

# 10 COMPLETE

## Kentucky

### KSA

# GRADE 5

# MATH

# PRACTICE TESTS

Standards-Based Review with  
Mixed Practice and Detailed Answer Key



#### 10 Complete Practice Tests

Build confidence and test readiness



#### Standards-Based Review

Covers key Grade 5 math standards



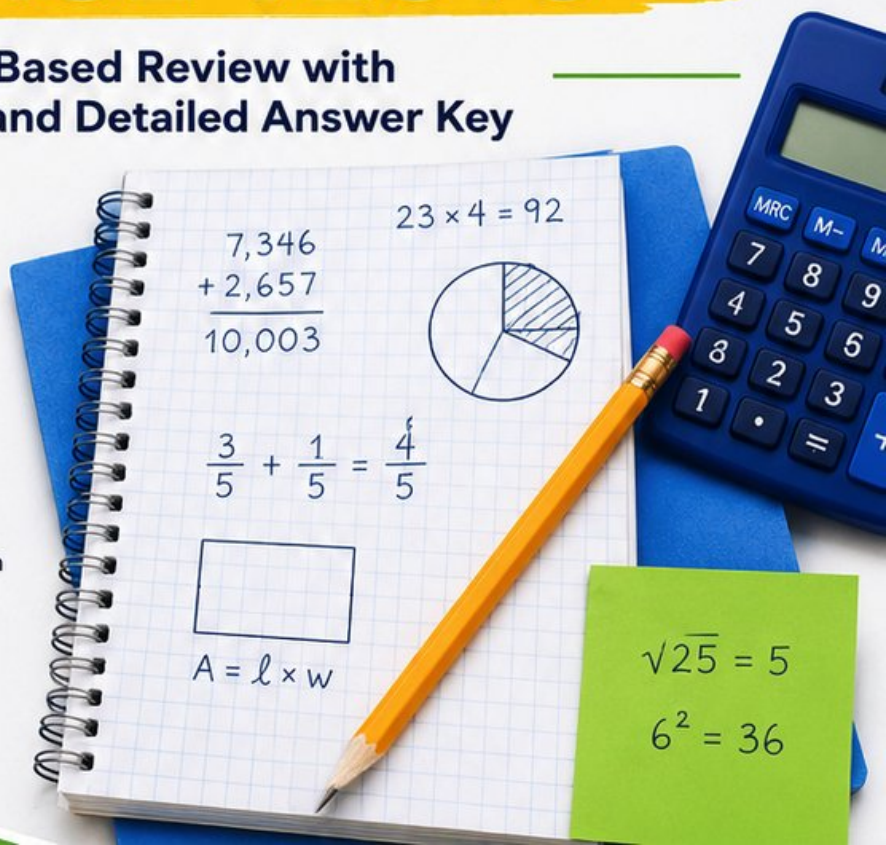
#### Mixed Practice

Variety of question types to strengthen skills



#### Detailed Answer Key

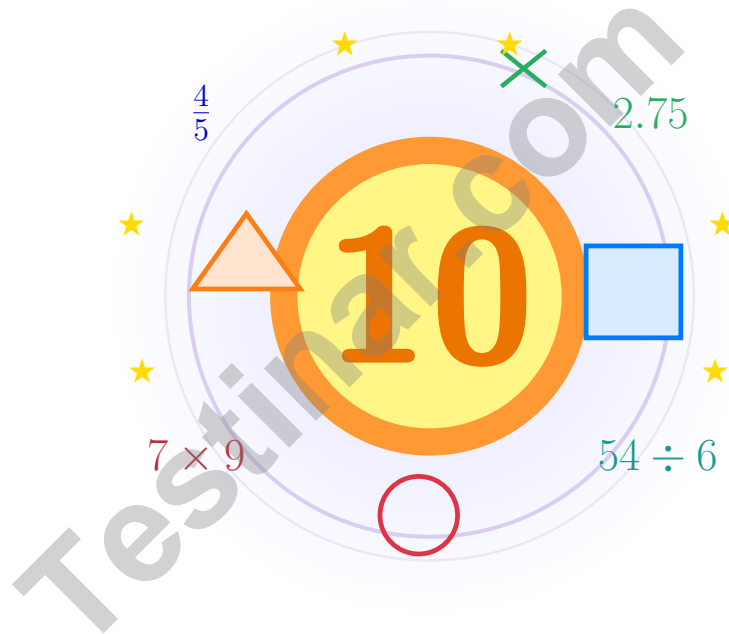
Step-by-step explanations for every question



