

5 FULL-LENGTH Tennessee TCAP

GRADE 5 MATH

★ PRACTICE TESTS ★



5 FULL-LENGTH
PRACTICE TESTS



COMPLETE
STANDARDS
REVIEW



SKILL PRACTICE,
WORD PROBLEMS,
AND MORE!

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



$$12 \times 3 = 36$$



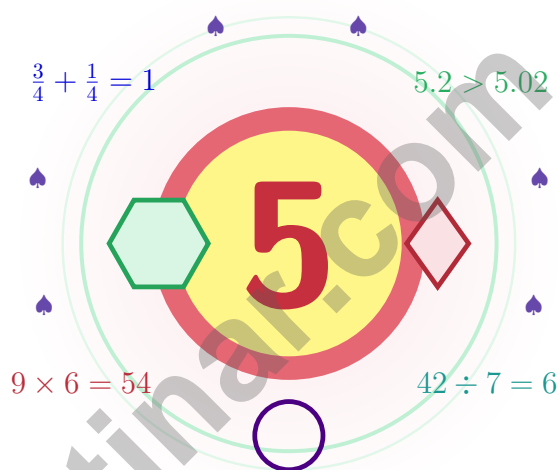
$$\frac{7}{10} = 0.7$$



BUILT FOR SUCCESS. DESIGNED TO HELP EVERY STUDENT.

5 Tennessee TCAP Grade 5 Math Practice Tests

Five practice tests woven into one calm, steady routine



Five full tests, a friendly quick review, smart strategy pages, and student-tested support that turn Grade 5 practice in The Volunteer State into a steady quest of real growth.

Jay Daie and Reza Nazari



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Open the Quest Map, Tennessee

Five practice tests woven into one calm, steady routine

Welcome Letter for Tennessee Math Crew

This book is your practice zone, not a place to be perfect. Each of the five tests gives you a chance to notice clues, choose a strategy, check your thinking, and come back stronger for the next round. Math practice rolls like the Tennessee River – it bends, it widens, it keeps going, and so do you.

Some questions will feel easy right away. Some will make you slow down, draw, estimate, or retry. That is excellent news. It means your math brain is doing real work.

Read Slow

Read every word, twice
when needed.

Choose Smart

Pick the operation,
sketch, or table that fits.

Grow

Lock the lesson in by
reflecting after each
problem.

A strong quest habit for Tennessee: slow down, write neatly, estimate before you solve, and keep going even when a problem looks tricky at first. That is exactly how confident math students are built.

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A Map of the Pages

A simple routine that turns five tests into real growth

Step 1: Set Up

Pencil ready, distractions gone.
Wake up important ideas before you begin so your brain is ready to use them.

Step 2: Work the Test

Take a full test like the real day.
Find a quiet space, work carefully, and let accuracy matter more than speed.

Step 3: Look Back

Walk through your answers without rushing.
Circle missed questions and look for patterns. Which skill or habit needs another try?

Step 4: Climb Higher

Pick one or two skills to sharpen next.
Read the explanation, repair the work, and carry that lesson into the next test.

A Five-Week Tennessee Quest Map

Week	Mission Focus
Week 1	Take Test 1 like a Smoky morning – soft mist, slow steps.
Week 2	Take Test 2 and notice one habit that grew steadier.
Week 3	Take Test 3 and lift fractions, decimals, and conversions.
Week 4	Take Test 4 and slow down on multi-step problems.
Week 5	Take Test 5 with calm, careful, courageous work.



Table of Contents

★ Practice Test 1	_____	20
★ Practice Test 2	_____	36
★ Practice Test 3	_____	51
★ Practice Test 4	_____	66
★ Practice Test 5	_____	82
Practice Test Answer Keys	_____	96
Practice Test Answers and Explanations	_____	100

Grade 5 Mathematics Reference Materials

PERIMETER AND AREA

Perimeter of Rectangle $P = 2l + 2w$ or $P = 2(l + w)$

Area of Rectangle $A = l \times w$

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Volume of Rectangular Prism $V = l \times w \times h$

LENGTH

Customary

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1) A door is 7 feet tall. How many inches is that?

