = 10 millimeters (mm)

1 kilometer (km) = 1,000 meters (m)

### CAPACITY

#### Customary

1 cup (c) = 8 fluid ounces (fl oz)

1 pint (pt) = 2 cups (c)

1 quart (qt) = 2 pints (pt)

1 gallon (gal) = 4 quarts (qt)

#### Metric

1 liter (L) = 1,000 milliliters (mL)

### WEIGHT AND MASS

#### Customary

1 pound (lb) = 16 ounces (oz)

#### Metric

1 kilogram (kg) = 1,000 grams (g)

1 gram (g) = 1,000 milligrams (mg)

### TIME

1 minute (min) = 60 seconds (sec)    1 week = 7 days

1 hour (hr) = 60 minutes (min)    1 year = 12 months

1 day = 24 hours (hr)    1 year = 52 weeks



- 1) A ribbon is 3.6 meters long. It is cut into 3 equal pieces. How long is each piece?
- A. 1.2 m                       C. 1.4 m  
 B. 1.3 m                       D. 1.5 m
- 2) A classroom aquarium has volume  $336 \text{ cm}^3$  and base area  $56 \text{ cm}^2$ . How deep is the water?
- A. 6 cm                       C. 4 cm  
 B. 5 cm                       D. 7 cm
- 3) Evaluate:  $\{[(12 \div 3) + 1] \times 2\} - 3$
- A. 5                       C. 9  
 B. 7                       D. 13
- 4) Why does  $5.00 - 1.23$  require regrouping?
- A. Regrouping is not needed because the ones are large enough.       C. No, the difference is 3.87  
 B. The tenths and hundredths in 5.00 must be regrouped.       D. Subtracting from left to right avoids regrouping.
- 5) A florist graphs event work. The x-axis shows hours, and the y-axis shows bouquets arranged. What does the point  $(4, 32)$  mean?
- A. hours is 32 when bouquets arranged is 4       C. bouquets arranged is 32 when hours is 4  
 B. hours and bouquets arranged are both 36       D. bouquets arranged is 4 when hours is 32





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1 kilogram (kg) = 1,000 grams (g)

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### TIME

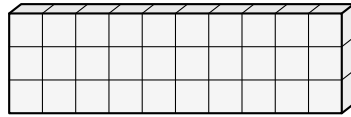
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1) A rectangular prism with dimensions 10 by 1 by 3 contains how many unit cubes?

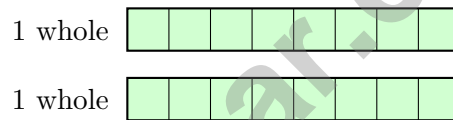


- A. 14 unit cubes
- B. 30 unit cubes
- C. 20 unit cubes
- D. 13 unit cubes

2) Without calculating, is  $1,205 \times (3 + 2)$  greater than, less than, or equal to  $5 \times (3 + 2)$ ?

- A. Cannot tell
- B. Less than
- C. Equal to
- D. Greater than

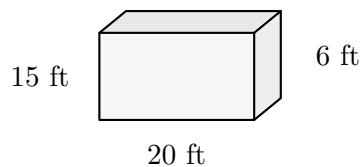
3) The model shows 2 wholes, with each whole cut into pieces of size  $\frac{1}{8}$ . How many pieces of size  $\frac{1}{8}$  are there in all?



2 wholes, each cut into pieces of size  $\frac{1}{8}$

- A. 10
- B. 16
- C. 8
- D. 2

4) A swimming pool is shaped like a rectangular prism with dimensions 20 feet long, 15 feet wide, and 6 feet deep. How many cubic feet of water can it hold?



- A. 600 cubic feet
- B. 1200 cubic feet
- C. 1800 cubic feet
- D. 2100 cubic feet



## Grade 5 Mathematics Reference Materials

### PERIMETER AND AREA

Perimeter of Rectangle  $P = 2l + 2w$  or  $P = 2(l + w)$

Area of Rectangle  $A = l \times w$

Area of Triangle  $A = \frac{1}{2} \times b \times h$

Volume of Rectangular Prism  $V = l \times w \times h$

### LENGTH

#### Customary

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### TIME

1 minute (min) = 60 seconds (sec)    1 week = 7 days

1 hour (hr) = 60 minutes (min)    1 year = 12 months

1 day = 24 hours (hr)    1 year = 52 weeks



1) Which equation is true after finding a common denominator?

