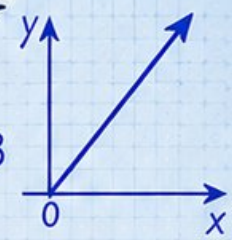
3 Idaho ISAT

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% of 150 = ?

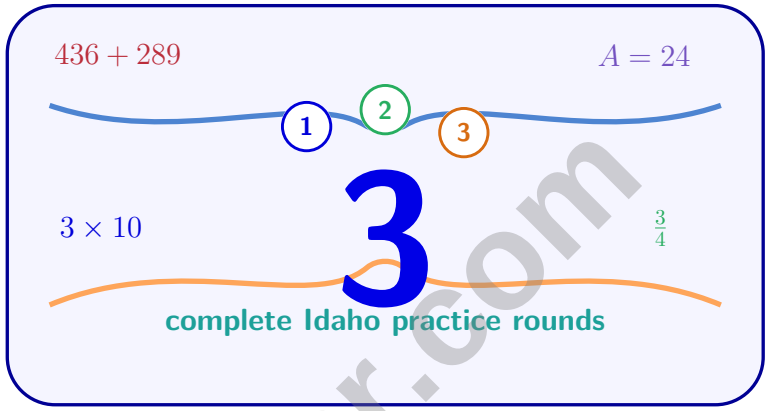
3 PRINTED TESTS

2 ONLINE TESTS

- Build Confidence
- Master Key Math Skills
- Answer Explanations for Every Question
- Test-Taking Strategies That Work

3 Idaho ISAT Grade 6 Math Practice Tests

Standards-Aligned Mountain-Valley Math Focus for Idaho Standards Achievement Test



Three complete 40-question Grade 6 practice rounds for ISAT, built for mountain-valley math focus 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, Idaho Math Explorer!

Three focused rounds using mountain-valley math focus

This book gives you three full Grade 6 practice tests for ISAT. Each round uses valley fields, mountain roads, and practical problem setup as a fresh mental backdrop while you read closely, choose a smart strategy, show your work, and check whether your answer makes sense.

Your Idaho Practice Promise

Build the setup before the calculation: list facts, choose the operation, and check reasonableness.

How to Use This Book

A three-session routine for mountain-valley math focus

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

Idaho review rhythm: Move through one test, harvest the missed skills, and practice those before the next round.

What Is Inside?

Three ISAT 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. Mountain-valley math focus means recognizing the skill even when the next question changes topic, changes format, or asks for an explanation.

Table of Contents

1) Class A scored a mean of 82 on a test; Class B scored a mean of 76 on the same test. Which statement is best supported by the data?

☐ A. Every student in Class A scored higher than every student in Class B.
☐ B. Class A's typical score was higher than Class B's.
☐ C. Class B had more students than Class A.
☐ D. The two classes had identical performance.

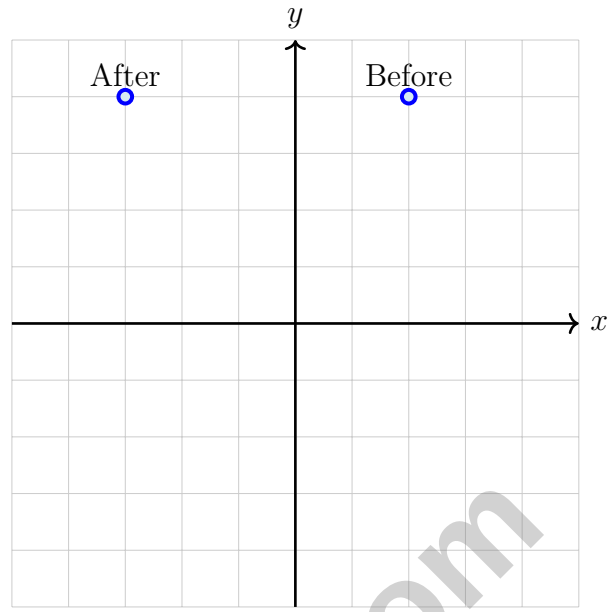
2) Convert 240 centimeters to meters. (Use 1 meter = 100 centimeters.)

☐ A. 2.4 meters
☐ B. 24 meters
☐ C. 0.24 meters
☐ D. 2400 meters

3) A stock price changes each day. On Monday the change is +6 points. On Tuesday the change is −3 points. On Wednesday the change is −2 points. What is the total change for the three days?

