

9

Kansas

KAP

GRADE 5 MATHEMATICS PRACTICE TESTS

Full-Length Standards-Aligned Practice
for Strong Math Performance

$$A = l \times w$$

$$x^2 + 3x - 4 = 0$$

$$y = 2x + 1$$



9
FULL-LENGTH
PRACTICE
TESTS

$$2,345 \times 6 = 14,070$$



$$\frac{3}{4} + \frac{1}{8} = \frac{7}{8}$$

$$7.2 \div 0.8 = 9$$



$$(12 + 8) \div 4 = 5$$



Build Confidence



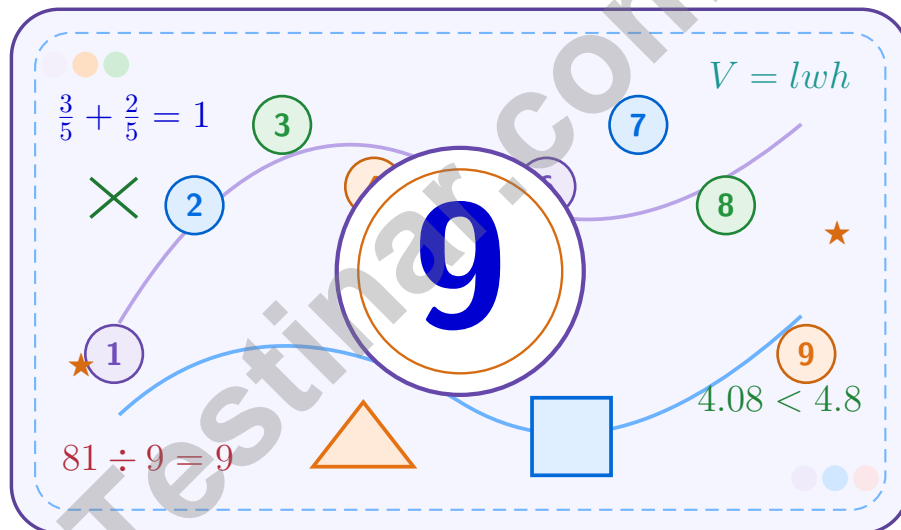
Improve Math Skills



Achieve Success

9 Kansas KAP Grade 5 Math Practice Tests

*A nine-step confidence climb with clear review, smart strategy, and practice
that gets stronger every round*



Nine full tests, focused skill boosters, and student-friendly support from start to finish for Grade 5 mathematicians who want to climb higher.

Jay Daie and Reza Nazari



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Welcome to the Confidence Climb

This book is here to help you practice with purpose and rise step by step

To the Grade 5 Mathematician

This practice book is a place to think, try, fix, and grow. You do not have to be perfect on the first question or the first test. What matters most is careful effort, clear work, and learning from each round of practice.

Use these nine 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 fast.

Try

Give each problem your best thinking.

Check

Study mistakes and learn what happened.

Rise

Bring that lesson into the next round.

A strong habit for every page: 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.

How to Use This Book

A simple practice routine that turns nine tests into steady growth

A Nine-Session Climb Map

Session	Mission Focus
1	Take Test 1; review place value and operation slips.
2	Take Test 2; keep work neat and easy to read.
3	Take Test 3; give extra time to fractions and decimals.
4	Take Test 4; slow down on word problems and units.
5	Take Test 5; compare scores and habits with earlier rounds.
6	Take Test 6; notice which habits are now automatic.
7	Take Test 7; explain open-ended answers clearly.
8	Take Test 8; review topics that still need attention.
9	Take Test 9; finish with calm, careful, confident work.

Step 1: Warm Up

Start with the quick review.
Spend a few minutes refreshing the ideas before you start a test.

Step 2: Take the Test

Take one full practice test.
Work in a quiet space and let accuracy matter more than speed.

Step 3: Study the Pattern

Check your work honestly.
Circle missed questions and notice patterns in the mistakes.

Step 4: Learn, Then Retry

Read the explanation and try again.
Learning happens after the test too. Fixing mistakes is one of the smartest parts of practice.



