

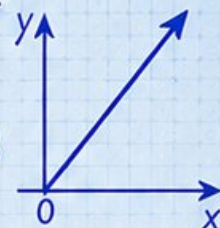
3 Indiana ILEARN

GRADE
6
MATH

PRACTICE TESTS

Standards Aligned Problem Solving
For Comprehensive Assessment Programs

$$y = 2x + 3$$



$$\frac{3}{5} + \frac{2}{10} = \frac{8}{10} = \frac{4}{5}$$

$$36\% \text{ of } 150 = ?$$



3 | PRINTED
TESTS



2 | ONLINE
TESTS



Build
Confidence



Master Key
Math Skills



Answer Explanations
for Every Question



Test-Taking
Strategies That Work

3 Indiana ILEARN Grade 6 Math Practice Tests

*Standards-Aligned Steady Hoosier Practice for Indiana Learning Evaluation Assessment
Readiness Network*



Three complete 40-question Grade 6 practice rounds for ILEARN, built for steady Hoosier practice 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, Indiana Math Explorer!

Three focused rounds using steady Hoosier practice

This book gives you three full Grade 6 practice tests for ILEARN. Each round uses quiet fields, town roads, and clean problem-solving steps as a fresh mental backdrop while you read closely, choose a smart strategy, show your work, and check whether your answer makes sense.

Your Indiana Practice Promise

Work with purpose: read fully, solve neatly, and explain why the answer makes sense.

Read

Plan

Check

How to Use This Book

A three-session routine for steady Hoosier practice

1. **Work in order.** Take one 40-question test at a time in a quiet place.
2. **Preview the skills.** Scan the quick review pages before beginning the first round.
3. **Correct actively.** Retry missed items before reading the full explanation.
4. **Mark confidence.** Put a small star beside problems where your plan felt strong.
5. **Plan the next round.** Use the growth log to choose one habit and one skill to practice.

Indiana review rhythm: Treat each test as a practice lap, then tune one habit before the next start.



What Is Inside?

Three ILEARN tests, 120 questions, and a full review path

Part	What You Will Practice
Tests 1–2	Foundation rounds for ratios, rational numbers, operations, and careful reading.
Test 3	Final stamina round for expressions, equations, geometry, data, problem models, and mixed review.
Answer Pages	Compact keys and explanations that show why each answer works.

The tests are mixed on purpose. Steady hoosier practice 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) On a number line, which comparison is true?

A. $-0.9 > -0.1$

C. $-0.5 > 0.5$

B. $-0.1 > -0.9$

D. $0.1 < -0.1$

2) Find the LCM of 8 and 12.

A. 20

C. 32

B. 24

D. 96

3) A dataset has $Q_1 = 8$ and $Q_3 = 20$. What is the range of the middle 50% of the data?

A. 8

C. 20

B. 28

D. 12

4) A ratio can be graphed as ordered pairs. If a ratio graph shows the points (3, 12) and (5, 20), what is the y-value when $x = 0$?

A. 0

C. 8

B. 4

D. 12

5) A class of 80 students has 20 absent. What percent are absent?

A. 20%

C. 30%

B. 25%

D. 50%



6) A student's grade increased from 82 to 90. What is the percent increase, rounded to the nearest whole number?

- A. 10% C. 8%
- B. 9.8% D. 12%

7) Complete the ratio table:

Left	3	?	15
Right	7	14	?

What are the missing values?

- A. 6 and 30 C. 9 and 35
- B. 6 and 35 D. 10 and 35

8) A can of soda is 12 fluid ounces. How many cups is this? (Use 1 cup = 8 fluid ounces.)

- A. 1 cup C. 2 cups
- B. $\frac{3}{4}$ cup D. 1.5 cups

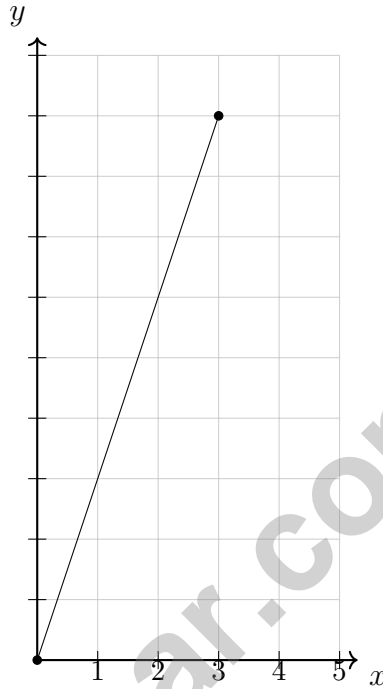
9) Sarah opens a savings account with \$500 earning a simple interest rate of 4% per year. Using the formula $I = P \times r \times t$, how much interest will she earn in 2 years?

