

8

FULL-LENGTH

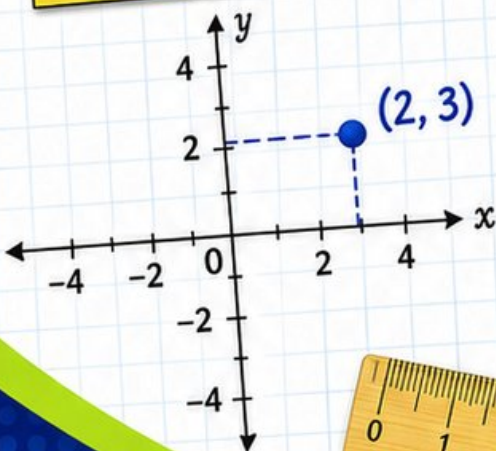
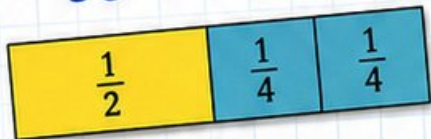
Tennessee TCAP

GRADE 5

MATH PRACTICE TESTS

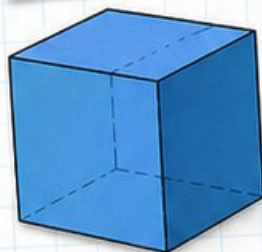
Mixed Practice Questions with Answer Key
for Students, Parents, and Teachers

$$36 \div 4 = 9$$



$$2.4 \times 7 = 16.8$$

$$7 \times (12 - 5) = 49$$

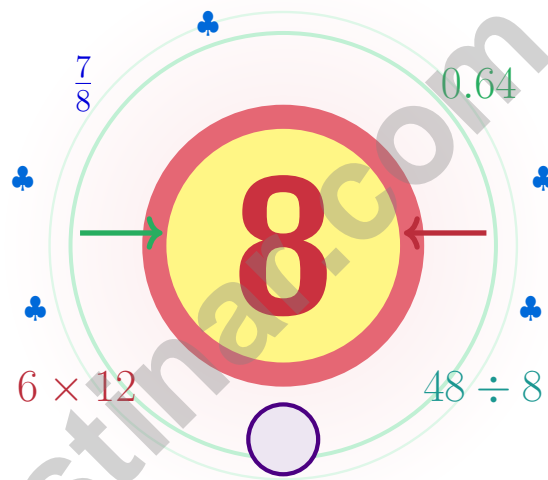


1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100



8 Tennessee TCAP Grade 5 Math Practice Tests

Seven practice tests woven into one calm routine



Eight full tests, a focused quick review, and helpful support that turns Grade 5 practice in The Volunteer State into steady, confident growth from page one to the final check.

Jay Daie and Reza Nazari



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Hello, Tennessee – Eight Tests, Steady Growth

Seven chances to read carefully, solve smartly, and grow stronger

To Tennessee Students Who Love a Puzzle

This practice book is your steady companion for eight tests, not a place to be perfect. Math practice rolls like the Tennessee River – it bends, it widens, it keeps going, and so do you.

Use these eight tests like stepping-stones. Take one test at a time, check your answers honestly, and notice which skills need more attention. Small improvements add up across seven rounds.

Read

Read with care – math problems hide their gifts.

Try

Try a strategy that fits the size of the numbers.

Reflect

Reflect after each problem to lock the lesson in.

A strong habit for Tennessee mathematicians: read carefully, estimate when it helps, show your steps, and keep going even when a question feels tricky. That is how steady math confidence is built.

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Scan me



How This Book Wants to Help

A simple routine that turns practice into progress

Step 1: Notice

Notice the structure: warm-up, test, review, repair.

Spend a few minutes waking up your memory before the test begins.

Step 2: Practice

Practice one full test in quiet conditions.

Work in a calm spot and focus on careful thinking before speed.

Step 3: Honest Check

Check honestly without rushing.

Circle missed questions and notice which topics keep showing up.

Step 4: Polish

Polish the rough spots before the next test.

Read the explanation, repair the work, and bring that lesson into the next test.



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Grade 5 Mathematics Reference Materials

PERIMETER AND AREA

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

Area of Rectangle $A = l \times w$

Area of Triangle $A = \frac{1}{2} \times b \times h$

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

LENGTH

Customary

1 foot (ft) = 12 inches (in.)

1 yard (yd) = 3 feet (ft)

1 yard (yd) = 36 inches (in.)

