

4 Tennessee TCAP

GRADE
6
MATH

PRACTICE TESTS

Standards Aligned Problem Solving
For Comprehensive Assessment Programs

4

**PRINTED
TESTS**



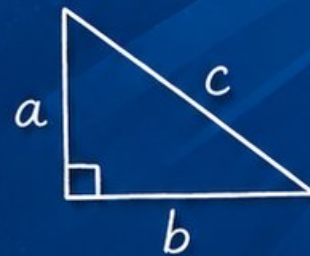
2

**ONLINE
TESTS**



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

$$2x + 5 = 21$$
$$x = 8$$



$$\frac{3}{4} + \frac{1}{2} = \frac{5}{4}$$

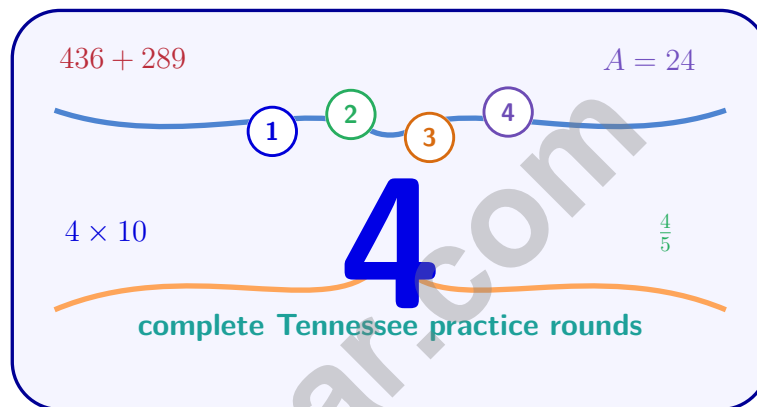


**USE THESE TWO
ADDITIONAL ONLINE
PRACTICE TESTS**

**FOR EXTRA REVIEW AFTER
THE PRINTED TESTS
IN THIS BOOK.**

4 Tennessee TCAP Grade 6 Math Practice Tests

Standards-Aligned Volunteer-State Math Rhythm for Tennessee Comprehensive Assessment Program



Four complete 40-question Grade 6 practice rounds for TCAP, built for volunteer-state math rhythm 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, Tennessee Math Explorer!

Four focused rounds using volunteer-state math rhythm

This book gives you four full Grade 6 practice tests for TCAP. Each round uses river music, mountain roads, and practical review habits as a fresh mental backdrop while you read closely, choose a smart strategy, show your work, and check whether your answer makes sense.

Your Tennessee Practice Promise

Keep a steady rhythm: read, model, solve, and check the final note.

Read

Plan

Check

How to Use This Book

A four-session routine for volunteer-state math rhythm

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.

Tennessee review rhythm: Practice one round, listen to what the mistakes teach, and tune up before the next test.



What Is Inside?

Four TCAP tests, 160 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 and final stamina rounds with expressions, equations, geometry, data, and problem models.
Answer Pages	Compact keys and explanations that show why each answer works.

The tests are mixed on purpose. Volunteer-state math rhythm 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) Simplify $6c + 4d - 2c + 3d$.

A. $8c + 7d$

C. $4c + 7d$

B. $4c + 1d$

D. $8c + d$

2) On a number line, the number -6 is best described as:

 A. Six units to the right of zero C. At the origin B. Six units above zero on a vertical line D. Six units to the left of zero

3) The absolute value of a negative number is:

 A. Always negative D. Sometimes negative and sometimes positive B. Always positive C. Always zero

4) Which fraction is located between 0 and 1 on a number line?

A. $-\frac{2}{5}$

C. $\frac{5}{4}$

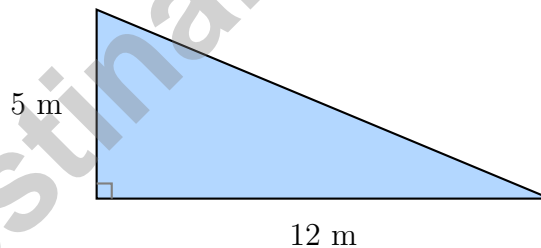
B. $\frac{3}{10}$

D. $\frac{7}{6}$

5) A 10×10 grid has 52 shaded squares. What percent of the grid is shaded?



