3 Oklahoma OSTP Grade 6 Math Practice Tests

Full-Length Test Prep with Detailed Answer Explanations

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3 Practice Tests

⚡ *Fast. Focused. Effective.* ⚡

Ready to find out how prepared you are?

These **3 quick practice tests** are your fast track to confidence. Each one covers every Grade 6 topic — ratios, integers, expressions, geometry, and statistics.

⏱ *See exactly where you stand*

⏱ *Zero in on what needs work*

⏱ *Build real confidence, fast!*

Grab a pencil and let's sprint!

" Three tests is all it takes to know your strengths and sharpen your weak spots! "

⏱ *How to Use This Book* ⏱

Three tests. Three steps. One powerful result.

📦 *What's Inside*

- **3 Full-Length Practice Tests** — *every Grade 6 math topic in each test: ratios, integers, expressions, geometry, statistics.*
- **Complete Answer Key** — *detailed explanations so you understand why, not just what.*
- **Formula Reference Sheet** — *key formulas at your fingertips.*
- **Sprint Scorecard** — *track your scores and see your growth!*

⚡ *Your 3-Step Sprint Plan*

🏁 *Step 1: The Warm-Up (Test 1)*

*Take Test 1 with **no timer**. This is your diagnostic sprint — find out what you already know and what needs work. Check every answer afterward and note the topics you missed.*

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🏁 *Step 2: The Practice Run (Test 2)*

*Set a timer for **60 minutes**. Focus on the tricky topics from Test 1. This is where you build speed and accuracy.*

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🏁 *Step 3: Race Day (Test 3)*

Full test conditions: timed, quiet room, no peeking. Treat this like the real thing. Compare your score with Test 1 and see how far you've come!

● Multiple Choice

Choose the best answer from A–D. Not sure? Eliminate an obvious wrong answer first — it narrows your odds fast!

✏ Open Response

Show every step of your work. Even if your final answer isn't perfect, clear reasoning earns credit!

Sprint Coach: *"Space your three tests a few days apart. Use the break to review what tripped you up. That's the secret to a strong finish line!"*

⚡ 3 Power Moves for Test Day ⚡

Simple strategies that make a big difference

⚡ Power Move 1: Read Like a Detective

> 💡 **Pro Tip**
>
> Watch out for words like **"NOT", "LEAST",** and **"GREATEST"** — they change everything!

1. Read the **whole** question before looking at answers.
2. **Circle** key numbers and important words.
3. **Underline** what the question is actually asking.

⚡ Power Move 2: Work Smart, Not Fast

1. **Answer easy questions first.** Skim through and grab every point you can.
2. **Mark the tough ones** with a star ⭐ and come back later.
3. **Show your work** — even on multiple choice. Writing steps prevents silly mistakes.
4. **Estimate first.** Does your answer make sense? If you got 5,000 for a question about percentages of 50, something's off!

⚡ Power Move 3: Check Before You're Done

Finished? Don't hand it in yet!

- ✅ Re-read any starred questions
- ✅ Check your decimal points
- ✅ Verify negative signs
- ✅ Make sure no question is blank
- ✅ Recheck fraction simplification
- ✅ Confirm units in geometry answers

⚠️ *Common Grade 6 Traps*

✖ *Mixing up **ratios** and **rates*** ✖ *Forgetting integer **sign rules*** ✖ *Wrong **order of operations***

✖ *Confusing **area** and **perimeter*** ✖ *Misreading **coordinate** axes* ✖ *Forgetting to **simplify***

🐘 ❝ *Three power moves might sound simple, but the students who use them consistently **always** outperform those who don't. Master these and you're already ahead!* ❞

🏁 Gear Up! 🏁

Everything you need before you start each test

Sharpened Pencils

Two is better than one!

Good Eraser

Clean corrections matter

Scratch Paper

For working out steps

A Quiet Spot

Focus is your superpower

A Timer

Start using on Test 2

Confidence

You've got this!

👍 OK to Use

- ✔ Pencils and erasers
- ✔ Blank scratch paper
- ✔ The formula reference in this book
- ✔ A ruler (for geometry questions)

👎 Not Allowed

- ✖ Calculators
- ✖ Phones, tablets, or computers
- ✖ Notes, textbooks, or study guides
- ✖ Help from anyone else

👥 For Parents & Teachers

- Space the 3 tests **several days apart** so there's time to review mistakes in between.
- Let your child take Test 1 untimed to build comfort with the format.
- After each test, sit together with the Answer Key. Focus on **understanding the reasoning**, not just the score.
- If a topic keeps coming up as a weak spot, pair this book with our **Grade 6 Math Study Guide** for deeper review.