Metric

1 meter (m) = 100 centimeters (cm)

1 centimeter (cm) = 10 millimeters (mm)

1 kilometer (km) = 1,000 meters (m)

CAPACITY

Customary

1 cup (c) = 8 fluid ounces (fl oz)

1 pint (pt) = 2 cups (c)

1 quart (qt) = 2 pints (pt)

1 gallon (gal) = 4 quarts (qt)

Metric

1 liter (L) = 1,000 milliliters (mL)

WEIGHT AND MASS

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TIME

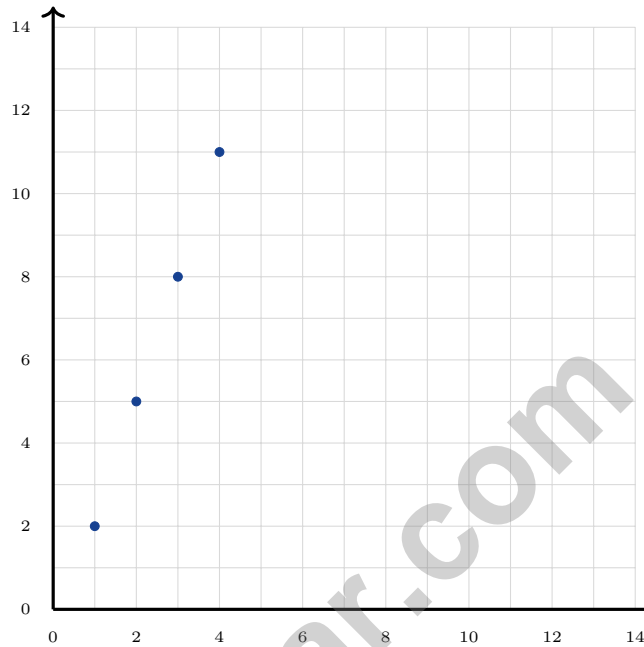
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- 1) A pattern rule states: “Start with 2 at position 1 and add 3 each step.” Do the plotted points match?



- A. Points shown match
- B. All second coordinates are too large by 1
- C. All x -values are wrong
- D. The pattern does not grow by a constant amount
- 2) A fish tank is 18 cubic inches. Which dimensions could match?
- A. $2 \times 3 \times 2$
- B. $2 \times 3 \times 3$
- C. $3 \times 3 \times 1$
- D. $2 \times 2 \times 5$
- 3) A toy chest measures 7 meters long, 3 meters wide, and 4 meters tall. What is its volume?
- A. 21 cubic meters
- B. 28 cubic meters
- C. 12 cubic meters
- D. 84 cubic meters



4) How many zeros are in the product $5 \times 2 \times 10$?

A. 1

C. 3

B. 0

D. 2

5) Convert: $5 \text{ km} = ? \text{ m}$.

Record your answer in the space provided.

6) Evaluate: $30 - \{4 + (2 \times 3)\}$

A. 20

C. 26

B. 24

D. 34

7) A bookshelf unit is a rectangular prism measuring 36 inches wide, 12 inches deep, and 48 inches tall. What is the volume in cubic inches?

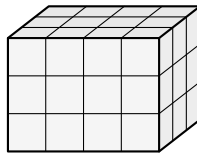
A. 17,280 cubic inches

C. 24,000 cubic inches

B. 20,736 cubic inches

D. 27,360 cubic inches

8) A rectangular prism has 3 layers. Each layer has 12 unit cubes arranged as 4 wide by 3 long. How many unit cubes total?



A. 36 unit cubes

C. 24 unit cubes

B. 12 unit cubes

D. 48 unit cubes



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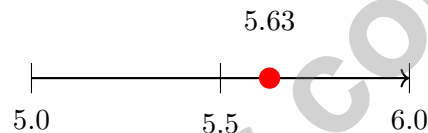
- 1) The model shows $\frac{1}{9}$ of a whole split into 3 equal parts. What fraction of the whole is each small part?

$\frac{1}{9}$ split into 3



1 whole split into 9 equal parts

- A. $\frac{1}{9}$
 C. $\frac{1}{3}$
 B. $\frac{1}{12}$
 D. $\frac{1}{27}$
- 2) Number line from 5.0 to 6.0, midpoint 5.5. Where is 5.63?



What does 5.63 round to (nearest whole)?