**PREPARE.  
PRACTICE.  
SUCCEED!**

# 10 Kentucky KSA Grade 5 Math Practice Tests

*Bright review, thoughtful practice, and steady confidence for Grade 5*



Ten full tests, a focused quick review, and student-friendly support that keeps practice clear and encouraging.

**Jay Daie and Reza Nazari**



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# Welcome!

This book is a place to practice bravely and think clearly

## Dear Grade 5 Mathematician

This book gives you ten chances to read carefully, solve thoughtfully, and build steady math confidence. Some problems will feel friendly right away. Some will take more patience. Both kinds help you grow.

The goal is not to feel perfect before you begin. The goal is to practice honest effort, learn from corrections, and notice how much stronger your thinking becomes over time.

### Read

Slow down and understand the task.

### Solve

Show clear steps and good choices.

### Learn

Use mistakes as clues for what comes next.

**A strong habit from the start:** keep your work neat, estimate when it helps, write units carefully, and do not let one hard problem decide your mood for the whole page.



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# How to Use This Book

A simple routine that turns practice into real progress

## Step 1

**Warm up with the quick review.**

Spend a few minutes refreshing the ideas before the test begins.

## Step 2

**Take one full practice test.**

Work in a calm spot and aim for careful thinking before speed.

## Step 3

**Check your work honestly.**

Circle missed questions and notice which skills need another look.

## Step 4

**Fix and reflect.**

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



**A Good 10-Week Rhythm**

<b>Week 1</b>	Take Test 1 and notice your starting strengths.
<b>Week 2</b>	Take Test 2 and slow down on word problems.
<b>Week 3</b>	Take Test 3 and sharpen multiplication and division checks.
<b>Week 4</b>	Take Test 4 and focus on fractions and decimals.
<b>Week 5</b>	Take Test 5 and watch your labels and units closely.
<b>Week 6</b>	Take Test 6 and practice calmer pacing.
<b>Week 7</b>	Take Test 7 and compare your habits with the earlier weeks.
<b>Week 8</b>	Take Test 8 and focus on tidy, checkable work.
<b>Week 9</b>	Take Test 9 and compare your progress with the way you worked in the earlier weeks.
<b>Week 10</b>	Take Test 10 and finish with steady, confident effort while using every strong habit you built.



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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

#### Customary

1 pound (lb) = 16 ounces (oz)

#### Metric

1 kilogram (kg) = 1,000 grams (g)

1 gram (g) = 1,000 milligrams (mg)

### TIME

1 minute (min) = 60 seconds (sec)

1 week = 7 days

1 hour (hr) = 60 minutes (min)

1 year = 12 months

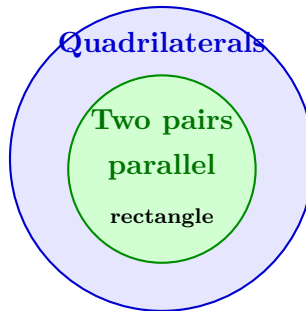
1 day = 24 hours (hr)

1 year = 52 weeks

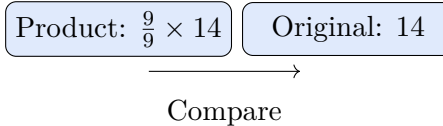




- 4) A Venn diagram has a large circle for quadrilaterals and a smaller circle inside it for figures with two pairs of parallel sides. A rectangle is placed inside the smaller circle. Why?