☐ A. +1 point
☐ B. +11 points
☐ C. −5 points
☐ D. 11 points

4)



A point is translated from $(2, 4)$ to $(-3, 4)$. How many units and in which direction was the point moved horizontally?

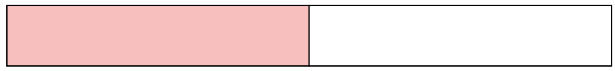
☐ A. 5 units right
☐ B. 3 units right
☐ C. 2 units left
☐ D. 5 units left

5) A ratio graph has points at $(2, 8)$ and $(5, 20)$. What does the y-value represent when x = 1?

☐ A. 2
☐ B. 8
☐ C. 5
☐ D. 4

6) What is 0.43 as a percent?

☐ A. 4.3%
☐ B. 43%
☐ C. 0.43%
☐ D. 430%



7) Total: 160 items

The shaded portion represents apples. How many apples are there?

☐ A. 40
☐ B. 60
☐ C. 80
☐ D. 100

8) A recipe for 4 servings uses 2 cups of rice. How much rice is needed for 10 servings?

☐ A. 4 cups
☐ B. 4.5 cups
☐ C. 5 cups
☐ D. 6 cups

9) Two banks offer simple interest on savings accounts. Bank A: principal $200, rate 5% per year, time 3 years. Bank B: principal $200, rate 3% per year, time 4 years. Which bank will earn more interest?

☐ A. Bank A earns more
☐ B. Bank B earns more
☐ C. They earn exactly the same
☐ D. Cannot determine without knowing the starting balance

10) A table of values is shown. Which statement is correct?

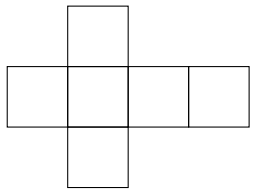
x	0	1	2	3
y	2	4	6	8

☐ A. This is proportional; when $x = 0$, $y = 0$
☐ B. This is not proportional; when $x = 0$, $y = 2$
☐ C. This is proportional; the equation is $y = 2x$
☐ D. Cannot determine if proportional

1) Simplify the ratio 18 : 27.

☐ A. 3 : 2
☐ B. 6 : 9
☐ C. 9 : 6
☐ D. 2 : 3

2) Which shape is a valid net of a cube?



☐ A. Cross pattern with 6 squares
☐ B. Line of 5 squares with 1 attached
☐ C. 2×3 rectangle
☐ D. Line of 4 squares only

3) A student calculates the area of a circle with radius 3 cm and gets 28.26 cm^2. Which value of π did they use?

☐ A. $\pi \approx 3.5$
☐ B. $\pi \approx 2.2$
☐ C. $\pi \approx 2.5$
☐ D. $\pi \approx 3.14$

4) A survey asks: "How many hours per week do students play video games?"
Sample responses:

0	10	5	8

Which is the BEST conclusion?

☐ A. All students play the same amount.
☐ B. Students play 5–6 hours on average, but responses vary widely.
☐ C. The survey was done incorrectly.
☐ D. Video games are bad for students.

5) Find the Mean Absolute Deviation for: $2, 4, 6, 8$.

☐ A. 1
☐ B. 2
☐ C. 3
☐ D. 4

6) A trapezoid has bases of 12 cm and 8 cm with a height of 5 cm. What is the area?

7) What is the median of the data set: $3, 7, 9, 12, 15$?

☐ A. 9
☐ B. 7
☐ C. 12
☐ D. 10.2

8) Find the volume of a rectangular prism with dimensions $\frac{3}{2}$ cm, 6 cm, and $\frac{8}{3}$ cm.

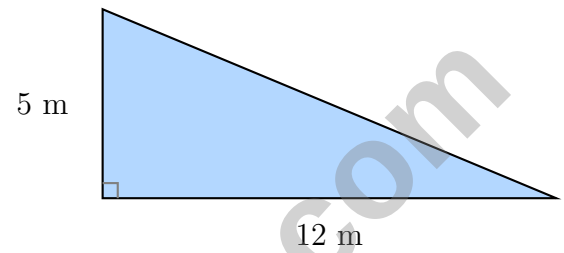
9) A box plot is constructed for the data set: $5, 8, 10, 12, 15, 18, 22$. The box extends from 8 to 18. This means:

☐ A. The range is 10.
☐ B. Q1 = 8 and Q3 = 18.
☐ C. The mean is 12.
☐ D. All values are between 8 and 18.

1) A student's monthly allowance is \$200. She wants to allocate money to savings, entertainment, and snacks in the ratio 3 : 2 : 1. How much should she allocate to savings?

