

7

Ohio

OST

GRADE 5

MATHEMATICS

PRACTICE TESTS

✓
PRACTICE
PREPARE
SUCCEED

★★★

Comprehensive Standards-Aligned
Review for Strong Grade 5
Math Performance



$$\frac{3}{4} + \frac{2}{4} = \frac{5}{4}$$

$$2.4 + 1.6 = 4.0$$

$$A = \frac{bh}{2}$$



**7 FULL-LENGTH
PRACTICE TESTS**

Realistic style
questions



**STANDARDS-
ALIGNED**

Covers all Grade 5
standards



BUILD CONFIDENCE

Target weak areas
and improve
performance



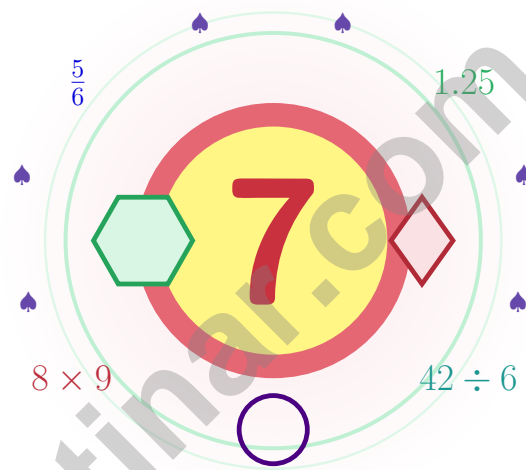
ACHIEVE SUCCESS

Develop skills,
stay prepared,
excel on test day

★ PRACTICE TODAY. PERFORM TOMORROW. **SUCCEED** FOREVER. ★

7 Ohio OST Grade 5 Math Practice Tests

This book is here to help you practice, reflect, and rise across seven tests



Seven full tests, a concise review, and helpful support that turns
Grade 5 practice in The Buckeye State into steady, confident
growth from page one to the final check.

Jay Daie and Reza Nazari



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Ohio, Your Seven-Test Trail Begins

Seven full tests woven into one calm, steady practice path

Dear Ohio Math Trail Crew

This practice book is your steady companion for seven tests, not a place to be perfect. Math is like an Ohio season – it changes, but the careful student notices what stays the same.

Use these seven tests like stepping-stones. Take one test at a time, check your answers honestly, and notice which skills need more attention. Small improvements add up across seven rounds.

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.

A strong habit for Ohio mathematicians: read carefully, estimate when it helps, show your steps, and keep going even when a question feels tricky. That is how steady math confidence is built.

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Scan me



Your Seven-Step Trail Plan

A simple routine that turns practice into progress

Step 1: Step 1

Warm up with a quick review.

Spend a few minutes waking up your memory before the test begins.

Step 2: Step 2

Take one full practice test.

Work in a calm spot and focus on careful thinking before speed.

Step 3: Step 3

Check your work honestly.

Circle missed questions and notice which topics keep showing up.

Step 4: Step 4

Fix, reflect, and try again.

Read the explanation, repair the work, and bring that lesson into the next test.

A Good 7-Week Ohio Rhythm

Week 1	Take Test 1 like a long fall walk.
Week 2	Take Test 2 and slow down on word problems.
Week 3	Take Test 3 and lift fraction and decimal work.
Week 4	Take Test 4 and pay close attention to labels and units.
Week 5	Take Test 5 and compare your habits with your first test.
Week 6	Take Test 6 and practice staying calm during tricky questions.
Week 7	Take Test 7 with calm, careful focus.



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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 $A = l \times w$

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

LENGTH

Customary

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

1 yard (yd) = 3 feet (ft)

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Metric

1 meter (m) = 100 centimeters (cm)

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

1 pint (pt) = 2 cups (c)

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1) Subtract: $8 - 2\frac{3}{5}$.

A. $5\frac{2}{5}$

B. $5\frac{3}{5}$

C. $6\frac{1}{5}$

D. $6\frac{2}{5}$

2) Compare: $(15 + 8) \times 4$ $15 + 8 \times 4$

A. $>$

B. $<$

C. $=$

D. Cannot tell

3) Which decimal is closest to the sum $1.89 + 2.14$?

