

# 7

# Tennessee

# TCAP

## GRADE 5

# MATHEMATICS

## PRACTICE TESTS

✓  
PRACTICE  
PREPARE  
SUCCEED

★★★

Comprehensive Standards-Aligned  
Review for Strong Grade 5  
Math Performance



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

$$2.4 + 1.6 = 4.0$$

$$A = \frac{bh}{2}$$



**7 FULL-LENGTH  
PRACTICE TESTS**

Realistic style  
questions



**STANDARDS-  
ALIGNED**

Covers all Grade 5  
standards



**BUILD CONFIDENCE**

Target weak areas  
and improve  
performance



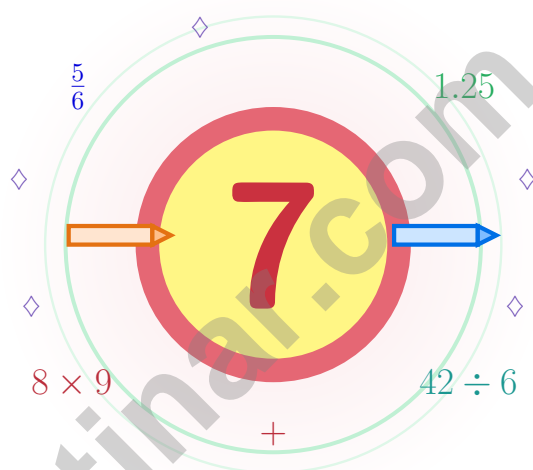
**ACHIEVE SUCCESS**

Develop skills,  
stay prepared,  
excel on test day

★ PRACTICE TODAY. PERFORM TOMORROW. **SUCCEED** FOREVER. ★

# 7 Tennessee TCAP Grade 5 Math Practice Tests

*Seven practice tests woven into one calm routine*



Seven full tests, a concise 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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# Tennessee Grade 5: Practice Path Briefing

A seven-step adventure for Tennessee Grade 5 thinkers

## Just for Tennessee Grade 5 Trail Specialists

This practice book is your steady companion for seven 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 seven 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.

### Notice

Look closely at what the problem says, shows, and asks.

### Try

Pick a plan and step through it carefully.

### Grow

Use every correction as a clue for what to master next.

**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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# Your Step-by-Step Plan

A simple routine that turns practice into progress

## Step 1: Step 1

**Warm up with a quick review.**

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

## Step 2: Step 2

**Take one full practice test.**

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

## Step 3: Step 3

**Check your work honestly.**

Circle missed questions and notice which topics keep showing up.

## Step 4: Step 4

**Fix, reflect, and try again.**

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

## A Good 7-Week Tennessee Rhythm

<b>Week 1</b>	Take Test 1 like a Smoky morning.
<b>Week 2</b>	Take Test 2 and slow down on word problems.
<b>Week 3</b>	Take Test 3 and lift fraction and decimal work.
<b>Week 4</b>	Take Test 4 and pay close attention to labels and units.
<b>Week 5</b>	Take Test 5 and compare your habits with your first test.
<b>Week 6</b>	Take Test 6 and practice staying calm during tricky questions.
<b>Week 7</b>	Take Test 7 with calm, careful, courageous work.



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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)

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#### Customary

1 pound (lb) = 16 ounces (oz)

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### TIME

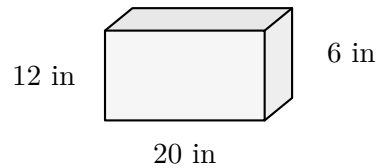
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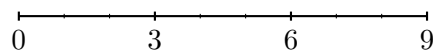


- 1) A candy store displays chocolates in a rectangular box. The box measures 20 inches long, 12 inches wide, and 6 inches tall. How many cubic inches of space does the display box have?



- A. 960 cubic inches                       C. 1440 cubic inches  
 B. 1200 cubic inches                       D. 1680 cubic inches
- 2) Compare without calculating:  $6 \times 20$    $12 \times 10$
- A.  $>$      C.  $=$   
 B.  $<$      D. Cannot tell
- 3) A clothing store has  $\frac{4}{8}$  of its inventory on sale. What is this fraction in simplest form?
- A.  $\frac{1}{8}$      C.  $\frac{1}{2}$   
 B.  $\frac{2}{8}$      D.  $\frac{3}{8}$
- 4) Pattern: 3, 6, 11, 18, 27, ... The differences increase by 2 each time: add 3, then 5, then 7, then 9. What is next?
- A. 34     C. 38  
 B. 36     D. 40
- 5) A seamstress has 9 yards of thread. How many  $\frac{1}{3}$ -yard pieces can she cut?

