

9

Tennessee TCAP

GRADE

6

MATH

PRACTICE TESTS

Standards-Aligned Review
Mixed Practice & Answer Key



9 PRINTED TESTS

Realistic practice to build confidence and mastery



DETAILED ANSWER EXPLANATIONS

Learn with step-by-step solutions



FOCUSED & EFFECTIVE

Target key math skills with purposeful practice



BUILD CONFIDENCE

Strengthen problem solving and test-taking skills



9 PRINTED TESTS
+2 ONLINE TESTS

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

**PRACTICE TODAY.
SUCCEED TOMORROW.**



PRACTICE



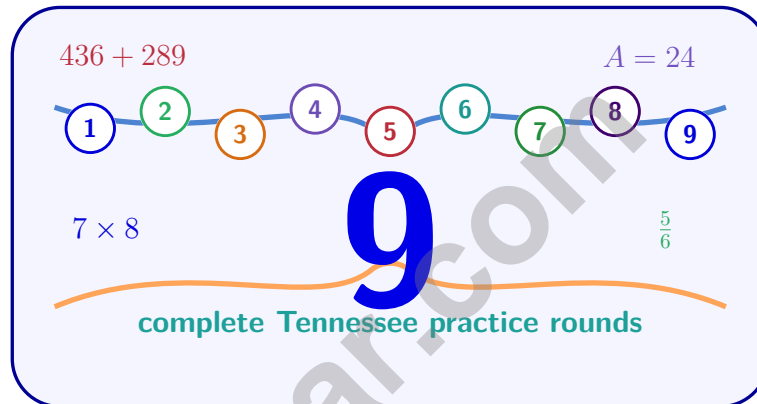
REVIEW



SUCCEED

9 Tennessee TCAP Grade 6 Math Practice Tests

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



Nine 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.

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Welcome, Tennessee Math Explorer!

Nine focused rounds using volunteer-state math rhythm

This book gives you nine 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 nine-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?

Nine TCAP tests, 360 questions, and a full review path

Part	What You Will Practice
Tests 1–3	Foundation rounds for ratios, rational numbers, operations, and careful reading.
Tests 4–6	Skill-building rounds with expressions, equations, geometry, data, and problem models.
Tests 7–9	Final stamina rounds 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. 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) Order these values from least to greatest:

$-0.25, 0.4, -0.9, 0.1$

A. $-0.9, -0.25, 0.1, 0.4$

C. $-0.25, -0.9, 0.1, 0.4$

B. $0.1, 0.4, -0.25, -0.9$

D. $0.4, 0.1, -0.9, -0.25$

2) If $\frac{1}{4}$ gallon of paint costs \$8, how much does 1 gallon of paint cost?

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

C. -5 points

B. +11 points

D. 11 points

4) A zoom of a number line shows integers from 2 to 3 divided into tenths. Which decimal is closest to 2.6?

A. 2.5

C. 2.7

B. 2.6

D. 2.8



5) Which point is on the negative y -axis?

A. $(0, -7)$

C. $(7, 0)$

B. $(-7, 0)$

D. $(0, 7)$

6) A business had a monthly budget of \$8000. They overspent by \$1200. What is the actual spending, and what percent over budget were they?

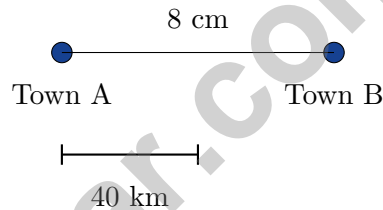
A. Spent \$9200; 15% over

C. Spent \$6800; 15% under

B. Spent \$9200; 13% over

D. Spent \$9200; 12% over

7) A map shows two towns with a distance between them. The scale bar below indicates the distance.



What is the actual distance between the towns?

A. 80 km

C. 160 km

B. 120 km

D. 200 km

8) Which is a multiple of both 4 and 6?