Scan me

Test Overview

What this practice book helps students do

These practice tests are designed to help Grade 5 students get comfortable with the kind of thinking used on the Kansas KAP. The goal is bigger than only getting answers right. Students are practicing how to read closely, choose a strategy, solve carefully, and explain their work when needed.

Selected-Response Questions

Students solve the problem and choose the best answer. Estimating first and crossing out weak choices can save time and points.

Constructed-Response Questions

Students show their thinking, steps, models, or explanations. Even when unsure, writing what they know can help organize the problem.

Grade 5 Skills You Will Practice Often

- place value, comparing numbers, and rounding
- multi-digit addition, subtraction, multiplication, and division
- fractions, decimals, and mixed numbers
- perimeter, area, volume, and measurement conversions
- coordinate points, patterns, graphs, and tables
- geometry and multi-step word problems

What strong work looks like: the answer is correct, the steps are clear, the labels or units are included, and the final result makes sense.



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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

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1 day = 24 hours (hr) 1 year = 52 weeks



1) What is $480 \div 10$?

A. 48

C. 4.8

B. 4,800

D. 0.48

2) A fish tank is 18 cubic inches. Which dimensions could match?

A. $2 \times 3 \times 2$

C. $3 \times 3 \times 1$

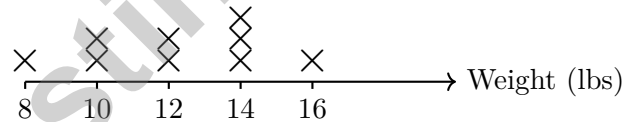
B. $2 \times 3 \times 3$

D. $2 \times 2 \times 5$

3) A temperature graph passes through $(0, 50)$ and $(4, 70)$. What is the change in temperature?

Record your answer in the space provided.

4) The line plot shows the weight (in pounds) of puppies at the shelter:



Each puppy gets $\frac{1}{2}$ cup of food. How many cups of food are needed for all the puppies?

A. 4 cups

C. 5 cups

B. $5\frac{1}{2}$ cups

D. $4\frac{1}{2}$ cups



5) A delivery company records package weights: 2.34 kg, 3.67 kg, and 1.89 kg. What is the total weight?

A. 7.70 kg

C. 7.90 kg

B. 7.80 kg

D. 8.90 kg

6) What is the x-coordinate of the point (7, 2)?

Record your answer in the space provided.

7) Which decimal is equivalent to $\frac{8}{10}$?

A. 0.08

C. 8.0

B. 0.8

D. 0.008

8) Divide: $18.9 \div 3$. Which shows the correct steps?

Option	Steps
A	Divide $189 \div 3 = 63$, place decimal to get 6.3
B	Divide $189 \div 3 = 63$, place decimal to get 63.0
C	Divide $18 \div 3 = 6$ and ignore the 0.9
D	Divide $189 \div 3 = 63$, place decimal to get 63

A. Option A

C. Option C

B. Option B

D. Option D



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1) Write the multiplication as a power of 10. $\underline{\hspace{2cm}} \times 100 = 3.7$. What is the missing number?

A. 0.037

C. 37

B. 0.37

D. 370

2) Maria has 8 pizzas. Each person gets one fourth of a pizza. Which division equation matches the situation?

A. $\frac{1}{4} \div 8 = n$

C. $8 + \frac{1}{4} = n$

B. $8 \times \frac{1}{4} = n$

D. $8 \div \frac{1}{4} = n$

3) Find: $4.6 - 1.85$.

Record your answer in the space provided.

4) Add: $\frac{7}{12} + \frac{1}{8}$

A. $\frac{8}{20}$

C. $\frac{8}{12}$

B. $\frac{17}{24}$

D. $\frac{15}{24}$

5) Error analysis: A student computes $6 \times \frac{1}{3}$ and writes $\frac{6}{3} = 2$. Is this correct?

 A. Yes, the answer is 2. C. No, the student treated the whole number as a denominator. B. No, the student added instead of multiplying. D. No, the student multiplied the denominator by 6.

