7 Indiana ILEARN GRADE 5 MATHEMATICS PRACTICE TESTS

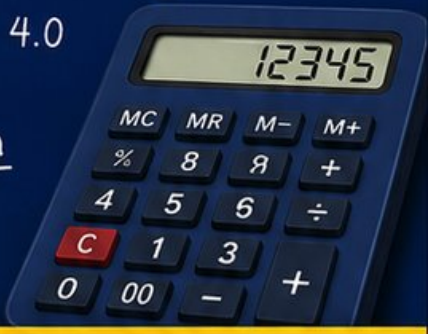
PRACTICE PREPARE SUCCEED

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

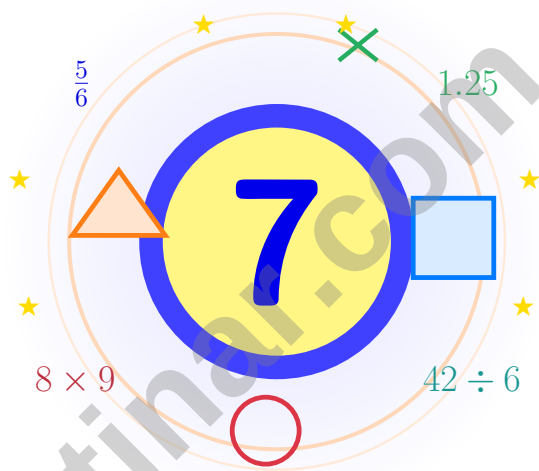
BUILD CONFIDENCE
Target weak areas and improve performance

ACHIEVE SUCCESS
Develop skills, stay prepared, excel on test day

★ PRACTICE TODAY. PERFORM TOMORROW. SUCCEED FOREVER. ★

7 Indiana ILEARN Grade 5 Math Practice Tests

Seven full tests woven into one calm, steady practice path



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

Jay Daie and Reza Nazari

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Step Into the Practice Path, Indiana

A seven-step expedition for curious Grade 5 thinkers

For Every Curious Mind in Indiana

This practice book is your steady companion for seven tests, not a place to be perfect. Math is like a long race lap: each careful step keeps you in the right lane and ready for the next turn.

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 Indiana 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.

Seven Tests, Seven Lessons

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 Indiana Rhythm

Week 1	Take Test 1 like a warm-up lap.
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, race-day focus.

Table of Contents

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	$A = \frac{1}{2} \times b \times h$
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LENGTH

Customary	**Metric**
1 foot (ft) = 12 inches (in.)	1 meter (m) = 100 centimeters (cm)
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1) A cube is built from 6 layers of unit cubes. Each layer is a 6×6 array. How many unit cubes are in the cube?

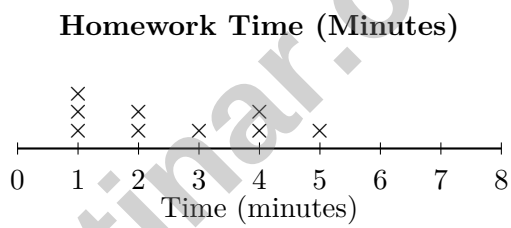
☐ A. 36 unit cubes
☐ B. 72 unit cubes
☐ C. 216 unit cubes
☐ D. 432 unit cubes

2) A place-value chart shows the number 24.6. Which value results from multiplying by 100?

Thousands	Hundreds	Tens	Ones	.	Tenths
		2	4	.	6

☐ A. 246
☐ B. 2,460
☐ C. 24,600
☐ D. 0.246

3) The line plot shows the time (in minutes) students spent on math homework:



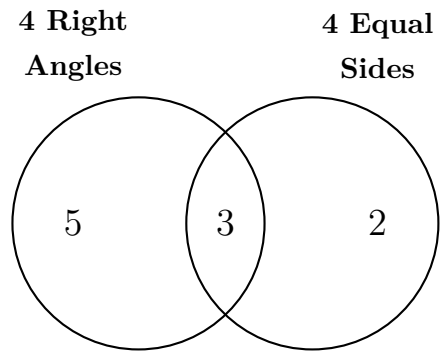
How many students spent 2 minutes on math homework?

☐ A. 1 student
☐ B. 2 students
☐ C. 3 students
☐ D. 4 students

4) A polygon has 6 sides, 6 vertices, and all sides and angles equal. What name can be used for this shape?

Record your answer in the space provided.

5) A Venn diagram classifies quadrilaterals by two properties:



Which type of figure is represented by the number 3?

☐ A. Rectangles that are not squares
☐ B. Squares
☐ C. Rhombuses that are not squares
☐ D. Triangles

6) A student says $\frac{6}{9}$ is equivalent to $\frac{6}{3}$ because the denominator was divided by 3. What is the student's mistake?

☐ A. Only the denominator was divided.
☐ B. Both numbers were divided by 3.
☐ C. The numerator should stay 6.
☐ D. The denominator should be multiplied by 3.