A. 3.93

B. 4.23

C. 4.13

D. 4.03

4) An artist paints a canvas that is $2\frac{1}{2}$ feet by $4\frac{1}{2}$ feet. What is the area of the canvas?



A. 13 square feet

B. $12\frac{1}{4}$ square feet

C. $11\frac{1}{4}$ square feet

D. 10 square feet

5) Find: 250×10^2 .

Record your answer in the space provided.



6) Error Check: A student says $\frac{1}{5} \div 2 = \frac{1}{3}$. What is the correct answer?

A. $\frac{1}{3}$ (student is correct)

C. $\frac{2}{5}$

B. $\frac{1}{10}$

D. $\frac{1}{7}$

7) What is the relationship between the sides of a rhombus?

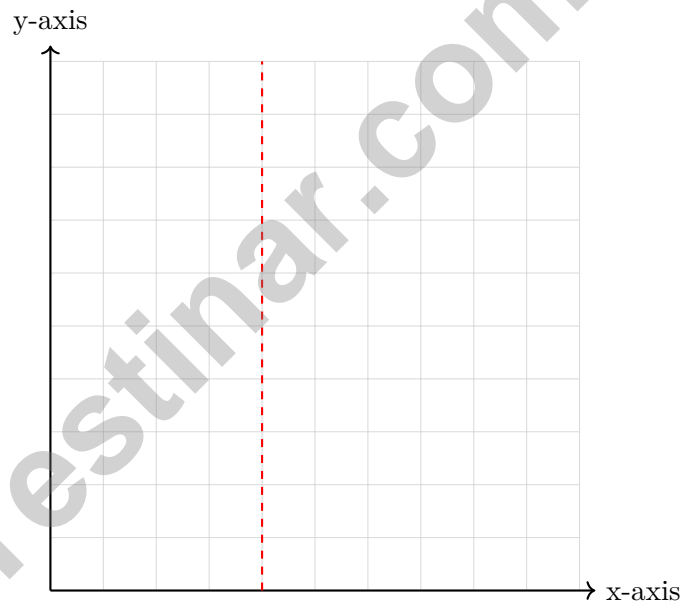
A. No two sides are equal.

C. All four sides are equal.

B. Only opposite sides are equal.

D. Two adjacent sides are equal.

8) How many whole-number grid points shown on this grid are on the dashed line and strictly above the x-axis? Do not include the point on the x-axis.



first coordinate 4

A. Exactly 1 point

C. Exactly 11 points

B. Exactly 10 points

D. 0 points



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- 1) A science kit box measures 8 meters long, 5 meters wide, and 4 meters tall. What is its volume?
- A. 40 cubic meters C. 20 cubic meters
 B. 32 cubic meters D. 160 cubic meters
- 2) Which expression is equivalent to $\frac{2,800}{10^1}$?
- A. $2,800 \div 1$ C. $2,800 \div 100$
 B. $2,800 \div 1,000$ D. $2,800 \div 10$
- 3) Compare without computing: $5 \times (240 + 80)$ and $240 + 80$.
- A. Equal C. First is 5 less than the second
 B. First is $\frac{1}{5}$ of the second D. First is 5 times the second
- 4) Use the place-value chart to build a mystery number.

Ones	Tenths	Hundredths	Thousandths
0	6	0	9

What is the standard form?

- A. 0.69 C. 60.9
 B. 6.09 D. 0.609
- 5) A prism's bottom layer has 12 unit cubes. The prism is 4 layers tall. What is the total volume?

Record your answer in the space provided.



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1) A tub holds 60 gallons. Water drains at 5 gallons per minute. Which expression gives gallons remaining after 8 minutes?

A. $60 - 5 \times 8$

C. $(60 - 5) \times 8$

B. $5 \times 8 - 60$

D. $60 \div 5 - 8$

2) Four swimmers' lap times in seconds: 8.12, 8.21, 8.02, 8.20. Order from fastest to slowest.

A. 8.02, 8.12, 8.20, 8.21

C. 8.21, 8.20, 8.12, 8.02

B. 8.02, 8.12, 8.21, 8.20

D. 8.12, 8.02, 8.21, 8.20

3) What is $3 \times \frac{5}{6}$?

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

C. $\frac{8}{6}$

B. $\frac{5}{18}$

D. $\frac{3}{6}$

4) Pattern B is 6 times Pattern A. If Pattern A is 4, what is Pattern B?

