

5

Indiana ILEARN

GRADE 6 MATH

PRACTICE TESTS

Standards Aligned Problem Solving
For Comprehensive Assessment Programs



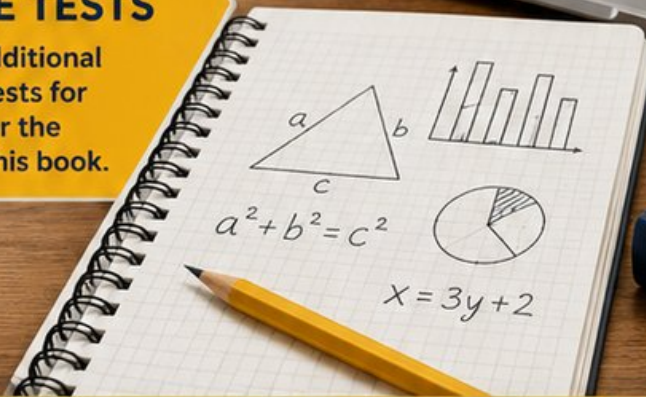
5 PRINTED TESTS

- ✓ Full-Length Practice Tests
- ✓ Realistic Questions
- ✓ Answer Key & Explanations



+ 2 ONLINE TESTS

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



PREPARE • PRACTICE • SUCCEED



5 Indiana ILEARN Grade 6 Math Practice Tests

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



Five 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!

Eight focused rounds using steady Hoosier practice

This book gives you five 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 five-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?

Eight ILEARN 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 3–4	Skill-building rounds with expressions, equations, geometry, data, and problem models.
Test 5	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. 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) Find the volume of a rectangular prism with length 8 ft, width $\frac{3}{4}$ ft, and height 5 ft.

A. 12 ft^3

C. 30 ft^3

B. 20 ft^3

D. 40 ft^3

2) Express the ratio “5 to 8” as a fraction in simplest form.

A. $\frac{8}{5}$

C. $\frac{5}{13}$

B. $\frac{8}{13}$

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

3) A bulk store sells potatoes. A small bag of 5 lbs costs \$3.50. A large bag of 15 lbs costs \$9.75. How much per pound do you save by buying the large bag?

A. \$0.05 per pound

C. \$0.15 per pound

B. \$0.10 per pound

D. \$0.20 per pound

4) What is $\frac{3}{6}$ as a percent?

A. 30%

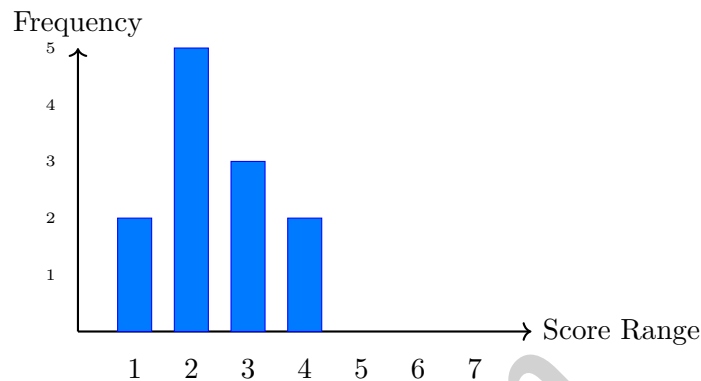
C. 50%

B. 36%

D. 60%



- 1) The histogram shows the frequency distribution of test scores.



Which range has the highest frequency?

- A. Range 1
- B. Range 4
- C. Range 3
- D. Range 2
- 2) Two summer camps compare camper satisfaction scores (0–100) using histograms. Camp A has a symmetric, bell-shaped distribution. Camp B has a right-skewed distribution. Both have the same median of 75. What is most likely different?
- A. Camp A's mean is higher than Camp B's
- B. Means cannot be compared for differently-shaped distributions
- C. Both have the same mean
- D. Camp B's mean is higher than Camp A's
- 3) A coin is flipped and a die is rolled. How many possible outcomes are in the sample space?
- A. 8
- B. 12
- C. 24
- D. 36

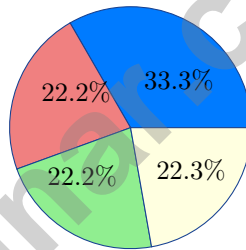


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4) A scientist records bird counts at different altitudes. The stem-and-leaf plot uses a 2-digit stem (like 15, 16, 17). If stem 16 has leaves 0, 3, 7, what are the data values?