- A. It has exactly 3 sides.
  B. It is not a polygon.
  C. It has no right angles.
  D. It has 4 sides and two pairs of parallel sides.
- 5) What is  $6 \div \frac{1}{2}$ ?
- A. 12
  B. 3
  C. 6
  D. 18
- 6) A rectangular prism has a volume of 648 cubic units. If the dimensions are 9 units, 8 units, and an unknown dimension, what is the missing dimension?
- A. 7 units
  B. 8 units
  C. 9 units
  D. 12 units
- 7) Compare  $\frac{9}{9} \times 14$  to 14. Which is true?



- A. Product < Original
  B. Cannot determine
  C. Product > Original
  D. Product = Original



## Grade 5 Mathematics Reference Materials

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1 minute (min) = 60 seconds (sec)

1 week = 7 days

1 hour (hr) = 60 minutes (min)

1 year = 12 months

1 day = 24 hours (hr)

1 year = 52 weeks



1) Which expression represents adding 7 to  $4 \times 9$ ?

A.  $7 + 4 + 9$

B.  $4 \times 9 + 7$

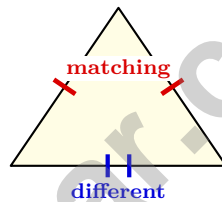
C.  $7 \times (4 + 9)$

D.  $4 \times (9 + 7)$

2) A school's sports day has three events at different times: Event A: 9:00 AM to 10:20 AM  
Event B: 10:45 AM to 11:50 AM Event C: 12:15 PM to 1:30 PM  
What is the total duration of all three events combined?

 A. 3 hours 20 minutes B. 3 hours 35 minutes C. 3 hours 40 minutes D. 4 hours

3) A triangle has two sides with matching tick marks and a third side with a different tick mark. What type of triangle is it based on its sides?

 A. Equilateral B. Right C. Scalene D. Isosceles

4) Without calculating, which is smallest?

A.  $8 \times 9$

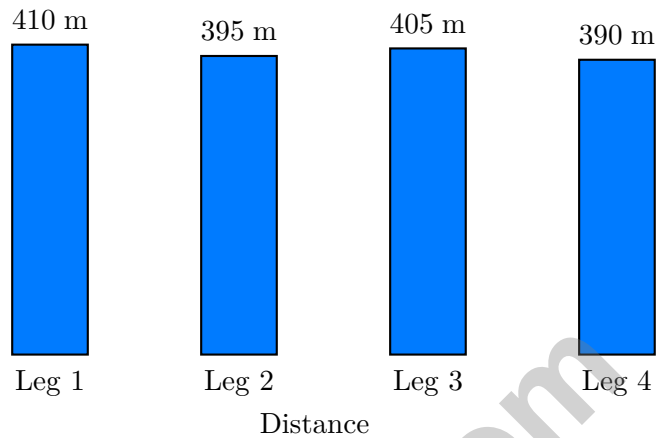
B.  $8 \times 7$

C.  $7 \times 9$

D.  $7 \times 7$



- 40) A track meet has relay events with measured distances: Leg 1: 410 meters, Leg 2: 395 meters, Leg 3: 405 meters, Leg 4: 390 meters.  
What is the total distance in kilometers?



- A. 1.4 km       C. 1.8 km  
 B. 1.6 km       D. 2.0 km

### End of Practice Test

Nice work. Pause, breathe, and check your answers with care.