7) A banner is 2 yards long. How many inches is that? (1 yard = 3 feet, 1 foot = 12 inches)

☐ A. 36 inches
☐ B. 48 inches
☐ C. 60 inches
☐ D. 72 inches

8) Which number has a 6 in the hundredths place?

☐ A. 4.687
☐ B. 6.483
☐ C. 3.64
☐ D. 9.061

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1) A paint can is $\frac{5}{6}$ full. If $\frac{2}{6}$ is used to paint a door, how much paint remains?

☐ A. $\frac{1}{6}$
☐ B. $\frac{2}{6}$
☐ C. $\frac{1}{2}$
☐ D. $\frac{7}{6}$

2) A triangle has angles of 60 degrees, 60 degrees, and 60 degrees. What type of triangle is this based on its angles?

☐ A. Acute triangle
☐ B. Right triangle
☐ C. Obtuse triangle
☐ D. Isosceles triangle

3) A trip is 2 hours 45 minutes. Express the total time in minutes.

Record your answer in the space provided.

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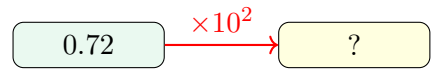
1) A gardener planted flowers in two beds. One bed is $\frac{3}{10}$ meter wide and the other is $\frac{1}{5}$ meter wide. What is the total width in simplest form?

☐ A. $\frac{4}{15}$ meter
☐ B. $\frac{1}{2}$ meter
☐ C. $\frac{5}{10}$ meter
☐ D. $\frac{3}{5}$ meter

2) Use the arrow diagram. How many places does the decimal point move when multiplying by 10^2?



☐ A. 1 place
☐ B. 2 places
☐ C. 3 places
☐ D. 10 places

3) Which number is least: 0.6, 0.55, or 0.605?

Record your answer in the space provided.

4) Subtract and simplify: $1 - \frac{3}{4}$

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

5) A tank holds $9\frac{3}{4}$ gallons of water. After using $4\frac{2}{4}$ gallons, how much water is left?

☐ A. $4\frac{1}{4}$ gal
☐ B. 5 gal
☐ C. $5\frac{1}{4}$ gal
☐ D. $5\frac{1}{2}$ gal

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1) What is the missing factor? $\_\_\_\_ \times 2 = 6\frac{1}{2}$

Factor 1	Product
?	$6\frac{1}{2}$
Factor 2	2

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

2) What is $6 \div \frac{1}{2}$?

☐ A. 12
☐ B. 3
☐ C. 6
☐ D. 18

3) Which is the largest?

☐ A. 91×10
☐ B. 91×100
☐ C. 9×1000
☐ D. 10×100

4) Subtract: $\frac{7}{12} - \frac{1}{3}$

☐ A. $\frac{3}{12} = \frac{1}{4}$
☐ B. $\frac{6}{12}$
☐ C. $\frac{8}{9}$
☐ D. $\frac{2}{9}$

5) Add: $\frac{5}{12} + \frac{1}{3}$

☐ A. $\frac{6}{15}$
☐ B. $\frac{9}{12}$ or $\frac{3}{4}$
☐ C. $\frac{1}{12}$
☐ D. $\frac{5}{12}$

6) A factory produces 1,248 toys per day and ships them in crates of 24. How many crates are needed for one day's production?

1,248 toys → 24 toys/crate → ? crates

☐ A. 50
☐ B. 56
☐ C. 54
☐ D. 52

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.