A. 96 inches

C. 72 inches

B. 80 inches

D. 84 inches

2) Pattern table shows input-output pairs: (1, 7), (2, 14), (3, 21), (4, 28). Which rule applies?

A. Add 6 to the input.

C. Multiply the input by itself, then add 6.

B. Multiply the input by 7.

D. Multiply the input by 5, then add 2.

3) Use the place-value chart to build a mystery number.

Ones	Tenths	Hundredths	Thousandths
0	6	0	9

What is the standard form?

A. 0.69

C. 60.9

B. 6.09

D. 0.609

4) The place-value chart shows the result of multiplying 0.29 by a power of 10. The result is 290. What power of 10 was used?

Hundreds	Tens	Ones	Tenths	Value
2	9	0	0	290

A. 10^1

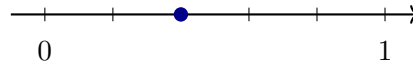
C. 10^3

B. 10^2

D. 10^4



5) What fraction is marked by the dot on the number line?



- A. $\frac{1}{5}$
 B. $\frac{2}{5}$

- C. $\frac{3}{5}$
 D. $\frac{1}{2}$

6) Which sum is correct?

Problem	Sum
A: $3.14 + 2.35$	5.59
B: $4.26 + 1.53$	5.79
C: $6.12 + 2.31$	8.53
D: $7.41 + 1.24$	8.75

- A. A
 B. B

- C. C
 D. D

7) A box contains 2 pounds of clay. Each small project uses $\frac{1}{4}$ pound of clay. How many small projects can be made?

- A. 6 projects
 B. 16 projects

- C. 8 projects
 D. 24 projects

8) Evaluate: $\{[25 - (3 \times 5)] \times 2\} + 3$

- A. 17
 B. 19

- C. 20
 D. 23



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1) Identify the error: A student said a triangle with sides 5 cm, 5 cm, and 8 cm is equilateral.

- A. Correct; all sides are present
- B. Incorrect; it is isosceles because two sides are equal
- C. Incorrect; it is scalene because the sides are different
- D. Incorrect; equilateral triangles must have sides over 5 cm

2) Which product equals $\frac{6}{35}$?

- A. $\frac{1}{6} \times \frac{6}{35}$
- B. $\frac{3}{5} \times \frac{2}{5}$
- C. $\frac{6}{7} \times \frac{1}{7}$
- D. $\frac{2}{5} \times \frac{3}{7}$

3) Find the product: $0.07 \times 1,000$.

Record your answer in the space provided.

4) What is $\frac{1}{5} \div 5$?

1 whole split into fifths



shaded $\frac{1}{5}$ split into 5

- A. $\frac{1}{25}$
- B. $\frac{5}{1}$
- C. $\frac{1}{10}$
- D. 1



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1) What is $6 \div \frac{1}{3}$?

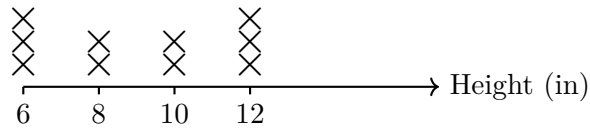
A. 18

C. 12

B. 2

D. 6

2) The line plot shows the height (in inches) of flowers in a garden:



What is the total height of all flowers?

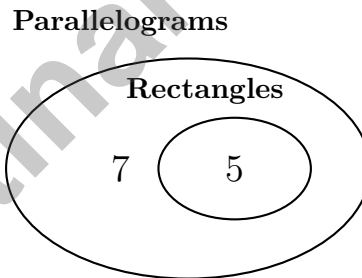
A. 84 inches

C. 90 inches

B. 88 inches

D. 96 inches

3) A Venn diagram shows rectangles inside parallelograms:



How many parallelograms are outside the rectangle circle?

A. 5

C. 7

B. 12

D. 2



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1) A supply cabinet measures 6 inches long, 7 inches wide, and 5 inches tall. What is its volume?

- A. 42 cubic inches C. 30 cubic inches
 B. 210 cubic inches D. 35 cubic inches

2) A rectangular container is 25 cm long, 15 cm wide, and 10 cm deep. What is its volume?