- A. \$20 C. \$80
- B. \$100 D. \$40

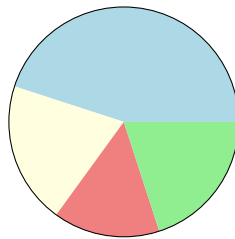


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- 10) A line on a coordinate plane passes through $(0,0)$ and $(3,9)$. Which equation represents this proportional relationship?



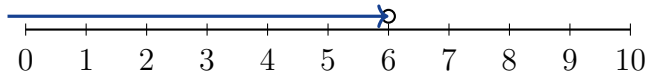
- A. $y = 3x$ C. $y = 9x$
 B. $y = 3x + 9$ D. $y = x + 9$
- 11) A budget is divided into: Housing 45%, Food 20%, Transportation 15%, and Savings. What percent is allocated to savings?



- A. 10% C. 20%
 B. 15% D. 25%



1) What inequality matches this number line?



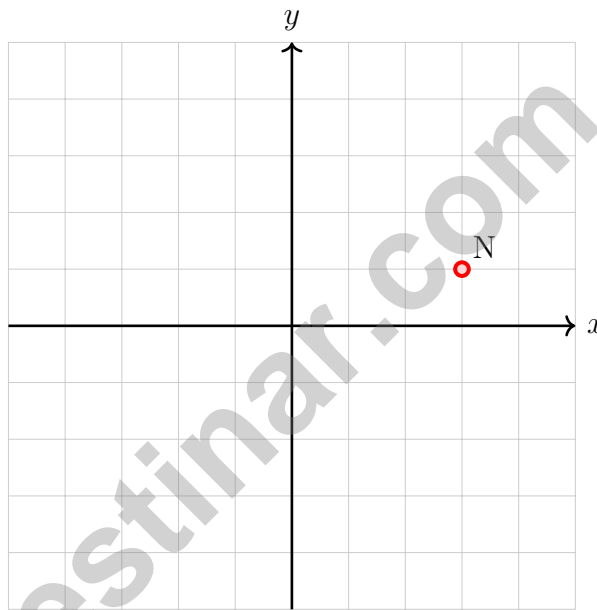
A. $x > 6$

C. $x \geq 6$

B. $x < 6$

D. $x \leq 6$

2)



Point N at $(3, 1)$ is translated 2 units to the left and 3 units up. What are the coordinates of N' ?

A. $(1, 4)$

C. $(1, -2)$

B. $(5, -2)$

D. $(5, 4)$

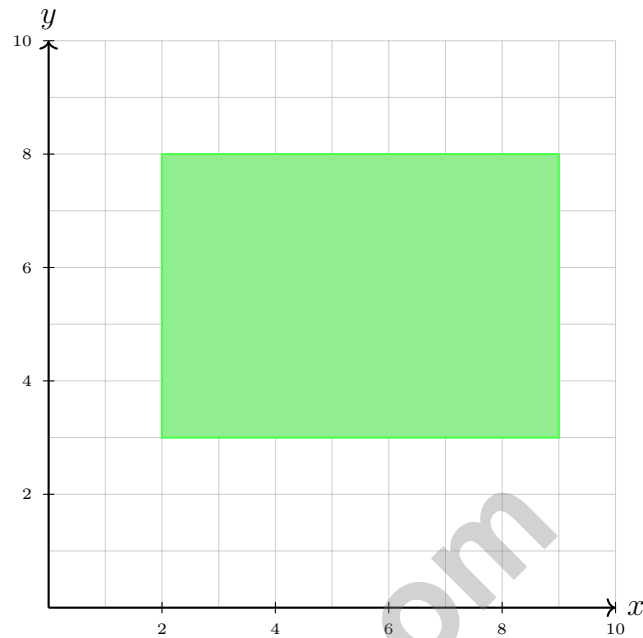
- 3) If a circle has an area of approximately 314 cm^2 and $\pi \approx 3.14$, what is the diameter?
- A. 5 cm C. 20 cm
 B. 10 cm D. 40 cm
- 4) Which question is BEST written as a statistical question?
- A. What is the area of a rectangle with length 5 and width 3? C. What is the average number of pages in novels written in the past 10 years?
 B. How many books are in our school library? D. Who is the principal of my school?
- 5) The data set is: 5, 7, 8, 9, 10, 11, 12, 50. Which value is an outlier?
- A. 5 C. 50
 B. 12 D. 11
- 6) Four test scores have a mean of 88. Three scores are 85, 90, 92. What is the fourth score?
- A. 87 C. 91
 B. 89 D. 93
- 7) A data set shows the following box plot summary statistics: min = 5, Q1 = 12, median = 18, Q3 = 24, max = 35. Find both the range and the IQR.
- A. Range = 30, IQR = 12 C. Range = 29, IQR = 12
 B. Range = 30, IQR = 11 D. Range = 30, IQR = 6