☐ A. \$50
☐ B. \$75
☐ C. \$100
☐ D. \$120

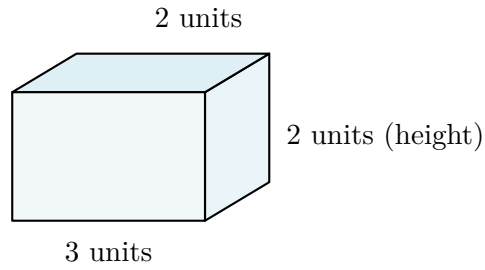
2) A right triangle has legs of length 5 m and 12 m. What is its area?



☐ A. 17 m^2
☐ B. 30 m^2
☐ C. 60 m^2
☐ D. 120 m^2

3) A trapezoid-shaped roof overhang has parallel edges of 4 m and 6 m with a perpendicular distance of 2 m between them. What is the area of the overhang?

☐ A. 10 m^2
☐ B. 12 m^2
☐ C. 20 m^2
☐ D. 24 m^2



4) How many unit cubes fit in this rectangular prism?

☐ A. 7 unit cubes
☐ B. 12 unit cubes
☐ C. 18 unit cubes
☐ D. 24 unit cubes

5) A rectangle has a length of 8 units and width of 4 units. What is its perimeter?

☐ A. 12 units
☐ B. 24 units
☐ C. 32 units
☐ D. 16 units

Idaho ISAT Practice Test Answer Keys

How to use this Idaho ISAT 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 mountain-valley math focus
3. rework the problem before reading the full explanation, using this reminder: Build the setup before the calculation: list facts, choose the operation, and check reasonableness.

A calm Idaho correction routine turns every missed item into useful practice. Move through one test, harvest the missed skills, and practice those before the next round.

Idaho Practice Test Answers and Explanations

Review the three printed ISAT tests with grounded, careful, and ready for more growth habits.