Container
25 cm × 15 cm × 10 cm

- A. 3000 cm³ C. 3750 cm³
 B. 3500 cm³ D. 4000 cm³

3) Subtract: $3\frac{2}{9} - 1\frac{7}{9}$ (requires borrowing).

- A. $2\frac{2}{9}$ C. $2\frac{1}{9}$
 B. $1\frac{5}{9}$ D. $1\frac{4}{9}$

4) A student ate $\frac{5}{8}$ of an apple and $\frac{3}{7}$ of a banana. Estimate the fraction of fruit eaten.

- A. $\frac{1}{2}$ of a fruit C. About $1\frac{1}{2}$ fruits
 B. About 1 whole fruit D. More than 2 fruits



Practice Test Answer Keys

How to use this section:

1. check your answer
2. circle missed questions
3. rework them before reading the explanation

Good correction habits build strong scores.

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Practice Test Answers and Explanations

Practice Test 1 Answers and Explanations

- Choice D is correct.** **(5.MD.A.1)** Since 12 inches = 1 foot, multiply 7 by 12: $7 \times 12 = 84$ inches.
- Choice B is correct.** **(5.G.A.2)** Compare each pair: $1 \times 7 = 7$, $2 \times 7 = 14$, $3 \times 7 = 21$, and $4 \times 7 = 28$.
- Choice D is correct.** **(5.NBT.A.1)** The chart shows 0 ones, 6 tenths, 0 hundredths, and 9 thousandths: $0 + 0.6 + 0 + 0.009 = 0.609$.
- Choice C is correct.** **(5.NBT.A.2)** $0.29 \times 1000 = 290$. Moving the decimal 3 places right requires multiplying by 10^3 .
- Choice B is correct.** **(5.NF.A.2)** The number line shows the dot positioned at $\frac{2}{5}$ (two-fifths of the way from 0 to 1).
- Choice B is correct.** **(5.NBT.B.7)** B is correct because $4.26 + 1.53 = 5.79$. A should be 5.49, C should be 8.43, and D should be 8.65.
- Choice C is correct.** **(5.NF.B.6)** Ask, "How many fourths are in 2?" Since $2 \div \frac{1}{4} = 2 \times 4 = 8$, there is enough clay for 8 projects.
- Choice D is correct.** **(5.OA.A.1)** Work from the inside out: $3 \times 5 = 15$, then $25 - 15 = 10$, then $10 \times 2 = 20$, and finally $20 + 3 = 23$.
- Choice A is correct.** **(5.OA.A.1)** To make 20, group the addition first: $(6 + 4) \times 2 = 10 \times 2 = 20$. The other choices give different values, so A is the only match.
- Choice D is correct.** **(5.NF.A.2)** $\frac{9}{10} \approx 1$ and $\frac{8}{11} \approx 1$. So $\frac{9}{10} + \frac{8}{11} \approx 1 + 1 = 2$ meters.
- Choice D is correct.** **(5.G.A.2)** The first coordinate, 6, matches the x-axis label: minutes. The second coordinate, 72, matches the y-axis label: cookies baked. So the point means cookies baked is 72 when minutes is 6.
- Choice C is correct.** **(5.MD.C.4)** Volume = $17 \times 8 \times 5 = 136 \times 5 = 680 \text{ ft}^3$.
- Choice A is correct.** **(5.MD.C.4)** $V = l \times w \times h = 7 \times 4 \times 3 = 84 \text{ m}^3$.
- Choice D is correct.** **(5.G.B.3)** A square has four right angles, so it is a rectangle. It also has four equal sides, so it is a rhombus. Therefore, it belongs in the overlap of Rectangle and Rhombus.
- Choice A is correct.** **(5.NF.B.6)** The word "of" points to multiplication: $\frac{1}{4} \times \frac{2}{3} = \frac{2}{12} = \frac{1}{6}$ meter.
- Choice A is correct.** **(5.G.A.1)** Dividing each term in Sequence 1 by 5 gives Sequence 2: $5 \div 5 = 1$, $10 \div 5 = 2$, $15 \div 5 = 3$, etc.
- The correct answer is 6.** **(5.MD.C.5)** The known length and height make groups of $6 \times 4 = 24$ cubic centimeters. Since $144 \div 24 = 6$, the width is 6 cm.
- Choice D is correct.** **(5.OA.A.2)** In the first expression, only the 6 is multiplied by 4. In the second expression, the whole sum $(12 + 6)$ is multiplied by 4, so the second expression is larger.
- The correct answer is 3.47.** **(5.NBT.A.3)** Read the place value to decide whether the decimal uses tenths, hundredths, or thousandths. Three wholes, then 47 hundredths: 3.47. This confirms the answer.
- Choice C is correct.** **(5.MD.B.2)** There are three throws at $25\frac{1}{2}$ feet, for a total of $76\frac{1}{2}$ feet. There are two throws at $24\frac{1}{2}$ feet, for a total of 49 feet. The difference is $76\frac{1}{2} - 49 = 27\frac{1}{2}$ feet.
- Choice A is correct.** **(5.G.B.3)** Both shapes have 4 sides and 4 vertices. A rhombus must have two pairs of parallel sides, while a kite does not have to.
- Choices A, B, C are correct.** **(5.MD.C.5)** Volume counts cubic units, so multiply length, width, and height. Adding the dimensions does not find the space inside.
- Choice D is correct.** **(5.NBT.A.3)** Grid shows 0.405 shaded. Tenths: 0.405 has 4, 0.504 has 5. So $0.504 > 0.405$ because 5 tenths $>$ 4 tenths.
- Choice B is correct.** **(5.MD.B.2)** Longest is $\frac{5}{8}$, shortest is $\frac{1}{4}$. Difference: $\frac{5}{8} - \frac{1}{4} = \frac{5}{8} - \frac{2}{8} = \frac{3}{8}$.
- Choice B is correct.** **(5.NF.A.2)** Continue the multiples shown: 6, 12, 18, 24, 30, 36; 9, 18, 27, 36; and 4, 8, 12, 16, 20, 24, 28, 32, 36. The first number in all three lists is 36.
- The correct answer is 25000.** **(5.NBT.A.2)** Multiplying by a power of 10 shifts the value to a larger place. $250 \times 100 = 25,000$ (attach two zeros). This confirms the answer.
- Choice A is correct.** **(5.NBT.B.7)** Only A is fully correct. A: 3.24 has hundredths $4 < 5$, so it rounds to 3.2 (tenth) and 3 (whole). B is wrong because 3.25 rounds up to 3.3, not 3.2. C is wrong because 3.26 rounds up to 3.3, not 3.2. D is wrong because 3.27 rounds to 3, not 4.