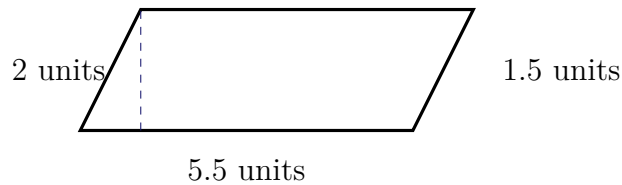
- 6) Which statement correctly describes all points in Quadrant II?
- A. The x -coordinate is greater than the y -coordinate
- B. The x -coordinate is negative and the y -coordinate is positive
- C. Both coordinates are negative
- D. The point is below the x -axis
- 7) Which comparison is false?
- A. $-7 < -2$
- B. $0 > -5$
- C. $-6 > -4$
- D. $3 > -1$
- 8) A car travels at a constant speed of 60 miles per hour. Which variable is *independent*?
- A. Distance traveled
- B. Time driven
- C. Speed of the car
- D. Fuel consumption
- 9) 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



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10)

The parallelogram has base 5.5 units and height 2 units. What is the area?

- A. 4.25 sq units C. 11 sq units
 B. 9 sq units D. 22 sq units

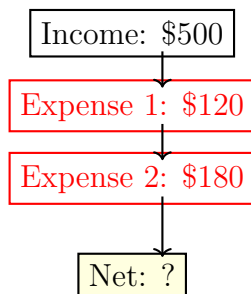
11) A rectangular prism has base dimensions 3.5 ft and 2 ft. If its volume is 28 ft^3 , what is the height?

- A. 2 ft C. 5 ft
 B. 3 ft D. 4 ft

12) A vertical segment goes from $(5, 2)$ to $(5, 8)$. What is its length?

- A. 4 units C. 7 units
 B. 5 units D. 6 units

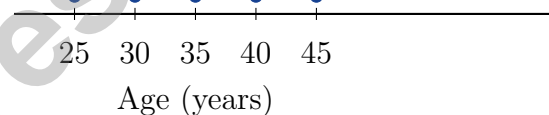
13) A business account tracks income and expenses. A company has income of \$500 and expenses of \$120, then more expenses of \$180. What is the net profit or loss?



- A. \$800 profit C. \$200 profit
 B. \$200 loss D. \$800 loss



- 1) A student is converting 8 feet to inches. He multiplies by 12 to get 96. Is his work correct?
- A. No, he should divide by 12, not multiply.
- B. No, he should multiply by 3 instead of 12.
- C. No, 8 feet should equal 80 inches.
- D. Yes, 8 feet = 96 inches.
- 2) Comparing two data sets: Set P has range 20 and Set Q has range 15. Both have the same mean. What conclusion can you draw?
- A. Set P is more spread out than Set Q.
- B. Set Q is more spread out than Set P.
- C. Both sets have identical distributions.
- D. Range is not useful for comparing data sets.
- 3) A dot plot displays the ages of people at a yoga class. The distribution appears roughly symmetric with a peak at 35 years. This suggests:



- A. The mean is less than the median
- B. The mean cannot be determined from a dot plot
- C. The mean is greater than the median
- D. The mean is approximately equal to the median



- 4) Two manufacturing plants' defect rates (per 1000 units) are summarized below.

Plant	Mean	Median	Range
Plant X	12	11	8
Plant Y	10	10	20

Which plant's performance is more predictable?

- A. Plant X, because it has a lower range
- B. Plant Y, because it has a lower mean
- C. Both are equally predictable
- D. Plant X, because the mean equals the median
- 5) A student records the number of minutes spent on homework: 24, 31, 28, 35, 29, 32, 26. Arranging in a stem-and-leaf plot, the data spans:
- A. One stem (20s)
- B. Two stems (20s and 30s)
- C. Three stems
- D. Cannot determine
- 6) A store inventory has 900 items. The circle graph shows $\frac{2}{9}$ are on clearance. How many items are on clearance?
- A. 180
- B. 200
- C. 220
- D. 240
- 7) A histogram shows test scores with intervals: 60–69 (frequency 3), 70–79 (frequency 8), 80–89 (frequency 6), 90–99 (frequency 2).

What is the total number of students who took the test?