- A. 160, 163, 167
 B. 16, 16, 16
 C. 1603, 1663, 1673
 D. Cannot determine without the full plot

5) On a number line, point A is at -3 and point B is at 4 . What is the distance between the two points?



6)

A circle graph shows 350 data points distributed as shown. If the 33.3% section is selected for sampling, approximately how many items will be sampled?

- A. 110
 B. 115
 C. 120
 D. 125



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.



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Indiana Practice Test Answers and Explanations

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

Practice Test 1 Answers and Explanations

- 1) **Choice C is correct.** **(6.GM.4)** $V = 8 \times 0.75 \times 5 = 6 \times 5 = 30 \text{ ft}^3$.
- 2) **Choice D is correct.** **(6.RP.2)** The phrase “5 to 8” means 5 goes in the numerator and 8 goes in the denominator. Since 5 and 8 have no common factor greater than 1, $\frac{5}{8}$ is simplest.
- 3) **Choice A is correct.** **(6.RP.2)** Small bag: $\$3.50 \div 5 = \$0.70/\text{lb}$. Large bag: $\$9.75 \div 15 = \$0.65/\text{lb}$. Savings: $\$0.70 - \$0.65 = \$0.05$ per pound.
- 4) **Choice C is correct.** **(6.RP.1)** $\frac{3}{6} = \frac{1}{2} = \frac{50}{100} = 50\%$.
- 5) **Choice A is correct.** **(6.RP.4)** Rectangle 1: $4 \times 5 = 20 \text{ m}$ and $2 \times 5 = 10 \text{ m}$, so area = 200 sq m. Rectangle 2: $5 \times 4 = 20 \text{ m}$ and $2 \times 4 = 8 \text{ m}$, so area = 160 sq m. Rectangle 1 is larger.
- 6) **Choice D is correct.** **(6.NS.6)** Factors of 9: 1, 3, 9. Factors of 12: 1, 2, 3, 4, 6, 12. Common factors: 1, 3. GCF is 3.
- 7) **The correct answer is 3.** **(6.RP.1)** Number of green marbles = $\frac{1}{3} \times 9 = 3$.
- 8) **The correct answer is 71.5.** **(6.DS.2)** In order: 67, 68, 71, 72, 74, 75. With 6 values, the median is the average of the 3rd and 4th values: $(71 + 72)/2 = 71.5$.
- 9) **Choice C is correct.** **(6.AF.1)** Mechanical pencils are the 1-part amount. If that part is 5, then wooden pencils are 4 parts: $4 \times 5 = 20$.
- 10) **Choice C is correct.** **(6.RP.2)** Option C compares boys to girls, which are both types of people (same category), so it is a ratio, not a rate. Options A, B, and D all compare quantities with different units (laps/time, loaves/time, miles/time), making them rates.
- 11) **Choice B is correct.** **(6.RP.3)** The rate is $100 : 2.50$ or $40 : 1$. For $\$7.50$: $7.50 \times 40 = 300$ beads.
- 12) **Choice B is correct.** **(6.RP.3)** The ratio is 6 balls:2 rackets, which simplifies to 3:1. So for every 3 tennis balls (x), there is 1 tennis racket (y). The constant of proportionality is $k = \frac{2}{6} = \frac{1}{3}$. Therefore, $y = \frac{1}{3}x$.
- 13) **Choice D is correct.** **(6.AF.1)** First shirt: $\$40$. Second shirt at 50% off: $0.50 \times 40 = 20$. Total: $\$40 + \$20 = \$60$.
- 14) **Choice D is correct.** **(6.RP.4)** Real plane: $60 \text{ m} = 6000 \text{ cm}$. At scale 1 : 200, model is $6000 \div 200 = 30 \text{ cm}$.
- 15) **Choice A is correct.** **(6.GM.1)** Divide: $20 \div 8 = 2.5$ gallons.
- 16) **Choice D is correct.** **(6.GM.1)** Using $I = P \times r \times t$: $\$250 = \$1000 \times 0.05 \times t \Rightarrow \$250 = \$50 \times t \Rightarrow t = 5$ years.
- 17) **Choice B is correct.** **(6.RP.5)** For a proportional relationship, the ratio cost/people must be constant: $5/1 = 10/2 = 5$. There is no one-time starting fee; each person simply adds another $\$5$ to the total.
- 18) **Choice C is correct.** **(6.RP.5)** Rent is $\$500$ out of $\$1000$: $\frac{500}{1000} = 0.50 = 50\%$.
- 19) **Choice C is correct.** **(6.NS.3)** $\frac{6}{7} \times \frac{14}{9} = \frac{84}{63} = \frac{4}{3} = 1\frac{1}{3}$.
- 20) **The correct answer is IQR and middle 50%.** **(6.DS.3)** (A) $IQR = Q3 - Q1 = 45 - 20 = 25$. (D) By definition, the middle 50% of data falls between Q1 and Q3. (B) is false because the box plot is not definitely symmetric. (C) is false because the range is $80 - 10 = 70$, not 75. (E) is false because $30 - 20 = 10$ while $45 - 30 = 15$, showing asymmetry.
- 21) **Choice A is correct.** **(6.NS.8)** $4,725 \div 15 = 315$. Each classroom receives 315 pencils.
- 22) **Choice A is correct.** **(6.NS.4)** Stack the decimals, subtract tenths then ones (borrowing quietly if needed), and you land on 5.6—no drama needed.
- 23) **The correct answer is 112.** **(6.RP.1)** 28% of 400 is $0.28 \times 400 = 112$ students.
- 24) **Choice B is correct.** **(6.NS.1)** A negative elevation means below sea level. An elevation of -340 meters means 340 meters below sea level.
- 25) **Choice B is correct.** **(6.NS.2)** Absolute value $|-25| = 25$ represents the magnitude of the temperature change, not its direction.