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- 1) A polygon has 5 vertices. How many sides does it have?
- A. 3 C. 5
 B. 4 D. 6
- 2) A recipe is scaled up. The original calls for $\frac{1}{6}$ cup sugar and $\frac{1}{4}$ cup flour. To add both with a common denominator, which works?
- A. $\frac{2}{12}$ cup and $\frac{3}{12}$ cup C. $\frac{3}{12}$ cup and $\frac{4}{12}$ cup
 B. $\frac{1}{12}$ cup and $\frac{1}{12}$ cup D. $\frac{2}{24}$ cup and $\frac{2}{24}$ cup
- 3) Round each fraction to the nearest benchmark 0, $\frac{1}{2}$, or 1 first. Which is a reasonable estimate for $\frac{1}{3} + \frac{5}{12}$?
- A. 0 C. 1
 B. $\frac{1}{2}$ D. 2
- 4) A toy company produces 1000 toys per hour. In 82 hours, how many toys?
- A. 1082 C. 82000
 B. 8200 D. 820000
- 5) Compare: $(8 \times 12) \times 5$ $8 \times (12 \times 5)$
- A. > C. =
 B. < D. Cannot tell
- 6) A warehouse stores canned goods. There are 35 shelves with 22 cans on each shelf. How many cans are stored?
- A. 750 C. 770
 B. 760 D. 780



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 Kansas scores.

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Practice Test Answers and Explanations

Practice Test 1 Answers and Explanations

- 1) **Choice A is correct.** **(5.NBT.2)** Dividing by 10 moves the decimal point one place to the left. $480 \div 10 = 48$.
- 2) **Choice B is correct.** **(5.NBT.2)** $2 \times 3 \times 3 = 18$ cu. in. Choice A: $2 \times 3 \times 2 = 12$. Choice C: $3 \times 3 \times 1 = 9$. Choice D: $2 \times 2 \times 5 = 20$.
- 3) **The correct answer is 20.** **(5.G.2)** Compare the y-values: $70 - 50 = 20$. The temperature changed by 20 degrees.
- 4) **Choice D is correct.** **(5.G.2)** Count the puppies first: $1 + 2 + 2 + 3 + 1 = 9$ puppies. Each puppy gets $\frac{1}{2}$ cup, so $9 \times \frac{1}{2} = 4\frac{1}{2}$ cups.
- 5) **Choice C is correct.** **(5.NBT.7)** Add: $2.34 + 3.67 = 6.01$; then $6.01 + 1.89 = 7.90$ kg.
- 6) **The correct answer is 7.** **(5.NBT.7)** The first number in an ordered pair is the x-coordinate.
- 7) **Choice B is correct.** **(5.G.1)** A fraction with denominator 10 equals a decimal with one place: $\frac{8}{10} = 0.8$.
- 8) **Choice A is correct.** **(5.NBT.3a)** 18.9 has 1 decimal place. $189 \div 3 = 63$; move decimal 1 place left to get 6.3.
- 9) **The correct answer is 120.** **(5.MD.5a)** Use the rectangular-prism formula $V = l \times w \times h$. Multiply $8 \times 5 \times 3 = 120$ cubic units.
- 10) **Choice D is correct.** **(5.MD.5a)** $\frac{3}{3} = 1$, so $6 \times \frac{3}{3} = 6 \times 1 = 6$.
- 11) **Choice A is correct.** **(5.MD.5)** The base area is $14 \times 7 = 98$ square centimeters. Since $392 \div 98 = 4$, the height is 4 cm.
- 12) **Choice A is correct.** **(5.MD.5)** Divide by 3 each step: $3 \div 3 = 1$.
- 13) **Choice B is correct.** **(5.G.1)** Each box starts with 24 pencils, so 6 boxes have 6×24 pencils. Since 4 pencils in each box are broken, subtract 6×4 broken pencils.
- 14) **The correct answer is 21.** **(5.OA.1)** First simplify the parentheses: $6 + 2 = 8$. Then $48 \div 8 = 6$ and $5 \times 3 = 15$, so the total is $6 + 15 = 21$.
- 15) **Choice B is correct.** **(5.OA.1)** Since $7 \div \frac{1}{4} = 7 \times 4 = 28$, the whole number is 7.
- 16) **Choice D is correct.** **(5.NF.7c)** For each point, the second coordinate is 1 more than the first: $0+1=1$, $2+1=3$, $4+1=5$, $6+1=7$.
- 17) **Choice A is correct.** **(5.NF.2)** $\frac{1}{2}$ and $\frac{2}{3}$ have different denominators. With LCD 6: $\frac{1}{2} = \frac{3}{6} \neq \frac{4}{6} = \frac{2}{3}$.