- A. 17
- B. 19
- C. 21
- D. 24



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1) Which table represents a non-proportional relationship?

x	1	3	5
y (option A)	7	21	35
y (option B)	2	4	6

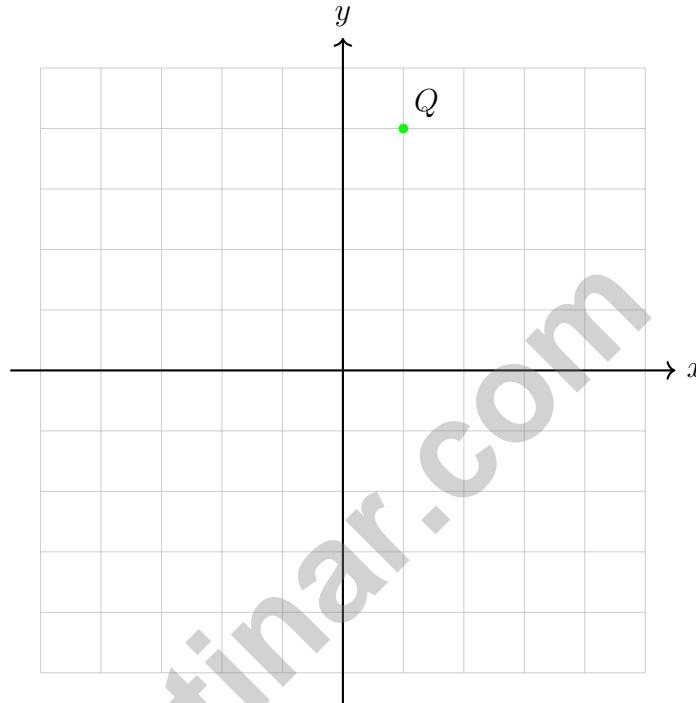
- A. Option A; the ratio is 7:1 C. Option A; each y is x squared
 B. Option B; the ratio is not constant D. Neither; both are proportional
- 2) A museum exhibit uses a scale model where 1 inch = 7 feet. If the actual hall is 91 feet long, how many inches should the model be?
- A. 13 inches C. 98 inches
 B. 84 inches D. 637 inches
- 3) A water bottle contains $\frac{5}{6}$ liter. How many $\frac{1}{12}$ -liter cups can be filled?
- A. 5 C. 10
 B. 8 D. 12
- 4) What is $9,360 \div 48$?
- A. 195 C. 205
 B. 200 D. 210
- 5) A receipt shows three items: \$5.25, \$12.99, and \$8.50. What is the total?
- A. \$26.74 C. \$27.00
 B. \$25.74 D. \$18.24



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6) On a number line, which number is between $-\frac{1}{2}$ and $\frac{1}{2}$?

- A. -1
 C. 0
 B. -0.6
 D. 1



7)

If point Q is reflected across the x -axis, what are the new coordinates?

- A. $(1, 4)$
 C. $(-1, 4)$
 B. $(-1, -4)$
 D. $(1, -4)$

8) Which fraction is greater than $-\frac{1}{2}$?

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



Tennessee TCAP Practice Test Answer Keys

How to use this Tennessee TCAP 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 volunteer-state math rhythm
3. rework the problem before reading the full explanation, using this reminder:
Keep a steady rhythm: read, model, solve, and check the final note.

A calm Tennessee correction routine turns every missed item into useful practice. Practice one round, listen to what the mistakes teach, and tune up before the next test.



Scan me!
For more practice
& answers

Tennessee Practice Test Answers and Explanations

Review the four printed TCAP tests with steady, tuned, and ready for the next round habits.