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& answers

Cheer Squad Final Pep Talk

Hi, Math Star!

◇ 5 practice tests! That's a LOT of work, and you did it ALL. I am cheering so loud right now. You earned every clap and every cheer! ◇

★ **Cheerleader truth:** confidence is built by showing up. You showed up 5 times. That's real confidence. It is not pretend! ★

Cheer Roll Call

- **Effort:** 100% YOU SHOWED UP!
- **Heart:** BIG!
- **Skills:** STRONG and growing!
- **Spirit:** BRIGHT!

Cheer tip: on test day, be your own cheerleader. Whisper to yourself: "I can do this. I practiced." Tiny cheers make a big difference!

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

Jay Daie

Your Math Cheerleader

PRACTICE MORE. ACHIEVE MORE.

This book provides **5 full-length Math practice tests** designed to help Grade 6 students strengthen their skills, build confidence, and excel on standardized assessments.

Each test is carefully crafted to reflect the latest standards and covers a wide range of math topics with realistic questions and detailed answer explanations.



BUILD CONFIDENCE

Practice builds familiarity and reduces test anxiety.



IMPROVE ACCURACY

Sharpen skills and avoid common mistakes.



ACHIEVE SUCCESS

Consistent practice leads to greater results.

WHAT'S INSIDE?



5 Full-Length Practice Tests

Realistic tests designed to mirror actual exam conditions.



Realistic Questions

A variety of question types to strengthen problem-solving skills.



Answer Keys & Explanations

Detailed solutions to help students learn and improve.



Performance Tracking

Track progress and identify areas that need improvement.



Comprehensive Coverage

All essential topics aligned with Grade 6 math standards.



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PRACTICE
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STAY
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SOLVE
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SUCCEED
BRIGHTLY

PREPARE TODAY. **SUCCEED TOMORROW!**