Record your answer in the space provided.

5) Find the least common denominator for $\frac{1}{5}$ and $\frac{2}{3}$.

A. 8

C. 10

B. 5

D. 15

6) Pattern 100, 50, 25, 12.5, ... Next?

A. 6.25

C. 10

B. 6.5

D. 5



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1) A baker used $\frac{2}{5}$ cup of flour, then added $\frac{1}{3}$ cup more. How much flour total?

A. $\frac{3}{8}$ cup

B. $\frac{11}{15}$ cup

C. $\frac{3}{15}$ cup

D. $\frac{5}{8}$ cup

2) Pattern table:

x	y
1	2
2	5
3	8
4	?

What is the rule and the missing output?

A. Multiply the input by 3, then subtract 1; output 11

B. Add 1 to the input; output 5

C. Double the input; output 8

D. Multiply the input by 3; output 12

3) Which expression is equivalent to $(9 + 6) \times (5 - 2)$?

A. $15 + 3$

B. 15×3

C. 15×7

D. 3×3

4) Estimate: $6 - 3\frac{9}{10}$.

A. 1

B. 2

C. 3

D. 4



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.NF.1)** $8 = 7\frac{5}{5}$. Then $7\frac{5}{5} - 2\frac{3}{5} = 5\frac{2}{5}$.
- Choice A is correct.** **(5.OA.2)** On the left, the whole sum (15 + 8) is multiplied by 4. On the right, only the 8 is multiplied by 4 before adding 15, so the left expression is greater.
- Choice D is correct.** **(5.NBT.7)** Add: $1.89 + 2.14 = 4.03$ (hundredths: $9 + 4 = 13$, regroup; tenths: $8 + 1 + 1 = 10$, regroup; ones: $1 + 2 + 1 = 4$).
- Choice C is correct.** **(5.NF.5b)** $2\frac{1}{2} = \frac{5}{2}$ and $4\frac{1}{2} = \frac{9}{2}$. Multiply: $\frac{5}{2} \times \frac{9}{2} = \frac{45}{4} = 11\frac{1}{4}$ square feet.
- The correct answer is 25000.** **(5.NBT.2)** Multiplying by a power of 10 shifts the value to a larger place. $250 \times 100 = 25,000$ (attach two zeros). This confirms the answer.
- Choice B is correct.** **(5.NF.7c)** The student treated the problem like adding to the denominator. Dividing $\frac{1}{5}$ into 2 equal parts means $\frac{1}{5} \div 2 = \frac{1}{5} \times \frac{1}{2} = \frac{1}{10}$.
- Choice C is correct.** **(5.MD.5c)** By definition, a rhombus has all four sides of equal length.
- Choice B is correct.** **(5.G.1)** The dashed line shows points with first coordinate 4. The whole-number points above the x-axis are (4, 1) through (4, 10), so there are 10 points.
- Choice C is correct.** **(5.MD.1)** First add the liquid amounts: $1\frac{1}{2} + \frac{1}{2} = 2$ cups. Since 1 cup is 8 fl oz, $2 \times 8 = 16$ fl oz.
- Choice D is correct.** **(5.NF.7c)** The model counts half-size pieces in 4 wholes. So the matching equation is $4 \div \frac{1}{2} = n$.
- Choice D is correct.** **(5.OA.3)** The rule is: multiply each term by its position number. $48 \times 5 = 240$.
- Choice A is correct.** **(5.NF.2)** $\frac{1}{2}$ and $\frac{2}{3}$ have different denominators. With LCD 6: $\frac{1}{2} = \frac{3}{6} \neq \frac{4}{6} = \frac{2}{3}$.
- Choice B is correct.** **(5.NBT.2)** $0.023 \times 100 = 2.3$ (move decimal 2 places right).
- Choice A is correct.** **(5.G.2)** Starting at (0,0), adding 2 to x and 1 to y each time gives (0,0), (2,1), (4,2), (6,3). Graph A shows those points.
- Choice C is correct.** **(5.OA.3)** For 25 likes, the matching number of views should be $25 \times 5 = 125$, not 150. The other listed pairs follow the rule.
- Choice C is correct.** **(5.MD.5)** Choose the operation from the story, then keep the unit with the answer. Divide: $840 \div 35 = 24$ bags. This confirms the answer.
- The correct answer is 48.** **(5.NBT.2)** Move the decimal point one place left: $480 \rightarrow 48$.
- The correct answer is 10.** **(5.OA.2)** The expression (45 - 9) is the original amount. Multiplying it by 10 makes 10 copies of that amount.
- The correct answer is 6.** **(5.MD.5)** The known length and height make groups of $6 \times 4 = 24$ cubic centimeters. Since $144 \div 24 = 6$, the width is 6 cm.
- Choice A is correct.** **(5.NF.4)** $\frac{1}{6} \times 30 = \frac{30}{6} = 5$ students.
- Choice B is correct.** **(5.OA.1)** Work from the inside out. First $12 \div 4 = 3$, then the bracket becomes $5 + 3 = 8$, and finally $8 \times 2 = 16$.
- Choices A, B are correct.** **(5.NBT.3a)** 0.25 is twenty-five hundredths, and it can also be written as $0.2 + 0.05$. C equals 2.5, and D equals 0.025.
- Choice D is correct.** **(5.NBT.3b)** $3.25 > 3.2$ because 25 hundredths $>$ 20 hundredths.
- Choice D is correct.** **(5.NF.6)** $\frac{18}{20} \times 40 = \frac{18 \times 40}{20} = \frac{720}{20} = 36$ questions.
- Choice C is correct.** **(5.MD.5a)** Volume = $20 \times 10 \times 2 = 400$ m³.
- Choice C is correct.** **(5.NF.7c)** $4 \div \frac{1}{5} = 4 \times 5 = 20$. We can make 20 packages.
- Choice B is correct.** **(5.NF.2)** The GCF of 10 and 25 is 5. Divide: $\frac{10}{25} = \frac{10 \div 5}{25 \div 5} = \frac{2}{5}$.
- The correct answer is 10⁹.** **(5.NBT.2)** A power of 10 tells how many factors of 10 to use. Count the zeros: nine zeros, so 10⁹. This confirms the answer.
- Choice D is correct.** **(5.MD.3b)** A cube with side length 4 cm has 4 layers of $4 \times 4 = 16$ cubic centimeters each. So $16 \times 4 = 64$ cubic centimeters.