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- 1) A model car is 8 cm long. The scale is 1 cm = 2 meters. How long is the actual car?
- A. 8 meters C. 20 meters
 B. 10 meters D. 16 meters
- 2) A trapezoid has an area of 112 cm^2 , a height of 8 cm, and one base of 9 cm. What is the other base?
- A. 19 cm C. 14 cm
 B. 16 cm D. 22 cm
- 3) A rectangular prism has volume 120 cm^3 , width 5 cm, and height 4 cm. What is its length?
- A. 4 cm C. 8 cm
 B. 6 cm D. 15 cm
- 4) What is the perimeter of a square with vertices at (0, 0), (4, 0), (4, 4), and (0, 4)?
- A. 8 units C. 16 units
 B. 12 units D. 20 units





5)

A rectangle has vertices at $(2, 3)$, $(9, 3)$, $(9, 8)$, and $(2, 8)$. What is its area in square units?

- A. 28 square units C. 35 square units
 B. 32 square units D. 40 square units

6) A rectangular prism has dimensions $6\text{ m} \times 4\text{ m} \times 2\text{ m}$. Which expression correctly computes its surface area?

- A. $2(6 + 4 + 2)$ C. $2(6 \times 4) + 2(6 \times 2) + 2(4 \times 2)$
 B. $6 + 4 + 2 + 6 + 4 + 2$ D. $6 \times 4 \times 2$



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Indiana ILEARN Practice Test Answer Keys

How to use this Indiana ILEARN 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 steady Hoosier practice
3. rework the problem before reading the full explanation, using this reminder:
Work with purpose: read fully, solve neatly, and explain why the answer makes sense.

A calm Indiana correction routine turns every missed item into useful practice. Treat each test as a practice lap, then tune one habit before the next start.



Indiana Practice Test Answers and Explanations

Review the three printed ILEARN tests with steady, prepared, and ready to keep improving habits.