Practice Test 1 Answers and Explanations

1) **Choice B is correct.** 6.SP.B.5 The mean represents a typical score. A higher mean in Class A ($82 > 76$) supports that Class A's typical score was higher, but not that every individual outperformed.
2) **Choice A is correct.** 6.RP.A.3 Divide: $240 \div 100 = 2.4$ meters.
3) **Choice A is correct.** 6.NS.C.5 Total change is $(+6) + (-3) + (-2) = 6 - 3 - 2 = 1$ point, a positive change of 1 point.
4) **Choice D is correct.** 6.NS.C.8 From $x = 2$ to $x = -3$ is a change of -5, meaning 5 units to the left.
5) **Choice D is correct.** 6.RP.A.3 The unit rate is the y-value when x = 1. From $(2, 8)$: $8 \div 2 = 4$. When x = 1, y = 4. Verify with $(5, 20)$: $20 \div 5 = 4$ ✓.
6) **Choice B is correct.** 6.RP.A.3 Multiply the decimal by 100: $0.43 \times 100 = 43\%$.
7) **Choice C is correct.** 6.RP.A.3 50% of $160 = 0.50 \times 160 = 80$ apples.
8) **Choice C is correct.** 6.RP.A.3 Unit rate: $2 \div 4 = 0.5$ cups per serving. For 10 servings: $0.5 \times 10 = 5$ cups.
9) **Choice A is correct.** 6.NS.C.7d Bank A: $I = \$200 \times 0.05 \times 3 = \$30$. Bank B: $I = \$200 \times 0.03 \times 4 = \$24$. Bank A earns \$30, which is \$6 more than Bank B's \$24.
10) **Choice B is correct.** 6.EE.C.9 The data point $(0, 2)$ shows that the line does not pass through the origin. The ratios are not constant either: $4/1 = 4$, $6/2 = 3$, and $8/3$ is not equal to 3. So the relationship is not proportional.
11) **Choice B is correct.** 6.EE.A.2 Shortfall is Expenses minus Budgeted Amount: $\$1700 - \$1500 = \$200$.
12) **Choice C is correct.** 6.RP.A.3 Actual dimensions: $4 \times 5 = 20$ feet and $3 \times 5 = 15$ feet. Perimeter: $2(20 + 15) = 70$ feet.
13) **Choice A is correct.** 6.NS.A.1 The correct answer is $\frac{4}{9} \times \frac{9}{2} = \frac{36}{18} = 2$. The student calculated $\frac{4}{9} \times \frac{2}{9} = \frac{8}{81}$.
14) **Choice A is correct.** 6.NS.B.2 $9{,}108 \div 52 = 175$ remainder 8. Check: $52 \times 175 = 9{,}100$, and $9{,}100 + 8 = 9{,}108$. So the whole-number quotient is 175.
15) **Choice D is correct.** 6.NS.B.3 Multiply: $3.8 \times 2 = 7.6$ liters.
16) **Choice B is correct.** 6.NS.B.4 $84 = 4 \times 21 = (2 \times 2) \times (3 \times 7) = 2^2 \times 3 \times 7$. Options A, C, and D contain composite numbers.
17) **Choice A is correct.** 6.NS.B.4 Treat (4+5) like a chunky variable and slide it outside: $3(4+5)+2(4+5) = (3+2)(4+5)$. Choice B totals 45, but shows every miniature product—not one clean factored form. Choice C mistakenly multiplies by 14, and Choice D chops the parentheses.
18) **The correct answer is Girls to boys is** $10 : 15 = 2 : 3$ **(Choice A is correct). Boys to total is** $15 : 25 = 3 : 5$ **(Choice B is correct)..** 6.RP.A.1 Choice A is correct because girls to boys is $10 : 15$, which simplifies to $2 : 3$. Choice B is correct because boys to total is $15 : 25$, which simplifies to $3 : 5$. The other choices either flip the order, swap which group is named first, or use the wrong total (10 girls out of 25 students is $2 : 5$, not $1 : 3$).
19) **The correct answer is** 9. 6.RP.A.3 Strawberries are the 5-part amount. Since $15 \div 5 = 3$, each part is 3, and bananas are 3 parts: $3 \times 3 = 9$.
20) **The correct answer is** 40 **miles per hour.** 6.RP.A.1 Divide distance by time: $360 \div 9 = 40$ miles per hour.
21) **Choice B is correct.** 6.SP.B.4 We compare absolute values: $|-3| = 3$, $|5| = 5$, $|-2| = 2$, $|1| = 1$. The largest is 5.
22) **Choice A is correct.** 6.SP.B.4 Opposites are the same distance from zero on opposite sides. Both -3 and 3 are distance 3 from the origin.
23) **Choice A is correct.** 6.NS.C.8 Reflecting across the y-axis flips the x-coordinate to its opposite, giving $(-a, b)$.
24) **Choice C is correct.** 6.NS.C.7d $-6 < -4$ is the correct statement. All other comparisons are true.
25) **The correct answer is** \$1.50. 6.RP.A.2 $\$9 \div 6 = \$1.50$ per muffin. Accept 1.5 as equivalent.
26) **Choice B is correct.** 6.NS.C.8 The bottom side goes from $(0, 0)$ to $(4, 0)$: $|4 - 0| = 4$ units.
27) **Choice A is correct.** 6.NS.B.3 Increases by means adding. Start at -8 and add 15: $-8 + 15 = 7°C$.

Hi, Curious Scientist!

◇ 3 tests. So many experiments! You tested ideas. You watched what worked. You learned a lot. That's how scientists work—and how you work! ◇

⋆ **Scientists know:** mistakes are facts, not failures. Every problem you missed taught you something. You used those facts to do better next time. ⋆

Lab Results

- **Hypothesis:** CONFIRMED! Practice makes you better.
- **Method:** STRONG! You try, watch, and adjust.
- **Data:** CAREFUL! You read and copy numbers right.
- **Conclusion:** READY! You can do this test.

Scientist tip: on test day, stay curious. Ask, "What is this asking?" Then experiment with your math tools. You will find the answer!

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

Jay Daie

Your Math Scientist

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.

THIS BOOK INCLUDES:

- 3 Full-Length Printed Tests
- 2 Online Practice Tests
- Detailed Answer Explanations

MORE PRACTICE. GREATER RESULTS.

Give your child the tools to build strong math skills, confidence, and a positive attitude toward learning.

WHAT YOU'LL GAIN

Stronger Math Skills
Build a solid foundation through targeted practice and review.

Better Problem Solving
Develop logical thinking and effective solution strategies.

Deeper Understanding
Reinforce key concepts with clear explanations and meaningful practice.

Test Confidence
Familiarize with test formats and improve accuracy and speed.

Achieve Success
Build confidence and perform your best on test day.

TOPICS COVERED

- Ratios & Rates
- The Number System
- Expressions & Equations
- Geometry
- 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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PRACTICE REGULARLY | STAY FOCUSED | SOLVE CONFIDENTLY | SUCCEED BRIGHTLY

PREPARE TODAY. SUCCEED TOMORROW!