Grade 5 Mathematics

10

Questions: 40 Duration: No time limit

Calculator Policy: Calculators are not allowed



## 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 B is correct. (KY.5.NBT.5) Round 511 to 500. Then  $500 \times 9 = 4,500$ .
- Choice B is correct. (KY.5.NF.2) Add the ribbon lengths shown:  $2\left(\frac{1}{4}\right) + 3\left(\frac{1}{2}\right) + 2\left(\frac{3}{4}\right) + 1 + 1\frac{1}{4} = 5\frac{3}{4}$  yards.
- Choice A is correct. (KY.5.NBT.1)  $0.402 \times 10 = 4.02$ . Multiplying by 10 shifts each digit one place to the left in the place-value chart.
- Choice D is correct. (KY.5.G.4) A rectangle is a quadrilateral, and its opposite sides are parallel.
- Choice A is correct. (KY.5.NF.7)  $6 \div \frac{1}{2} = 6 \times 2 = 12$ .
- Choice C is correct. (KY.5.MD.4) The known dimensions make a base area of  $9 \times 8 = 72$  square units. Since  $648 \div 72 = 9$ , the missing dimension is 9 units.
- Choice D is correct. (KY.5.NF.5)  $\frac{9}{9} = 1$ , so  $1 \times 14 = 14$ .
- Choice C is correct. (KY.5.MD.1) 1 centimeter = 10 millimeters. Multiply:  $25 \times 10 = 250$  mm.
- Choice D is correct. (KY.5.NBT.2)  $10^2 = 100$ . So  $? \times 100 = 7200 \Rightarrow ? = 72$ .
- The correct answer is 0.85. (KY.5.NBT.2) Move the decimal point three places left:  $850 \rightarrow 0.85$ .
- Choice B is correct. (KY.5.NBT.2) Multiplying by 1000 moves the decimal point 3 places to the right:  $0.45 \times 1000 = 450$ .
- The correct answer is 2. (KY.5.MD.3)  $30 \div (5 \times 3) = 30 \div 15 = 2$ .
- Choice C is correct. (KY.5.NF.4)  $5 \times 1\frac{1}{5} = 5 \times \frac{6}{5} = \frac{30}{5} = 6$ .
- Choice C is correct. (KY.5.NF.1) Add wholes:  $2 + 3 = 5$ . Add fractions:  $\frac{3}{4} + \frac{1}{4} = 1$ . Total: 6.
- Choice B is correct. (KY.5.NF.1) LCM of 5, 3, 6 is 30.  $\frac{3}{5} = \frac{18}{30}$ ,  $\frac{2}{3} = \frac{20}{30}$ ,  $\frac{5}{6} = \frac{25}{30}$ . Order: A, B, C.
- Choice B is correct. (KY.5.G.1) In an ordered pair  $(x, y)$ , the  $y$  represents the vertical distance (how far up) from the origin.
- Choice B is correct. (KY.5.OA.3) Rule: Output =  $5 \times$  Input  $- 1$ . When input is 5:  $5 \times 5 - 1 = 24$ .
- The correct answer is  $2\frac{2}{3}$ . (KY.5.NF.1) Rewrite  $5\frac{1}{3} = 4\frac{4}{3}$  (borrow). Subtract:  $(4 - 2) + (\frac{4}{3} - \frac{2}{3}) = 2\frac{2}{3}$ .
- Choice A is correct. (KY.5.G.2) Subtract 1 (start 10): 10, 9, 8... Divide by 2 (start 16): 16, 8, 4...
- Choice A is correct. (KY.5.NF.1) LCM(7,3) = 21.  $\frac{2}{7} = \frac{6}{21}$  and  $\frac{1}{3} = \frac{7}{21}$ .  $\frac{6}{21} + \frac{7}{21} = \frac{13}{21}$  of the project.
- Choices A, B are correct. (KY.5.MD.5) C is addition; D equals  $\frac{3}{4}$ , not  $\frac{3}{8}$ .
- The correct answer is (6, 4). (KY.5.G.2) Move 6 units right for the x-coordinate and 4 units up for the y-coordinate, so the ordered pair is (6, 4).
- Choice D is correct. (KY.5.NF.7)  $\frac{1}{7} \div 2 = \frac{1}{7} \times \frac{1}{2} = \frac{1}{14}$ .
- Choice C is correct. (KY.5.MD.5) Use the rectangular-prism volume formula:  $9 \times 7 \times 2 = 126$ . So the volume is 126 cubic feet.
- Choice B is correct. (KY.5.NBT.2) Dividing by a power of 10 shifts the value to a smaller place.  $7,000 \div 10 = 700$  screws per box. This confirms the answer.
- Choice C is correct. (KY.5.G.2) The rule is Output =  $2 \times$  Input  $+ 1$ : when Input = 2, Output = 5; when Input = 8, Output =  $2(8) + 1 = 17$ .
- Choice C is correct. (KY.5.G.4) Triangle C has side labels 3 cm, 4 cm, and 5 cm. Since all three side lengths are different, Triangle C is scalene.
- Choice A is correct. (KY.5.NBT.2) On a  $10 \times 10$  grid, shading 4 columns (width) and 6 rows (height) covers  $4 \times 6 = 24$  squares out of 100, which is 0.24.
- Choice A is correct. (KY.5.NF.1)  $\frac{3}{5} = \frac{6}{10}$ .  $\frac{6}{10} - \frac{1}{10} = \frac{5}{10} = \frac{1}{2}$ .
- The correct answer is 9.1. (KY.5.NBT.4) Hundredths digit is 7 (with 5 in thousandths). Since  $7 \geq 5$ , round tenths up:  $9.0 \rightarrow 9.1$ .
- Choice D is correct. (KY.5.NF.3) Each liter fills 2 half-liter bottles. So  $3 \div \frac{1}{2} = 3 \times 2 = 6$  bottles.