9 yards of thread



- A. 9     C. 27  
 B. 18     D. 36



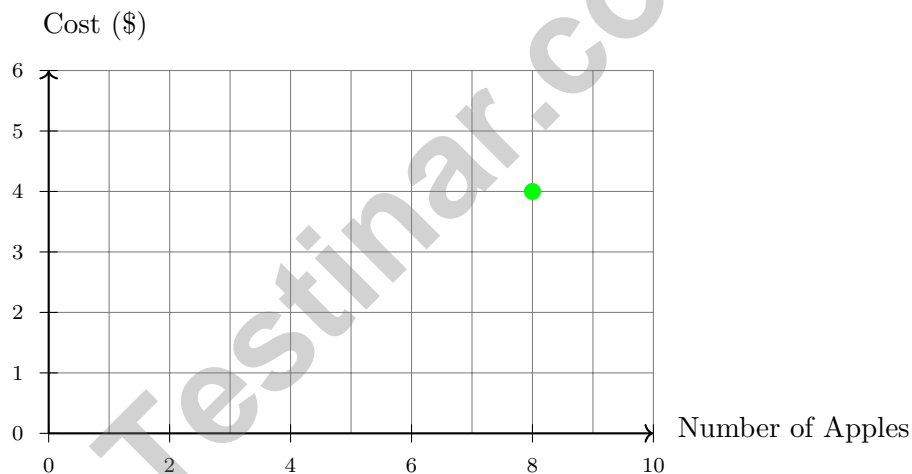
6) Box A measures 8 feet by 5 feet by 4 feet. Box B measures 7 feet by 5 feet by 4 feet. Which has the greater volume, and by how much?

- A. Box A by 30 cubic feet  
 B. Box B by 25 cubic feet  
 C. They have the same volume.  
 D. Box A by 20 cubic feet

7) A baker uses 2.4 cups of flour for each batch. If the baker makes 15 batches, how many cups of flour are used?

- A. 36 cups  
 B. 34 cups  
 C. 32 cups  
 D. 38 cups

8) A grocery store tracks the cost of apples. The graph shows the relationship between the number of apples bought and the total cost. What does the point (8, 4) mean on this graph?



- A. 4 apples cost \$8  
 B. 8 apples cost \$4  
 C. 12 apples cost \$8  
 D. \$4 buys 12 apples



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1) Divide:  $567 \div 21$

A. 25

C. 29

B. 31

D. 27

2)

Attribute Table

Shape	Parallel-side pairs	All sides equal	$90^\circ$ angles
Shape A	Exactly 1 pair	–	–
Shape B	2 pairs	–	–
Rectangle	2 pairs	–	✓
Rhombus	2 pairs	✓	–
Square	2 pairs	✓	✓

What is the difference between Shape A and Shape B?

A. Shape A has exactly 1 pair of parallel sides; Shape B has 2 pairs.

C. Shape A has 2 pairs of parallel sides; Shape B has exactly 1 pair.

B. Shape A is a rectangle; Shape B is a rhombus.

D. They are the same shape.

3) How many zeros are in the product  $25 \times 40$ ?

A. 1

C. 3

B. 2

D. 4

4) A strip of paper is 12 inches long. Another strip is  $2\frac{1}{2}$  times as long. How long is the longer strip?

A. 42 inches

C. 24 inches

B. 36 inches

D. 30 inches



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## 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