- A. 5.0
 C. 5.6
 B. 5.5
 D. 6
- 3) A rectangular prism has length 9 cm, width 4 cm, and height 3 cm. What is its volume?
- A. 27 cm^3
 C. 108 cm^3
 B. 36 cm^3
 D. 216 cm^3
- 4) What is $11 \times \frac{1}{2}$?

- A. $\frac{1}{2}$
 C. $\frac{11}{1}$
 B. $\frac{1}{22}$
 D. $\frac{11}{2}$ or $5\frac{1}{2}$



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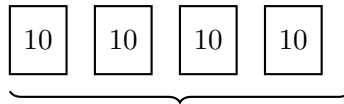
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- 1) A bakery packs cookies into boxes of 10. They pack 87 boxes. How many cookies?



10 cookies per box; 87 boxes total

- A. 870 C. 1700
 B. 97 D. 8700
- 2) A science kit box measures 6 meters long, 7 meters wide, and 7 meters tall. What is its volume?
- A. 42 cubic meters C. 20 cubic meters
 B. 49 cubic meters D. 294 cubic meters
- 3) Match: which expanded form equals 8.45?
- A. $8 + 4 + 5$ C. $8 + 0.4 + 0.05$
 B. $8 + 0.4 + 0.5$ D. $80 + 0.04 + 0.005$
- 4) Evaluate: $(6 + 9) \times (2 \times 2) - 12$
- A. 40 C. 52
 B. 60 D. 48
- 5) Find the difference: $8\frac{2}{3} - 4\frac{1}{6}$.

Record your answer in the space provided.



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 A is correct.** **(5.G.A.2)** The second coordinates follow 2, 5, 8, 11, adding 3 each step. The plotted points are (1,2), (2,5), (3,8), and (4,11), so they match.
- Choice B is correct.** **(5.MD.C.3)** $2 \times 3 \times 3 = 18$ cu. in. Choice A: $2 \times 3 \times 2 = 12$. Choice C: $3 \times 3 \times 1 = 9$. Choice D: $2 \times 2 \times 5 = 20$.
- Choice D is correct.** **(5.MD.C.5)** Use the rectangular-prism volume formula: $7 \times 3 \times 4 = 84$. So the volume is 84 cubic meters.
- Choice D is correct.** **(5.NBT.A.2)** The factors 5 and 2 make 10, and then multiplying by another 10 makes 100. The product has 2 zeros.
- The correct answer is 5000.** **(5.NBT.A.2)** $5 \times 1,000 = 5,000$ m. Each kilometer has 1,000 meters, so 5 kilometers has five groups of 1,000 meters.
- Choice A is correct.** **(5.MD.A.1)** Begin with the innermost operation: $2 \times 3 = 6$. That makes the braces $\{4 + 6\} = 10$, so the full expression is $30 - 10 = 20$.
- Choice B is correct.** **(5.OA.A.1)** The base is $36 \times 12 = 432$ square inches. With a height of 48 inches, the volume is $432 \times 48 = 20,736$ cubic inches.
- Choice A is correct.** **(5.MD.C.4)** Each layer has 12 cubes. Three layers of the same size give $12 \times 3 = 36$ unit cubes total.
- Choice D is correct.** **(5.OA.A.2)** The sum $(5 + 3) = 8$; twice this is $2 \times 8 = 16$ cups.
- Choice A is correct.** **(5.OA.A.2)** $\frac{1}{2} < 1$, so $\frac{1}{2} \times 20 < 20$.
- Choice C is correct.** **(5.NBT.B.7)** The hundredths digit is 3. The thousandths digit is 5. Since $5 \geq 5$, round hundredths up: $3 \rightarrow 4$, giving 7.64 g.
- Choice C is correct.** **(5.NBT.B.7)** $2.8 \div 0.7 = 4$. Dividing by 0.7 is equivalent to dividing by $\frac{7}{10}$: $2.8 \div 0.7 = 4$.
- Choice B is correct.** **(5.G.A.2)** Point X is 9 units right and 1 unit up, matching the coordinates (9, 1).
- Choice A is correct.** **(5.G.B.3)** A quadrilateral is any polygon with 4 sides. Some quadrilaterals have equal sides, right angles, or parallel sides, but not all do.
- Choice B is correct.** **(5.NF.A.2)** $3\frac{9}{10} \approx 4$. So $6 - 3\frac{9}{10} \approx 6 - 4 = 2$.
- Choice B is correct.** **(5.NF.A.2)** In 9.452, the digit 5 is in the hundredths place, so it is worth 0.05. The digit 2 is in the thousandths place, so it is worth 0.002.
- Choice A is correct.** **(5.NBT.A.3)** 43 out of 100 squares shaded represents $\frac{43}{100} = 0.43$.
- Choice D is correct.** **(5.NBT.A.2)** The student forgot the key concept: dividing by powers of 10 requires shifting the decimal point left. The correct answer is $8,300 \div 1,000 = 8.3$.
- The correct answer is 160.** **(5.MD.C.4)** The base area is 20 cm^2 , and there are 8 cm of height. Multiply $20 \times 8 = 160 \text{ cm}^3$.
- Choices A, B are correct.** **(5.MD.C.4)** The base area is $4 \times 3 = 12$ square units. Then $48 \div 12 = 4$, so the height is 4 units. C and D come from mixing up the height with the volume.
- The correct answer is $3\frac{1}{4}$.** **(5.NF.A.1)** Rewrite $4\frac{1}{2} = 4\frac{2}{4}$. Subtract: $(4 - 1) + (\frac{2}{4} - \frac{1}{4}) = 3\frac{1}{4}$.
- Choice C is correct.** **(5.NF.A.1)** Multiply the numerators and denominators: $\frac{2}{3} \times \frac{1}{4} = \frac{2}{12}$. Since both 2 and 12 can be divided by 2, the product simplifies to $\frac{1}{6}$.
- Choice C is correct.** **(5.MD.A.1)** Total fencing: $180 + 165 + 225 = 570$ meters. Cost: $570 \times 12 = 6,840$ dollars.
- Choice A is correct.** **(5.G.A.1)** A point in this region has a positive x-coordinate and a positive y-coordinate. Only (4, 6) has both coordinates greater than 0.
- Choice B is correct.** **(5.NBT.A.2)** Dividing by 10 moves the decimal one place left, so 2,478 becomes 247.8.
- Choice C is correct.** **(5.NBT.A.2)** The first coordinate, 15, matches the x-axis label: minutes played. The second coordinate, 450, matches the y-axis label: score. So the point means score is 450 when minutes played is 15.
- The correct answer is 2.** **(5.G.A.1)** Compare: $4 = 2 \times 2$, $8 = 2 \times 4$, etc. Each B term is 2 times its A term.
- Choice D is correct.** **(5.G.A.1)** The tree shows 15 and 3 being added inside $(15 + 3)$. The multiplication is by 2, so there is no product of 15 and 3 in this expression.