A.  $\frac{1}{2} = \frac{3}{4}$

B.  $\frac{2}{3} = \frac{8}{12}$

C.  $\frac{1}{4} = \frac{2}{6}$

D.  $\frac{3}{5} = \frac{8}{10}$

2) A student says  $0.03 \times 10 = 3$ . Is this correct?

 A. Correct B. Too large; correct is 0.003 C. Too large; correct is 0.3 D. Too small; correct is 30

3) Two related patterns are shown.

Step	1	2	3	4
Pattern A	15	18	21	24
Pattern B	30	36	42	48

Which relationship is true for each pair of corresponding terms?

 A. Pattern B is 15 more than Pattern A. C. Pattern B is 3 less than Pattern A. B. Pattern B is twice Pattern A. D. Pattern B is the same as Pattern A.

## Practice Test Answer Keys

### How to use this section:

1. check your answer
2. circle missed questions
3. rework them before reading the explanation

**Good correction habits build strong scores.**

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## Practice Test Answers and Explanations

### Practice Test 1 Answers and Explanations

- Choice A is correct.** (5.NBT.B.5)  $3.6 \div 3 = 1.2$  m. Divide  $36 \div 3 = 12$ , then place decimal one place from right.
- Choice A is correct.** (5.GM.D.7) The base area is 56 square centimeters. Since  $336 \div 56 = 6$ , the water is 6 cm deep.
- Choice B is correct.** (5.OA.A.1) Work outward:  $12 \div 3 = 4$ , then  $[4 + 1] = 5$ , then  $5 \times 2 = 10$ . The final subtraction gives  $10 - 3 = 7$ .
- Choice B is correct.** (5.NBT.B.7) Write 5.00 as 4 ones, 9 tenths, and 10 hundredths. Then subtract by place value:  $10 - 3 = 7$  hundredths,  $9 - 2 = 7$  tenths, and  $4 - 1 = 3$  ones. So  $5.00 - 1.23 = 3.77$ .
- Choice C is correct.** (5.GM.A.2) The first coordinate, 4, matches the x-axis label: hours. The second coordinate, 32, matches the y-axis label: bouquets arranged. So the point means bouquets arranged is 32 when hours is 4.
- Choice D is correct.** (5.NBT.A.2) Dividing by 1,000:  $189 \div 1000 = 0.189$  g per sample.
- Choice C is correct.** (5.GM.C.4) 5 lengths:  $5 \times 15 = 75$  meters. 3 widths:  $3 \times 8 = 24$  meters. Total:  $75 + 24 = 99$  meters. Convert:  $99 \times 100 = 9,900$  centimeters.
- Choice A is correct.** (5.NBT.A.1) “Zero and three hundred twenty-one thousandths” means  $0 + \frac{321}{1000}$ , which is 0.321.
- Choice A is correct.** (5.NF.A.2) To make an equivalent fraction, divide the numerator and denominator by the same nonzero number:  $\frac{6 \div 3}{9 \div 3} = \frac{2}{3}$ .
- Choice C is correct.** (5.NBT.A.3) 0.72 has two decimal places, so it represents hundredths. The correct word form is “seventy-two hundredths”.
- Choice D is correct.** (5.NF.A.1)  $6 - 4 = 2$  and  $\frac{2}{5} - \frac{1}{5} = \frac{1}{5}$ . Result:  $2\frac{1}{5}$ .
- Choice A is correct.** (5.GM.D.7) Use the rectangular-prism volume formula:  $11 \times 5 \times 8 = 440$ . So the volume is 440 cubic centimeters.
- Choice C is correct.** (5.GM.C.4) Convert 1.2 L to mL:  $1.2 \times 1000 = 1200$  mL. Both containers hold 1,200 mL.
- Choice D is correct.** (5.NBT.A.2) A power of 10 tells how many factors of 10 to use.  $5 \times 10^3 = 5 \times 1000 = 5000$ . This confirms the answer.
- The correct answer is 34.** (5.NBT.B.6)  $18 \times 30 = 540$ , leaving 72.  $72 \div 18 = 4$ . Quotient:  $30 + 4 = 34$ .
- Choice C is correct.** (5.GM.D.6) Each layer has  $4 \times 3 = 12$  unit cubes. With 2 layers, the total is  $12 \times 2 = 24$  unit cubes.
- Choice A is correct.** (5.NF.B.7) The question is  $8 \div \frac{1}{5}$ . Each box makes 5 fifth-box kits, and  $8 \times 5 = 40$  kits.
- Choice C is correct.** (5.NF.B.7) The student found  $4 \times \frac{1}{2} = 2$ . But  $4 \div \frac{1}{2}$  asks how many halves are in 4 wholes. There are 2 halves in each whole, so 4 wholes contain  $4 \times 2 = 8$  halves.
- Choice A is correct.** (5.GM.C.4) First convert 7 feet to inches:  $7 \times 12 = 84$ . Then add the extra 6 inches:  $84 + 6 = 90$  inches.
- Choices A, B are correct.** (5.DR.A.1) The three measurements add to 1 cup. If 1 cup is shared equally among 3 containers, each container gets  $\frac{1}{3}$  cup.
- Choice D is correct.** (5.GM.B.3) Figure D is a rhombus with no right angles. It has two pairs of parallel sides, so it is a parallelogram, but it is not a rectangle.
- The correct answer is  $\frac{11}{12}$ .** (5.NF.A.1) Use a common denominator of 12.  $\frac{1}{4} = \frac{3}{12}$ ,  $\frac{1}{6} = \frac{2}{12}$ , and  $\frac{1}{2} = \frac{6}{12}$ . Then  $\frac{3}{12} + \frac{2}{12} + \frac{6}{12} = \frac{11}{12}$ .
- Choice D is correct.** (5.NF.A.2) Completed:  $\frac{7}{10} + \frac{1}{5} = \frac{7}{10} + \frac{2}{10} = \frac{9}{10}$ . Left:  $1 - \frac{9}{10} = \frac{1}{10}$ .
- Choice C is correct.** (5.GM.D.7) Choose the operation from the story, then keep the unit with the answer. Multiply:  $5 \times 3.25 = 16.25$  liters. This confirms the answer.
- The correct answer is 36000.** (5.NBT.A.2) Move the decimal point four places right:  $3.6 \rightarrow 36,000$ .
- The correct answer is 36855.** (5.NBT.B.5)  $819 \times 5 = 4,095$  and  $819 \times 40 = 32,760$ . Sum:  $4,095 + 32,760 = 36,855$ .
- Choice C is correct.** (5.GM.B.3) A rectangle is defined as a quadrilateral with all four angles equal to  $90^\circ$ . Trapezoids, rhombuses, and general parallelograms do not have this property.
- Choice A is correct.** (5.NF.B.4)  $8 \times \frac{1}{4} = \frac{8}{4} = 2$  kilometers.