Practice Test 1 Answers and Explanations

- 1) **Choice B is correct.** **(6.NS.3)** On the number line, -0.1 is to the right of -0.9 , making it greater.
- 2) **Choice B is correct.** **(6.NS.6)** Multiples of 8: 8, 16, 24, 32, ... Multiples of 12: 12, 24, 36, ... The least common multiple is 24.
- 3) **Choice D is correct.** **(6.DS.1)** The middle 50% is the IQR: $Q_3 - Q_1 = 20 - 8 = 12$.
- 4) **Choice A is correct.** **(6.RP.3)** For a proportional relationship through the origin, when $x = 0$, $y = 0$. The unit rate is $\frac{12}{3} = 4$, so the equation is $y = 4x$. When $x = 0$, $y = 4(0) = 0$.
- 5) **Choice B is correct.** **(6.RP.1)** $\frac{20}{80} = \frac{1}{4} = \frac{25}{100} = 25\%$.
- 6) **Choice A is correct.** **(6.AF.1)** Increase is $90 - 82 = 8$. Percent increase is $\frac{8}{82} \approx 0.0976 \approx 9.8\%$, which rounds to 10% to the nearest whole percent.
- 7) **Choice B is correct.** **(6.RP.4)** Ratio is 3 : 7. Second column: Right = 14 means Left = $14 \div 7 \times 3 = 6$. Third column: Left = 15 means Right = $15 \div 3 \times 7 = 35$.
- 8) **Choice D is correct.** **(6.GM.1)** Divide: $12 \div 8 = 1.5$ cups.
- 9) **Choice D is correct.** **(6.GM.1)** $I = \$500 \times 0.04 \times 2 = \40 .
- 10) **Choice A is correct.** **(6.RP.5)** The constant ratio is $\frac{9}{3} = 3$. Since the line passes through the origin, the equation is $y = 3x$ with no constant term.
- 11) **Choice C is correct.** **(6.RP.5)** Savings: $100\% - 45\% - 20\% - 15\% = 20\%$.
- 12) **Choice D is correct.** **(6.RP.4)** Multiply: $6 \text{ cm} \times 0.5 \text{ m/cm} = 3 \text{ m}$.
- 13) **The correct answer is 30.** **(6.AF.1)** Red marbles are the 3-part amount. Since $18 \div 3 = 6$, each part is worth 6 marbles, and blue marbles are 5 parts: $5 \times 6 = 30$.
- 14) **Choice C is correct.** **(6.NS.3)** Rewrite the division as multiplication by flipping $\frac{1}{3} : \frac{5}{6} \times \frac{3}{1} = \frac{15}{6}$. Simplify $\frac{15}{6}$ to $\frac{5}{2}$ (or mixed form $2\frac{1}{2}$).
- 15) **The correct answer is 40 miles per hour.** **(6.RP.2)** Divide distance by time: $360 \div 9 = 40$ miles per hour.
- 16) **Choice A is correct.** **(6.NS.8)** $5,460 \div 28 = 195$ exactly. Check: $28 \times 195 = 5,460$.
- 17) **Choice D is correct.** **(6.NS.4)** Multiply: $3.8 \times 2 = 7.6$ liters.
- 18) **The correct answer is 0.25 cup.** **(6.RP.2)** $8 \div 32 = 0.25$ cups (or $\frac{1}{4}$ cup) per serving.
- 19) **The correct answer is 4 : 6 = 2 : 3 (dividing by 2) and 4 : 6 = 8 : 12 (multiplying by 2).** **(6.RP.2)** Nice checking: Choice A works because 4 : 6 simplifies to 2 : 3, and Choice B works because multiplying both parts of 4 : 6 by 2 gives 8 : 12. The other choices change the relationship.
- 20) **Choice A is correct.** **(6.NS.6)** $7 \times 18 = 7(10 + 8) = 7 \cdot 10 + 7 \cdot 8 = 70 + 56 = 126$.
- 21) **Choice B is correct.** **(6.NS.1)** Starting at 0: $+50 - 35 + 20 = 35$ points.
- 22) **Choice A is correct.** **(6.NS.2)** The absolute value of zero is zero. Zero is its own distance from zero on the number line.
- 23) **Choice D is correct.** **(6.AF.5)** Point Q is at $(1, 4)$. When reflected across the x -axis, the x -coordinate stays the same and the y -coordinate changes sign, giving $(1, -4)$.
- 24) **Choice D is correct.** **(6.NS.3)** P is at -1 and Q is at 2. Since $-1 < 2$, point P is less than point Q .
- 25) **Choice A is correct.** **(6.AF.5)** Height is the vertical distance: $|3 - 1| = 2$ units.
- 26) **Choice A is correct.** **(6.NS.3)** Starting balance: 250. Withdrawal is -100 . So $250 + (-100) = 150$.
- 27) **Choice A is correct.** **(6.GM.2)** Positive times negative gives negative (-54); negative times negative gives positive (64).



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Author's Note

From a Friend Who Believes in You

Hi, Friend!

◇ I just want to say something important: I am proud of you. You did 3 full practice tests. That takes time, hard work, and heart. ◇

★ **Friendly truth:** a test is just one part of your math journey. You are SO much more than a score. The work you did is the real win! ★

What I Want You to Know

- **You are smart.** Every test you finished proves it.
- **You are brave.** You tried hard problems.
- **You are growing.** Mistakes taught you new things.
- **You are ready.** The skills are inside you.

One more thing: on test day, take a deep breath. Smile. Remember that someone (me!) believes in you. You can do this!

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

Jay Daie

Your Math Friend

PRACTICE TODAY. SUCCEED TOMORROW!

This book includes 3 full-length Math practice tests and 2 online tests to help Grade 6 students build confidence, strengthen skills, and excel on standardized assessments.

Each practice test is carefully crafted to reflect the latest standards and includes a variety of question types, realistic test conditions, and detailed answer explanations.

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

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Reinforce key concepts with clear explanations and meaningful practice.



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Build confidence and perform your best on test day.

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- ✓ The Number System
- ✓ Expressions & Equations
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- ✓ Fractions & Decimals
- ✓ Percents
- ✓ Statistics & Probability
- ✓ Data Analysis
- ✓ Measurement & Conversions
- ✓ And More!



2 ONLINE TESTS

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



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