Practice Test 1 Answers and Explanations

- 1) **Choice C is correct.** (6.EE.A.3) Combine like terms: $(6c - 2c) + (4d + 3d) = 4c + 7d$.
- 2) **Choice D is correct.** (6.NS.C.5) Negative numbers are located to the left of zero on a number line. The number -6 is 6 units to the left of zero.
- 3) **Choice B is correct.** (6.EE.B.8) Absolute value is defined as the distance from zero, which is always non-negative (positive or zero).
- 4) **Choice B is correct.** (6.NS.C.6) $\frac{3}{10} = 0.3$, which is between 0 and 1. All other choices are either negative or greater than 1.
- 5) **The correct answer is 52%.** (6.RP.A.1) A 10×10 grid has 100 squares total. If 52 are shaded, the percent is $\frac{52}{100} = 52\%$.
- 6) **Choice B is correct.** (6.NS.C.8) By definition, Quadrant II (upper left) has all points where $x < 0$ and $y > 0$.
- 7) **Choice C is correct.** (6.NS.C.7) $-6 < -4$ is the correct statement. All other comparisons are true.
- 8) **Choice B is correct.** (6.EE.C.9) The independent variable is what you control or choose. Time is chosen first; distance depends on time.
- 9) **Choice B is correct.** (6.G.A.1) For a right triangle, $A = \frac{1}{2} \times 5 \times 12 = 30 \text{ m}^2$.
- 10) **Choice C is correct.** (6.G.A.1) Area = $5.5 \times 2 = 11$ sq units. The slanted side (1.5 units) is not used.
- 11) **Choice D is correct.** (6.G.A.2) $28 = 3.5 \times 2 \times h = 7 \times h$, so $h = 4$ ft.
- 12) **Choice D is correct.** (6.G.A.3) For a vertical segment, subtract the y -coordinates: $8 - 2 = 6$ units.
- 13) **Choice C is correct.** (6.EE.C.9) Net is income minus total expenses: $500 - 120 - 180 = 500 - 300 = \200 profit.
- 14) **Choice B is correct.** (6.SP.A.1) The key change is moving from one car (fixed answer) to multiple cars in a location (varied answers). This introduces variability, which is the hallmark of a statistical question.
- 15) **Choice B is correct.** (6.SP.A.2) Bimodal means the distribution has two distinct modes (peaks). A single peak is unimodal; symmetric peaks form a bimodal distribution.
- 16) **The correct answer is 120.** (6.RP.A.3) 25% of 480 = $0.25 \times 480 = 120$ products were sold online.
- 17) **Choice D is correct.** (6.RP.A.1) IQR = $Q_3 - Q_1 = 30 - 18 = 12$.
- 18) **Choice B is correct.** (6.RP.A.1) $P(\text{orange or cyan}) = \frac{1}{4} + \frac{1}{4} = \frac{2}{4} = \frac{1}{2}$.
- 19) **Choice D is correct.** (6.SP.A.1) 6% of \$2500 = $0.06 \times 2500 = \$150$.
- 20) **The correct answer is The unit rate is 25 items per hour, and the y-value when $x = 1$ is 25.** (6.RP.A.3) A is correct because $50 \div 2 = 25$ items per hour. D is correct because when $x = 1$, $y = 25$. Choice B is false for a proportional relationship, Choice C should be $y = 25x$, and Choice E is false.
- 21) **Choice A is correct.** (6.RP.A.3) The constant of proportionality is $k = \frac{\text{cost}}{\text{items}} = \frac{10}{2} = \frac{20}{4} = \frac{30}{6} = \frac{40}{8} = 5$. The cost is \$5 per item.
- 22) **Choice C is correct.** (6.SP.A.1) Total savings: $\$12 \times 6 = \72 .
- 23) **Choice C is correct.** (6.RP.A.3) Multiply: $4 \text{ cm} \times 1.5 \text{ m/cm} = 6 \text{ m}$.
- 24) **Choice C is correct.** (6.NS.A.1) $\frac{11}{12} \times 3 = \frac{33}{12} = \frac{11}{4} = 2\frac{3}{4}$.
- 25) **Choice A is correct.** (6.NS.B.2) $5,544 \div 24 = 231$. Check: $24 \times 231 = 5,544$.
- 26) **Choice D is correct.** (6.NS.B.3) Multiply: $3.8 \times 2 = 7.6$ liters.
- 27) **Choice A is correct.** (6.NS.B.4) Multiples of 9: 9, 18, 27, 36, 45, ... Multiples of 12: 12, 24, 36, 48, ... The least common multiple is 36.



Star Player Pep Talk

Hi, Star Player!

◇ 4 practice tests. Every one of them was a chance to grow. You took every chance. That's why you're a math star today! ◇

★ **Star players know:** confidence comes from practice. You can't fake it. You build it. You built yours over 4 tests. It's real now! ★

Star Player Stats

- **Practice:** OFF THE CHARTS!
- **Skills:** BROAD! You can do many problem types.
- **Toughness:** HIGH! You don't quit on hard problems.
- **Game Plan:** READY! You know your strategies.

Star tip: on test day, take it one play at a time. One problem. Then the next. You will earn your stars!

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

Jay Daie

Your Math Coach

PRACTICE TODAY. SUCCEED TOMORROW!

This book includes 4 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:

4 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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