Research Conclusion Report

Greetings, Research Fellow!

★ Research breakthrough! You completed seven full practice tests, and that is a big achievement. In math, practice is like running experiments: you try a method, check the result, learn from mistakes, and improve the next time. After seven rounds of practice, your “math lab” is stronger and your confidence is higher. ★

◇ **What strong researchers do:** they stay organized. They read the question carefully, write down what is known, choose a strategy, and then verify the final answer. When you do that, you avoid careless mistakes and you earn points. ◇

Research Metrics

- **Methodology:** choose a clear plan (model, equation, or steps).
- **Analysis:** solve carefully and show your work.
- **Verification:** check the answer with estimation or an opposite operation.
- **Confidence:** stay calm and keep going, even on tricky questions.

Key principle: verify findings before you turn in your work. On test day, use the last minutes to check your answers, reread word problems, and make sure you answered what was asked.

Share your progress at reza@testinar.com!

Reza Nazari & Jay Daie

Your Math Coaches (Practice Makes Progress)

PRACTICE TODAY. PERFORM TOMORROW.

Success in math starts with practice! This book provides the **practice, confidence, and skills** your child needs to excel on the Grade 5 Math test and beyond.

KEY BENEFITS:



TARGETED PRACTICE

Focus on the most important Grade 5 math skills.



STANDARD-ALIGNED

All tests align with state standards for Grade 5.



BUILD CONFIDENCE

Strengthen skills, reduce test anxiety, and boost confidence.



IMPROVE PERFORMANCE

Timed practice helps improve speed and accuracy.



ACHIEVE SUCCESS

Develop strong test-taking skills and achieve your best score!

PERFECT FOR:

✓ Classroom Practice

✓ Homework Help

✓ Test Preparation

✓ Summer Learning

✓ On-the-Go Practice

✓
PRACTICE
PREPARE
SUCCEED
★★★

STRONG SKILLS. BRIGHT FUTURE.

Give your child the tools they need to succeed in math and in life!



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TRUSTED
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Proven practice for real results.



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YOUR CHILD

Every step of the way.