## Dear Hero of This Story,

◇ Once upon a time, there was a brave Grade 5 student who decided to take 10 practice tests. At first, the problems were tough. But the student kept showing up, kept trying, and kept learning. Slowly, the tough problems became easier. The student's confidence grew. By the time the 10<sup>th</sup> test was finished, that student had become the hero of their own math story. That student is you. ◇

★ **Storytellers know:** every great story has a hard middle. The hard middle is where the hero grows. You've lived your hard middle, and now your story is heading toward a strong ending: a confident test day. ★

### Your Hero's Toolkit

- **Brave Heart:** You face hard problems instead of running.
- **Sharp Mind:** You think carefully before you act.
- **Steady Hand:** You write neatly and check your work.
- **Kind Spirit:** You're patient with yourself when you make mistakes.

**Storyteller's tip:** when you sit down on test day, remember the hero you've become. The chapters before this moment have made you stronger. Now, write your best chapter yet.

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

**Reza Nazari & Jay Daie**

Your Math Storyteller (The Best Pages Are Ahead)

# PRACTICE TODAY. MASTER TOMORROW.

Give your child the confidence to excel in **Grade 5 Math!**  
This book includes **10 complete practice tests** designed to build strong skills, improve test readiness, and achieve success.



# 10

COMPLETE  
PRACTICE  
TESTS

- ✓ Realistic. Rigorous.
- ✓ Results-Driven.

More practice today for a **stronger** tomorrow.



## THIS BOOK HELPS YOUR CHILD:



### Build Confidence

Familiar, focused practice reduces anxiety and boosts self-belief.



### Strengthen Skills

Reinforces key math concepts through high-quality, standards-aligned questions.



### Improve Test Readiness

Full-length tests help students understand test format, pacing, and question types.



### Track Progress

Identify strengths and target areas with purposeful practice.



### Achieve Success

Better preparation leads to higher scores and bright futures.

## COVERS ALL ESSENTIAL TOPICS

- ✓ Whole Numbers & Operations
- ✓ Fractions & Decimals
- ✓ Algebraic Thinking
- ✓ Geometry
- ✓ Measurement & Data
- ✓ Graphing & Data Analysis
- ✓ Number Patterns
- ✓ Word Problems
- ✓ Ratio & Proportion
- ✓ Perimeter, Area & Volume
- ✓ And More!



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