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**Star Player Pep Talk**

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**To My Star Math Player,**

◇ 3 practice tests. Every one of them was a chance to grow, and every one of them you took. That's why your math game is at a new level today. ◇

★ **Star players know:** confidence comes from preparation. You can't fake confidence. You build it. You built yours through these 3 tests. So when test day shows up, your confidence will be real, because your work was real. ★

**Star Player Stats**

- **Practice Hours:** OFF THE CHARTS!
- **Skill Range:** BROAD! You can handle different problem types.
- **Mental Toughness:** HIGH! You don't quit on hard problems.
- **Game-Day Plan:** READY! You know your strategies.

**Star tip:** the best players don't try to be perfect on every play. They focus on the next play. Do that on the test. One problem at a time. One small win at a time. You add them up to a great score.

If you'd like to share your experience or have questions, please email me at [reza@testinar.com](mailto:reza@testinar.com). I'd love to hear from you!

**Reza Nazari & Jay Daie**

Your Math Coaches (Go Star!)

# Build Skills. Boost Confidence. Excel on the Grade 5 Math Test.

Help your child succeed with confidence! This book includes **3 full-length Grade 5 Math practice tests** aligned to state standards. With a focus on essential skills, problem solving, and test readiness, it's the perfect resource for classroom, home, or on-the-go practice.



## WHAT'S INSIDE:



### 3 Full-Length Grade 5 Math Practice Tests

Realistic test format to build familiarity and confidence.



### Covers All Essential Math Topics

Fractions, decimals, geometry, measurement, data, number operations, and more.



### Build Strong Math Skills

Strengthen understanding and problem-solving through varied question types.



### Detailed Answer Key

Step-by-step explanations to help your child learn from mistakes and improve.



### Track Progress & Improve

Use score trackers to identify strengths and focus on areas that need more practice.



## The Smarter Way to Prepare!

Consistent practice builds stronger skills, sharper thinking, and test-day success.

- ✓ Reinforce classroom learning
- ✓ Improve accuracy and speed
- ✓ Reduce test anxiety
- ✓ Achieve your best score!



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