A. 8

C. 18

B. 12

D. 10



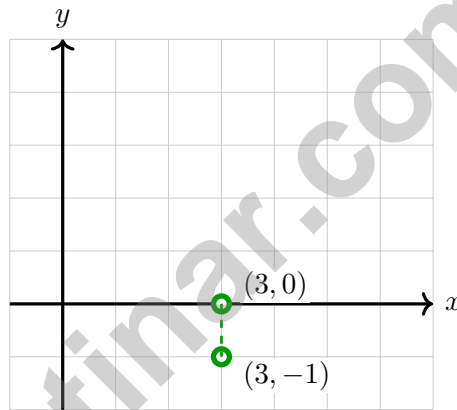
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9) A soccer coach is buying uniforms. She buys 12 red shirts and 18 blue shirts for the team. If she wants to divide them equally into piles with no shirts left over, what is the greatest number of piles she can make?

- A. 2 C. 6
 B. 3 D. 9

10) If a diver is at -45 feet relative to sea level, what is $|-45|$?

- A. -45 feet C. 0 feet
 B. 90 feet D. 45 feet



11)

What is the distance between $(3, 0)$ and $(3, -1)$?

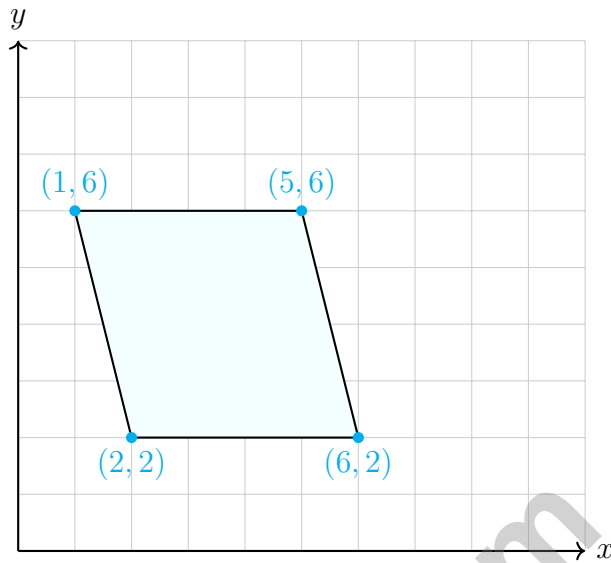
- A. 0 units C. 2 units
 B. 1 unit D. 3 units



- 1) A library receives 6,300 books to place on shelves that hold 48 books each. How many shelves are filled completely?
- A. 130 C. 132
 B. 131 D. 133
- 2) An error was made: a student computed $8 \times (-6)$ and got 48. What is the correct answer?
- A. 48 (correct) C. 2 (student should divide)
 B. -48 (positive times negative is negative) D. 14 (student should add)
- 3) Evaluate: $\frac{5}{6} \div \frac{1}{3}$
- A. $\frac{5}{18}$ C. $\frac{5}{2}$
 B. $\frac{5}{6}$ D. $\frac{15}{30}$
- 4) Evaluate $100 - 6t$ when $t = 10$.
- A. 40 C. 94
 B. 60 D. 160



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5)

What is the height of this trapezoid (the vertical distance between the parallel sides)?

- A. 3 units C. 5 units
 B. 4 units D. 6 units

6) Which pair of numbers are coprime (GCF = 1)?

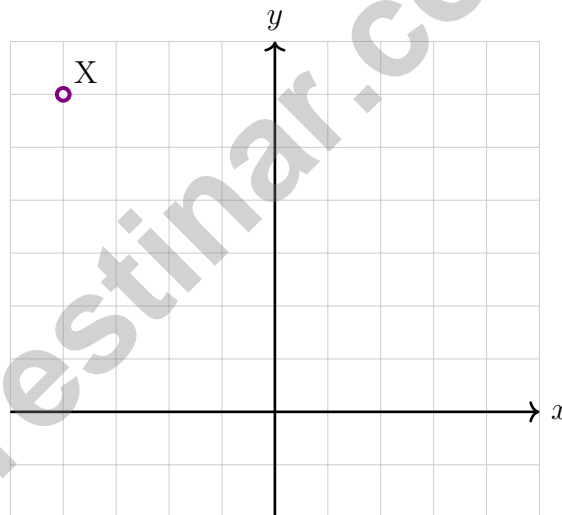
- A. 12 and 18 C. 10 and 20
 B. 8 and 15 D. 6 and 9

7) Which number has an absolute value of 20?