Star Player Pep Talk

To My Star Math Player,

◇ 8 practice tests. Every one of them was a chance to grow, and every one of them you took. That's why your math game is at a new level today. ◇

★ **Star players know:** confidence comes from preparation. You can't fake confidence. You build it. You built yours through these 8 tests. So when test day shows up, your confidence will be real, because your work was real. ★

Star Player Stats

- **Practice Hours:** OFF THE CHARTS!
- **Skill Range:** BROAD! You can handle different problem types.
- **Mental Toughness:** HIGH! You don't quit on hard problems.
- **Game-Day Plan:** READY! You know your strategies.

Star tip: the best players don't try to be perfect on every play. They focus on the next play. Do that on the test. One problem at a time. One small win at a time. You add them up to a great score.

If you'd like to share your experience or have questions, please email me at reza@testinar.com. I'd love to hear from you!

Reza Nazari & Jay Daie

Your Math Coaches (Go Star!)

$45 \div 5 = ?$

PRACTICE TODAY.

$\frac{3}{5} + \frac{1}{10} = ?$



ACHIEVE TOMORROW!



$3^2 + 4^2 = 25$

This book includes **8** full-length **Grade 5** math practice tests to help students master essential skills, build confidence, and achieve success. Each test is carefully designed to reflect real math standards and cover a variety of question types with detailed answer explanations.

$7x - 4 = 17$

$1\frac{1}{2} + 2\frac{1}{3} = ?$

8 FULL-LENGTH MATH PRACTICE TESTS



REALISTIC PRACTICE

Tests mirror Grade 5 math standards and real assessment formats.



ANSWER KEY INCLUDED

Detailed answer explanations help students understand and learn.



BUILD CONFIDENCE & SKILLS

Strengthens problem-solving abilities and reinforces key math concepts.



IMPROVE & TRACK PROGRESS

Identify strengths and focus on areas that need improvement.



ACHIEVE SUCCESS

Boosts test readiness and helps students achieve their best results.

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- ✓ Whole Numbers & Operations
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- ✓ Number Patterns
- ✓ Word Problems
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