- 18) **Choice A is correct.** **(5.MD.5c)** Find each part first: Prism A is $8 \times 2 \times 5 = 80$ cubic centimeters, and Prism B is $3 \times 3 \times 3 = 27$ cubic centimeters. Because the parts do not overlap, add them: $80 + 27 = 107$ cubic centimeters.
- 19) **Choice D is correct.** **(5.NBT.2)** Move the decimal 1 place left: $2.1 \div 10 = 0.21$.
- 20) **Choice A is correct.** **(5.NBT.2)** A power of 10 tells how many factors of 10 to use. In order: 100, 300, 2000, 10000. This confirms the answer.
- 21) **Choice C is correct.** **(5.MD.5)** Total tickets: $120 + 185 = 305$ tickets. Revenue: $305 \times 2.50 = 762.50$ dollars.
- 22) **Choices A, B are correct.** **(5.MD.1)** Convert first: 3 L is 3,000 mL. Since $3000 \div 250 = 12$, 12 glasses fill the pitcher; C and D use the wrong count or conversion.
- 23) **Choice C is correct.** **(5.G.4)** Size has nothing to do with hierarchy. A rectangle is NOT a trapezoid because a trapezoid has exactly ONE pair of parallel sides, while rectangles have TWO pairs.
- 24) **Choice A is correct.** **(5.NF.1)** $6 = 5\frac{9}{9}$. Then $5\frac{9}{9} - 1\frac{4}{9} = 4\frac{5}{9}$.
- 25) **The correct answer is 0.42.** **(5.NF.1)** Divide by 10 by moving the decimal point one place left: $4.2 \rightarrow 0.42$.
- 26) **Choice C is correct.** **(5.NBT.2)** 35×100 ends with 2 zeros, while $35 \times 1,000$ ends with 3 zeros. Multiplying by the larger power of 10 gives more zeros.
- 27) **Choice C is correct.** **(5.NF.5b)** The student correctly used the distributive property: both the 2 and the $\frac{1}{4}$ must be multiplied by 2. That gives $4 + \frac{2}{4} = 4\frac{1}{2}$.
- 28) **Choice C is correct.** **(5.G.2)** Use the rule output = input \times input: $1 \times 1 = 1$, $2 \times 2 = 4$, and $3 \times 3 = 9$.
- 29) **Choice D is correct.** **(5.G.2)** Count all X marks: $1 + 2 + 4 + 2 + 1 = 10$ teams.
- 30) **Choice D is correct.** **(5.NF.7c)** Start with one unit fraction, $\frac{1}{5}$, and share it into 6 equal parts. Each part is $\frac{1}{5} \div 6 = \frac{1}{30}$ of the whole.
- 31) **Choice C is correct.** **(5.NF.5a)** $2 \times \frac{3}{2} = 3$. Scaling by $\frac{3}{2}$ increases the height by half.



Authors' Notes

From a Friend Who Believes in You

Hi, Brilliant Friend!

◇ I have to tell you something important: I am proud of you. You completed 9 full practice tests. That takes time, focus, and heart. Many students never push themselves like that. You did. That tells me everything about your work ethic. ◇

★ **Here's a friendly reminder:** a test does not measure your worth. It measures one slice of your skills on one day. You are much more than a score. The work you put in to grow—that is the real win. ★

Things I Want You to Remember

- **You are capable.** Every test you finished proves it.
- **You are resilient.** You worked through hard problems.
- **You are growing.** Every mistake taught you something new.
- **You are ready.** The skills are inside you.

One last thing: when you sit down on test day, take a deep breath, smile a tiny smile, and remember that someone (me!) believes in you. You've got this.

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 Friend (Always in Your Corner)

PRACTICE MORE. ACHIEVE MORE.

Give your child the edge they need to excel in **Grade 5 Math!** This book includes **9 full-length** practice tests designed to build confidence, sharpen skills, and improve test performance.

9

**FULL-LENGTH
PRACTICE
TESTS**

- ✓ Realistic.
- ✓ Rigorous.
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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
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