- A. 20 only C. Only zero
 B. -20 only D. Both 20 and -20



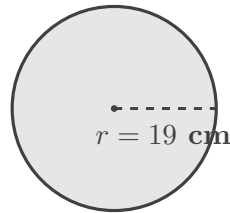
- 1) Which ordered pair has an x -coordinate of -5 and shares the same y -coordinate as the point $(2, 8)$?
- A. $(-5, 8)$ C. $(-5, 2)$
 B. $(8, -5)$ D. $(-5, -8)$
- 2) The mode is the value that appears most often. In a stem-and-leaf plot, the mode occurs in which stem if we see a repeated leaf?
- A. The stem with the most leaves D. The stem corresponding to the repeated leaf value
 B. The largest stem
 C. The smallest stem



- 3) Point X starts at $(-4, 6)$. It is translated 4 units right and 3 units down. What are the coordinates of X' ?
- A. $(0, 3)$ C. $(0, 9)$
 B. $(-8, 9)$ D. $(-8, 3)$



Circular Disc



4)

A circular disc has a radius of 19 cm. Using $\pi \approx \frac{22}{7}$, which is closest to the area?

A. 418 cm^2

C. 1134 cm^2

B. 836 cm^2

D. 2268 cm^2

5) For 68, 70, 72, 75, 73, 71, 69, find the interquartile range.

6) A student asks: “Do sixth graders prefer soccer or basketball?”

This is a statistical question. What is the population?

 A. Soccer players C. All sixth graders B. Basketball players D. Students who answered the survey7) If a box plot shows $Q_1 = 50$ and $Q_3 = 80$, how much greater is Q_3 than Q_1 ?

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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.



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Tennessee Practice Test Answers and Explanations

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

Practice Test 1 Answers and Explanations

- 1) **Choice A is correct.** **(6.NS.C.7)** Negatives come before positives. Among negatives: $-0.9 < -0.25$. Among positives: $0.1 < 0.4$.
- 2) **The correct answer is 32.** **(6.RP.A.3)** Unit cost: $8 \div \frac{1}{4} = 8 \times 4 = 32$ dollars per gallon.
- 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 B is correct.** **(6.NS.C.6)** The point 2.6 is six tenths of the way from 2 to 3, making it exactly the position given.
- 5) **Choice A is correct.** **(6.NS.C.8)** Points on the y -axis have $x = 0$. For the negative y -axis, the y -coordinate must be negative, so $(0, -7)$ is correct.
- 6) **Choice A is correct.** **(6.SP.A.1)** Actual spending: $\$8000 + \$1200 = \$9200$. Percent over: $\$1200 \div \$8000 = 0.15 = 15\%$.
- 7) **Choice C is correct.** **(6.RP.A.3)** The scale bar represents $2 \text{ cm} = 40 \text{ km}$. So $8 \text{ cm} = 4 \times 40 = 160 \text{ km}$.
- 8) **Choice B is correct.** **(6.NS.B.4)** $12 = 4 \times 3$ and $12 = 6 \times 2$, so 12 is divisible by both 4 and 6. Option A is a multiple of 4 but not 6; C is a multiple of 6 but not 4; D is neither.
- 9) **Choice C is correct.** **(6.NS.B.4)** Find GCF(12, 18). Factors of 12: 1, 2, 3, 4, 6, 12. Factors of 18: 1, 2, 3, 6, 9, 18. GCF is 6. She can make 6 piles with 2 red shirts and 3 blue shirts each.
- 10) **Choice D is correct.** **(6.EE.B.8)** The absolute value $|-45| = 45$ feet represents the magnitude of depth below sea level.
- 11) **Choice B is correct.** **(6.NS.C.8)** Same x -coordinate (3): $|0 - (-1)| = |0 + 1| = 1$ unit.
- 12) **Choice D is correct.** **(6.EE.C.9)** Elevator position: $0 + 6 - 9 + 4 = 1$ (floor 1).
- 13) **Choice A is correct.** **(6.EE.A.3)** Distribute: $3(x + 5) = 3 \cdot x + 3 \cdot 5 = 3x + 15$.
- 14) **Choice B is correct.** **(6.EE.B.6)** Three equal parts of m means add m three times, or multiply by 3: $3m$.
- 15) **Choice A is correct.** **(6.EE.B.8)** The filled circle at 2 means “equals 2” (\geq). The open circle at 6 means “not including 6” ($<$). Together: $2 \leq x < 6$.
- 16) **Choice A is correct.** **(6.EE.C.9)** The line passes through $(1, 2)$ and $(3, 6)$. The slope is $\frac{6-2}{3-1} = \frac{4}{2} = 2$, giving $y = 2x$.
- 17) **The correct answer is 60.** **(6.RP.A.3)** Multiply by the conversion factor: $5 \text{ feet} \times 12 \text{ inches/foot} = 60 \text{ inches}$.
- 18) **Choice C is correct.** **(6.G.A.1)** Rectangle area is $10 \times 6 = 60 \text{ cm}^2$. Triangle area is $\frac{1}{2} \times 10 \times 4 = 20 \text{ cm}^2$. The total area is $60 + 20 = 80 \text{ cm}^2$.
- 19) **The correct answer is $1.5 \times 2.4 = 3.6$ (two decimal places total) and $4.8 \div 0.4 = 12$ (shift both left by one place: $48 \div 4 = 12$).** **(6.NS.B.3)** B is correct because $15 \times 24 = 360$ and the factors have two decimal places total, giving 3.6. D is correct because $4.8 \div 0.4 = 48 \div 4 = 12$. A, C, and E have incorrect decimal placement.
- 20) **Choice A is correct.** **(6.G.A.1)** Area = $\frac{1}{2}(4 + 6) \times 2 = \frac{1}{2}(10)(2) = 10 \text{ m}^2$.
- 21) **Choice B is correct.** **(6.G.A.2)** Volume = $3 \times 2 \times 2 = 12$ unit cubes.
- 22) **Choice D is correct.** **(6.SP.A.1)** This is statistical because team members have different heights and you must collect data from multiple sources. The number of people or a team’s fixed size does not prevent variability—different players still have different heights.
- 23) **Choice C is correct.** **(6.SP.B.5)** Total students = 30, so the median is at position 15.5 (average of 15th and 16th values). Cumulative: 60–69 ($n = 5$), 70–79 ($n = 13$), 80–89 ($n = 23$). The 15th and 16th values fall in the 80–89 interval.
- 24) **Choice A is correct.** **(6.SP.B.4)** 50% of 200 is $0.50 \times 200 = 100$ customers.
- 25) **Choice B is correct.** **(6.NS.A.1)** $\frac{8}{9} \times \frac{5}{4} = \frac{40}{36} = \frac{10}{9}$.
- 26) **Choice D is correct.** **(6.EE.A.2)** Substitute $b = 6$ and $h = 8$: $A = \frac{1}{2}(6)(8) = \frac{48}{2} = 24$ square units.