Practice Test Answers and Explanations

Practice Test 1 Answers and Explanations

1) **Choice C is correct.** 5.M.4 Each layer has $6 \times 6 = 36$ unit cubes. With 6 layers, the cube has $36 \times 6 = 216$ unit cubes.
2) **Choice B is correct.** 5.NS.3 Multiplying by 100 moves each digit two places to a larger place value. That changes 24.6 to 2,460.
3) **Choice B is correct.** 5.DA.1 Count the X marks above 2 minutes. There are 2 X marks, so 2 students spent 2 minutes on math homework.
4) **The correct answer is hexagon.** 5.CA.1 A hexagon has 6 sides. Because all sides and angles are equal, regular hexagon is a more specific name, but hexagon is also correct.
5) **Choice B is correct.** 5.CA.1 The number 3 is in the intersection. A square has four right angles and four equal sides, so it belongs in both circles.
6) **Choice A is correct.** 5.CA.4 To make an equivalent fraction, divide the numerator and denominator by the same nonzero number: $\frac{6\div3}{9\div3} = \frac{2}{3}$.
7) **Choice D is correct.** 5.M.1 2 yards $= 2 \times 3 = 6$ feet. 6 feet $= 6 \times 12 = 72$ inches.
8) **Choice D is correct.** 5.NS.1 In 9.061, the digit 0 is in the tenths place, 6 is in the hundredths place, and 1 is in the thousandths place. So the digit 6 is in the hundredths place.
9) **Choice D is correct.** 5.CA.8 Each whole contains 3 pieces of size $\frac{1}{3}$. With 3 wholes, there are $3 \times 3 = 9$ pieces.
10) **Choice B is correct.** 5.CA.3 LCM(12,8) = 24. $\frac{7}{12} = \frac{14}{24}$ and $\frac{1}{8} = \frac{3}{24}$. $\frac{14}{24} + \frac{3}{24} = \frac{17}{24}$.
11) **Choice A is correct.** 5.CA.3 $14\frac{1}{7} \approx 14$ and $8\frac{4}{5} \approx 9$. So $14\frac{1}{7} - 8\frac{4}{5} \approx 14 - 9 = 5$.
12) **Choice C is correct.** 5.CA.10 Since 48 cookies is 4 times as many as 12 cookies, use 4 times as much sugar: $0.75 \times 4 = 3.0$ cups.
13) **Choice B is correct.** 5.CA.3 Borrow 1 from 4 to rewrite $4\frac{1}{8}$ as $3\frac{9}{8}$. Then $3\frac{9}{8} - 2\frac{7}{8} = 1\frac{2}{8}$, which simplifies to $1\frac{1}{4}$.
14) **Choice D is correct.** 5.CA.5 Tripling means using 3 copies of the salt amount. $3 \times \frac{3}{4} = \frac{9}{4}$, and $\frac{9}{4}$ is $2\frac{1}{4}$ teaspoons.
15) **Choice A is correct.** 5.CA.11 Pattern R is 5 times Pattern S: $2 \times 5 = 10$, $4 \times 5 = 20$, $6 \times 5 = 30$, $8 \times 5 = 40$.
16) **Choice D is correct.** 5.CA.11 Rule A gives $6, 9, 12, 15$ and Rule B gives $1, 3, 5, 7$. The next ordered pair is $(15, 7)$.
17) **Choice B is correct.** 5.CA.9 Multiplying by 10 shifts the decimal point 1 place to the right. For example, $3.4 \times 10 = 34$.
18) **Choices A, B are correct.** 5.M.1 A is true: $2.5 \times 100 = 250$ cm. B is true: $3 \times 1{,}000 = 3{,}000$ g. C is false: 500 mL = 0.5 L (not 5 L). D is false: 4 cm = 0.04 m (not 40 m).
19) **The correct answer is 40.** 5.CA.6 Each whole contains 4 fourths. Ten wholes contain $10 \times 4 = 40$ fourths, so the quotient is 40.
20) **The correct answer is isosceles.** 5.G.1 Two side lengths are equal, so Triangle P is isosceles.
21) **Choice B is correct.** 5.CA.7 $9 \times \frac{2}{3} = 6$. The product is less than 9 because $\frac{2}{3} < 1$.
22) **Choice D is correct.** 5.CA.11 The product of 6 and 9 is 6×9. The phrase "8 less than" means subtract 8 from that product.
23) **Choice B is correct.** 5.CA.11 Multiples of 11: 20th multiple is $11 \times 20 = 220$.
24) **Choice B is correct.** 5.CA.7 Area $= \frac{4}{5} \times \frac{3}{4} = \frac{12}{20}$, which simplifies to $\frac{3}{5}$ m^2.
25) **The correct answer is \$4/hr.** 5.CA.11 The point means 3 hours and 12 dollars. Divide dollars by hours: $12 \div 3 = 4$, so the rate is 4 dollars per hour.
26) **Choice B is correct.** 5.M.3 The base area is $12 \times 4 = 48$ square inches. Since $240 \div 48 = 5$, the height is 5 in.
27) **Choice C is correct.** 5.DA.1 Add the ribbon lengths shown by the marks: $(1 \times 3) + (3 \times 2) + (5 \times 3) + (7 \times 1) = 31$ inches. Sharing 31 inches equally among 4 posters gives $31 \div 4 = 7\frac{3}{4}$ inches per poster.
28) **Choice B is correct.** 5.CA.7 A gives $1\frac{1}{2}$, B gives $13\frac{1}{2}$, and C gives 18. The value $13\frac{1}{2}$ is closest to 15, so B is correct.
29) **Choice B is correct.** 5.CA.3 $\frac{1}{3} = \frac{3}{9}$. If $\frac{7}{9} - x = \frac{3}{9}$, then $x = \frac{4}{9}$.
30) **Choice B is correct.** 5.CA.11 Start with the product 4×9. Adding 7 to that product gives $4 \times 9 + 7$.

Celebrate Your Progress

Dear Student,

⋆ Take a moment to be proud of yourself. Seven practice tests is a lot of work, and you did it. That shows responsibility and determination. ⋆

◇ **Progress happens in small steps:** one corrected mistake, one new strategy, one better explanation, one more careful check. Those small steps add up. ◇

Celebrate These Wins

- **Stamina:** you can focus through a full test.
- **Skills:** you practiced many Grade 5 topics.
- **Strategies:** you learned how to plan and check.
- **Confidence:** you know what to do when it's hard.

Keep your head up. Walk into test day knowing you prepared the right way.

Email me at reza@testinar.com.

Reza Nazari & Jay Daie

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PRACTICE TODAY.
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PRACTICE
PREPARE
SUCCEED
★★★

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Every step of the way.