- 1) **Choice C is correct.** (5.MD.C.4) Volume =  $20 \times 12 \times 6 = 1440$  cubic inches.
- 2) **Choice C is correct.** (5.OA.A.2) The second expression doubles 6 to 12 but halves 20 to 10. That trade keeps the product the same.
- 3) **Choice C is correct.** (5.NF.A.2)  $\frac{4}{8} = \frac{4 \div 4}{8 \div 4} = \frac{1}{2}$ . In simplest form, this is one half of the inventory.
- 4) **Choice C is correct.** (5.OA.B.3) The differences are 3, 5, 7, and 9. The next difference is 11, so  $27 + 11 = 38$ .
- 5) **Choice C is correct.** (5.NF.B.7)  $9 \div \frac{1}{3} = 9 \times 3 = 27$ . She can cut 27 pieces.
- 6) **Choice D is correct.** (5.MD.C.5) Find both volumes: Box A is  $8 \times 5 \times 4 = 160$ , and Box B is  $7 \times 5 \times 4 = 140$ . The difference is 20 cubic feet.
- 7) **Choice A is correct.** (5.MD.A.1) Choose the operation from the story, then keep the unit with the answer. Multiply:  $2.4 \times 15 = 36$  cups. This confirms the answer.
- 8) **Choice B is correct.** (5.G.A.2) The x-coordinate is the number of apples (8), and the y-coordinate is the cost in dollars (4). So 8 apples cost \$4.
- 9) **Choice D is correct.** (5.MD.A.1) Since 12 inches = 1 foot,  $\frac{1}{2}$  foot =  $12 \div 2 = 6$  inches.
- 10) **The correct answer is 6.** (5.NF.B.6) The question asks for  $\frac{3}{4}$  of 8 cups, so multiply:  $\frac{3}{4} \times 8 = 6$ . The answer is 6 cups.
- 11) **Choice C is correct.** (5.G.A.1) A point directly above Point A has the same x-coordinate but a larger y-coordinate. Of the choices, only (3,9) has  $x = 3$  and a y-value greater than 5.
- 12) **Choice B is correct.** (5.NF.B.4) Dividing by a whole number means multiplying by its reciprocal:  $\frac{1}{6} \div 4 = \frac{1}{6} \times \frac{1}{4} = \frac{1}{24}$ .
- 13) **Choice D is correct.** (5.NF.B.6) Start with one unit fraction,  $\frac{1}{5}$ , and share it into 4 equal parts. Each part is  $\frac{1}{5} \div 4 = \frac{1}{20}$  of the whole.
- 14) **Choice C is correct.** (5.MD.C.3) Each layer has 14 unit cubes. Since  $56 \div 14 = 4$ , the prism has 4 layers, so the height is 4 units.
- 15) **The correct answer is  $\frac{1}{3}$ .** (5.OA.A.2) Dividing the whole amount (6 + 9) by 3 splits it into 3 equal parts. One part is  $\frac{1}{3}$  of the original value.
- 16) **Choice B is correct.** (5.NF.B.5)  $8 \times \frac{1}{2} = 4$  units. Scaling by  $\frac{1}{2}$  halves the length.
- 17) **The correct answer is 11.** (5.OA.A.1) The parentheses give  $15 + 9 = 24$ . Then  $24 \div 4 = 6$ , and the remaining steps are  $6 - 2 = 4$  and  $4 + 7 = 11$ .
- 18) **Choice A is correct.** (5.NF.B.4) When using the area model for mixed number multiplication, decompose both factors:  $2\frac{2}{3} = 2 + \frac{2}{3}$  and  $1\frac{1}{2} = 1 + \frac{1}{2}$ . Then multiply each part:  $(2 + \frac{2}{3})(1 + \frac{1}{2})$  gives four partial products.
- 19) **Choice B is correct.** (5.G.A.1) Check the table:  $3 \times 1 + 1 = 4$ ,  $3 \times 2 + 1 = 7$ , and  $3 \times 3 + 1 = 10$ .
- 20) **Choice B is correct.** (5.MD.A.1) 1 centimeter = 10 millimeters. Divide:  $550 \div 10 = 55$  cm.
- 21) **Choice C is correct.** (5.NBT.A.2)  $10^5 = 100000$  and  $10^6 = 1000000$ , so this is true.
- 22) **Choices A, B are correct.** (5.NF.B.4) Both A and B equal  $\frac{1}{6}$  because the same two factors can be multiplied in either order. C is  $\frac{1}{8}$ , and D is  $\frac{1}{9}$ .
- 23) **Choice B is correct.** (5.G.A.2) The point (6, 2) is located 6 units to the right along the x-axis and 2 units up along the y-axis from the origin.
- 24) **Choice C is correct.** (5.NBT.B.7) Multiply  $5 \times 0.75 = 3.75$ . Since 0.75 has 2 decimal places and 5 has 0, the product has 2 decimal places: \$3.75.
- 25) **Choice A is correct.** (5.MD.C.4) Multiply the three dimensions to count all cubes in the prism.  $6 \times 2 \times 3 = 36$  unit cubes.
- 26) **Choice B is correct.** (5.NBT.A.1) The tenths digit is 3, so the expression is  $3 \times 0.1$ . That product gives the digit's value, 0.3.
- 27) **Choice C is correct.** (5.OA.A.2) A square has 4 equal sides. If each side is 9 meters, the perimeter is  $9 + 9 + 9 + 9$ , or  $4 \times 9$ .



**Dear Student,**

★ When you completed seven practice tests, you proved you can do hard things. The secret was not magic—it was your step-by-step work. ★

◇ **Professional tip:** big problems become small when you break them into parts. One good step is better than ten rushed steps. ◇

**My 4-Step Plan**

- **Understand:** what is the question asking?
- **Plan:** what operation or model should I use?
- **Solve:** show steps neatly.
- **Check:** estimate or substitute to see if it makes sense.

**Keep trusting your process.** You built it through seven tests, and it will support you on test day. Email me at [reza@testinar.com](mailto:reza@testinar.com) if you want to share how you improved.

**Reza Nazari & Jay Daie**

Your Math Coaches (Step by Step)

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# PRACTICE TODAY. PERFORM TOMORROW.

Success in math starts with practice! This book provides the **practice, confidence, and skills** your child needs to excel on the Grade 5 Math test and beyond.

## KEY BENEFITS:



### TARGETED PRACTICE

Focus on the most important Grade 5 math skills.



### STANDARD-ALIGNED

All tests align with state standards for Grade 5.



### BUILD CONFIDENCE

Strengthen skills, reduce test anxiety, and boost confidence.



### IMPROVE PERFORMANCE

Timed practice helps improve speed and accuracy.



### ACHIEVE SUCCESS

Develop strong test-taking skills and achieve your best score!

## PERFECT FOR:

✓ Classroom Practice

✓ Homework Help

✓ Test Preparation

✓ Summer Learning

✓ On-the-Go Practice

✓  
PRACTICE  
PREPARE  
SUCCEED  
★★★

## STRONG SKILLS. BRIGHT FUTURE.

Give your child the tools they need to succeed in math and in life!



Visit [testinar.com/math5](https://testinar.com/math5) for more Grade 5 math resources and practice materials!



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Every step of the way.