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A Note From Your Math Friend

Hi, Math Star!

◇ Wow! You finished 9 full practice tests. That is a LOT of math problems. You worked hard, and your brain got stronger every time. ◇

★ **Here is a big idea:** mistakes are okay! Every time you got something wrong, you got smarter. Through 9 tests, you learned that trying is the most important thing. ★

Look What You Did!

- **Hard Worker:** You did not give up!
- **Smart Thinker:** You used your math tools.
- **Brave Learner:** You tried hard problems.
- **Test Ready:** You feel proud and prepared.

Big tip for test day: take your time. Read each problem twice. Show your work. Check your answer. 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 MORE. ACHIEVE MORE.

This **Grade 6 Math Practice Tests** book is designed to help students strengthen their math skills, master important concepts, and build the confidence they need to excel on any test.

With 9 full-length printed tests and 2 online tests, students get the review, practice, and realistic test experience they need to improve accuracy, develop problem-solving abilities, and reach their full potential.

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

PERFECT FOR:

- ✓ Classroom Practice
- ✓ Homework & Review
- ✓ Independent Learning
- ✓ Test Preparation
- ✓ Skill Reinforcement
- ✓ Building Confidence



**PRACTICE TODAY.
SUCCEED TOMORROW.**

WHAT STUDENTS WILL 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 math concepts aligned with standards.



Test Confidence

Get familiar with test formats and improve accuracy.



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

Extra online practice to reinforce learning and build confidence.

MORE PRACTICE. GREATER RESULTS.

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



9 PRINTED
PRACTICE TESTS



2 ONLINE
PRACTICE TESTS



DETAILED ANSWER
EXPLANATIONS