Formula Reference Sheet

🔺 Area Formulas

Rectangle $A = l \times w$

Parallelogram $A = b \times h$

Triangle $A = \dfrac{1}{2} \times b \times h$

Trapezoid $A = \dfrac{1}{2}(b_1 + b_2) \times h$

📦 Volume

Rectangular $V = l \times w \times h$

Prism

🟪 Surface Area

Find the area of each face, then add them all up.

Rectangular Prism:

$SA = 2lw + 2lh + 2wh$

↓ Order of Operations

P   Parentheses first

E   Exponents

M/D Multiply & Divide (left to right)

A/S Add & Subtract (left to right)

✇ Ratios & Percents

Ratio: $a : b$ or $\dfrac{a}{b}$

Unit rate: amount per 1 unit

Percent: a ratio out of 100

$Part = Percent \times Whole$

⚖️ Integers & Absolute Value

Integers:

$\ldots, -3, -2, -1, 0, 1, 2, 3, \ldots$

$|-5| = 5$ $|5| = 5$

Absolute value = distance from 0

X¹ Expressions & Equations

Exponent: $3^4 = 3 \times 3 \times 3 \times 3 = 81$

Variable: a letter that stands for a number

Equation: two expressions joined by $=$

Inequality: uses $<, >, \leq, \geq$

✛ Coordinate Plane

Ordered pair: (x, y)

x-axis: horizontal y-axis: vertical

Origin: $(0, 0)$

Four quadrants (I, II, III, IV)

📊 Statistics

Mean: sum of values $\div$ count

Median: middle value (sorted)

Range: $max - min$

⏱ *My Sprint Scorecard* ⏱

Track your speed and accuracy across all 3 tests!

Name: _____

🏁 Test	📅 Date	⭐ Score	☺ Feeling
1	_____	_____ / _____	☺
2	_____	_____ / _____	☺
3	_____	_____ / _____	☺

⚡ My Sprint Review

My strongest topic:

_____

The topic I need to practice most:

_____

How my score changed from Test 1 to Test 3:

_____

My goal for the real test:

_____

Three sprints, three chances to improve. Every point forward is a win!

⭐ Table of Contents ⭐

Here's what we'll explore together!

Let's learn and have fun!

1

Practice Test 1

📋 *30 Questions*

⭐

✏️ Before You Start ✏️

- ✔ **Read each question carefully** *before choosing your answer.*
- ✔ **Show your work** *on scratch paper when you need to.*
- ✔ **Skip hard questions** *and come back to them later.*
- ✔ **Check your answers** *when you're done.*
- ✔ **Take your time** *— there's no rush!*

★ You've Got This! ★

Do your best and show what you know!

1. A truck delivers 600 *pounds of supplies to* 4 *stores. Write this as a rate and find the pounds per store.*

Your Answer:

2. A bus uses 7 *gallons of gas for every* 42 *miles. How many gallons does it need for* 120 *miles?*

Your Answer:

3. A graph shows points $(2, 8)$ and $(5, 20)$. Verify that these represent the same ratio.

Your Answer:

4. 20% *of what number is* 16?

Your Answer:

5. A recipe needs 2.5 *liters of water. How many milliliters is that?*

(A) 25

(B) 250

(C) 2,500

(D) 25,000

6. A scale drawing of a playground uses 1 *cm* = 5 *m. The playground is* 40 *m long and* 25 *m wide. What are the dimensions on the drawing?*

(A) 8 *cm by* 5 *cm*

(B) 5 *cm by* 25 *cm*

(C) 200 *cm by* 125 *cm*

(D) 40 *cm by* 25 *cm*

7. A student solved $\frac{3}{5} \div \frac{2}{9}$ and got $\frac{6}{45}$. What mistake did the student make?

(A) The student forgot to simplify the answer

(B) The student multiplied without using the reciprocal

(C) The student flipped the first fraction instead of the second

(D) The student added the fractions

8. Which is the best estimate for $3,612 \div 6$?

(A) 60

(B) 602

(C) 600

(D) 6,000

9. If $a + b = 0$ and $a = 8$, what is the value of b?

Your Answer:

10. A point has coordinates $(0, 7)$. Which statement is true about this point?

(A) It is in Quadrant I

(B) It is on the x-axis

(C) It is at the origin

(D) It is on the y-axis

11. Pedro says $4 + 6 \times 3 = 30$. Maya says the answer is 22. Who is correct?

(A) Pedro

(B) Maya

(C) Both are correct

(D) Neither is correct

12. Which expression represents "6 more than half of a number n"?

(A) $6 + 2n$

(B) $\dfrac{n+6}{2}$

(C) $\dfrac{n}{2} + 6$

(D) $n + 3$

13. Evaluate $20 - 3n$ when $n = 4$.

(A) 8

(B) 12

(C) 17

(D) 32

14. Simplify: $6 + 2(x + 4)$

(A) $2x + 10$

(B) $8x + 4$

(C) $2x + 14$

(D) $16x$

15. An elevator starts at floor f and goes up 7 floors. Which expression gives the new floor?

(A) $f - 7$

(B) $7f$

(C) $f + 7$

(D) $f \div 7$

16. Solve: $12p = 84$

(A) $p = 72$

(B) $p = 96$

(C) $p = 7$

(D) $p = 6$

17. The temperature stayed below 0 degrees. Which inequality represents the temperature t?

(A) $t > 0$

(B) $t < 0$

(C) $t \leq 0$

(D) $t \geq 0$

18. To check if your graph is correct, you should:

(A) Count the number of tick marks

(B) Pick a number in the shaded region and test it in the inequality

(C) Always shade to the right

(D) Use a closed circle every time

19. You earn $8 per hour. Which variable is the independent variable?

(A) Earnings

(B) Hours worked

(C) Hourly rate

(D) Total pay

20. What is the area of the shaded trapezoid drawn on the coordinate plane?
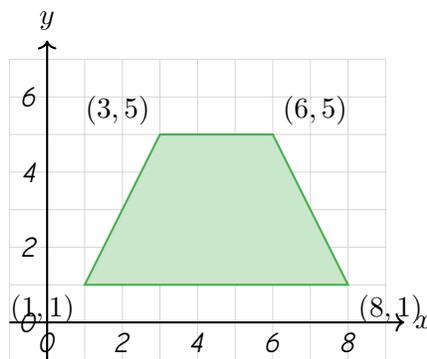
Your Answer:

_____

21. A square has vertices $(-2, -2)$, $(4, -2)$, $(4, 4)$, and $(-2, 4)$. What is the area?

(A) 24 square units

(B) 36 square units

(C) 12 square units

(D) 16 square units

22. What is a net?

(A) A 3D shape made of cubes

(B) A flat pattern that folds into a 3D shape

(C) The volume of a rectangular prism

(D) A grid used to measure area

23. Data: $15, 16, 16, 17, 17, 17, 18, 100$. How does the outlier 100 affect the center?

(A) It pulls the center toward 100, making it higher than typical values.

(B) It has no effect on the center.

(C) It makes the center equal to 100.

(D) It pulls the center lower.

24. The test scores of 4 students are $88, 92, 76, 84$. What is the mean?

(A) 84

(B) 85

(C) 86

(D) 88

25. You survey 15 classmates about their favorite fruit. Which display should you start with?

(A) Histogram, because it groups data into intervals.

(B) Frequency table, because you need to count each category first.

(C) Box plot, because you need the five-number summary.

(D) Dot plot, because it shows individual numerical values.

26. A box plot shows: $min = 55$, $Q1 = 62$, $median = 70$, $Q3 = 78$, $max = 85$. What is the range?

(A) 16

(B) 23

(C) 30

(D) 85

27. *School A has 150 sixth graders with a median reading score of 290 and IQR of 30. School B has 100 sixth graders with a median reading score of 285 and IQR of 45. Which school's students are more spread out in reading ability?*

(A) *School A*

(B) *School B*

(C) *They are equally spread.*

(D) *Cannot be determined without the means.*

28. *The probability of picking a striped marble from a bag is $\frac{7}{12}$. What is the probability of **not** picking a striped marble? Write your answer as a fraction.*

Your Answer:

29. *What is the mode of the data in the stem-and-leaf plot below?*

Stem	Leaves
2	1 5 5 8
3	0 3 5 5 5
4	2 7

Key: 2 | 1 *means* 21

(A) 5

(B) 25

(C) 35

(D) 55

30. *Jayden wants to compare the number of students in each club at his school. Which type of graph is most appropriate?*

(A) *Line graph*

(B) *Bar graph*

(C) *Scatter plot*

(D) *Line plot*

⭐ *End of Practice Test 1* ⭐

Great job finishing the test!

☑ *My Score*

I got _____ out of 30 questions right.

*Check your answers in the **Answer Key** at the back of the book.*

💡 *Review any questions you missed. That's how we learn!*

Enjoyed This Preview?

Get the Full Book!

This preview shows just a small sample of what's inside.

The complete book includes:

- ✅ All chapters and topics

- ✅ Hundreds of practice problems

- ✅ Complete answer key with explanations

- ✅ Colorful visuals and step-by-step examples

- ✅ Reference sheets and progress trackers

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