Director's Notes: Final Scene

Greetings, Star Performer!

★ Spectacular performance! You've rehearsed five complete mathematical productions, perfecting your delivery and timing like a professional actor! Each test was a dress rehearsal, allowing you to fine-tune your performance, discover your strengths, and polish your techniques. Opening night (test day) approaches, and you're absolutely ready for the spotlight! ★

◇ **Here's what acclaimed performers understand:** confidence comes from thorough preparation. Professional actors rehearse extensively so that when the curtain rises, they can perform naturally and confidently. You've completed your rehearsals five of them! Your mathematical performance skills are polished and ready. Trust your preparation and deliver an outstanding show! ◇

Performance Review Notes

1. **Character Development:** You understand your mathematical role completely!
2. **Stage Presence:** You approach problems with confidence and poise!
3. **Line Delivery:** You express solutions clearly and accurately!
4. **Show Ready:** You're prepared for a standing ovation!

Remember this performance wisdom: great actors don't memorize words they understand characters. You haven't just memorized procedures you understand mathematical concepts. That deep understanding means you can adapt to any question variation. When the test begins, step into your role confidently and perform brilliantly!

Want to share your mathematical performance insights or celebrate a particularly elegant solution? Send your reviews to reza@testinar.com. I appreciate mathematical artistry!

Reza Nazari & Jay Daie

Your Math Coaches—Keep Going!

5 FULL-LENGTH TESTS. STRONG SKILLS. BRIGHTER RESULTS.



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with consistent
practice



Improve Accuracy
and problem-
solving skills



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