

4

COMPLETE

Kansas KAP

Grade

MATH

5

PRACTICE TESTS

Standards-Based Test Prep with
Mixed Review, Word Problems,
and **Full Answer Key**



- ✓ **4 COMPLETE PRACTICE TESTS**
Built to reflect the test format and rigor



- ✓ **COVERS ALL ESSENTIAL TOPICS**
Numbers & Operations, Fractions, Decimals, Geometry, Measurement, Data & Probability, and more



- ✓ **STRENGTHEN SKILLS & CONFIDENCE**
Mixed review, challenging questions, and strategic practice



- ✓ **FULL ANSWER KEY INCLUDED**
Detailed explanations for every question



BUILD STRONG
MATH SKILLS
& TEST READINESS



IMPROVE ACCURACY,
SPEED, AND
PROBLEM SOLVING



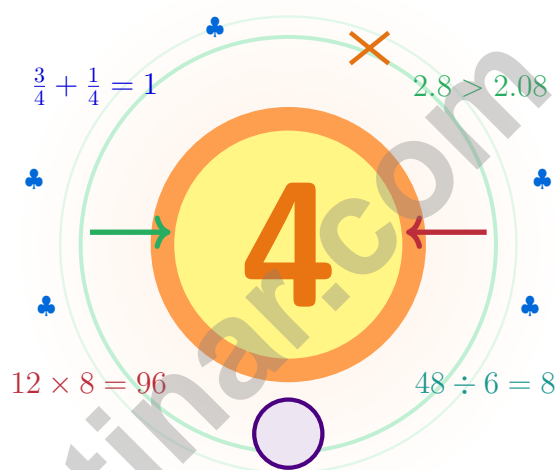
PERFECT FOR
CLASSROOM,
HOME, OR
SELF-STUDY



ALIGNED TO
KANSAS
STATE STANDARDS
(KAP)

4 Kansas KAP Grade 5 Math Practice Tests

Four full practice tests and the habits that carry you to the real one



Four full tests, a smart quick review, mission-style strategy pages,
and student-tested support that help Grade 5 mathematicians from
The Sunflower State build calm, careful, confident habits.

Jay Daie and Reza Nazari



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Kansas Grade 5: Mission Briefing

A four-test journey for Kansas Grade 5 thinkers

Just for Kansas Grade 5 Mission Specialists

This book gives you four chances to read closely, solve carefully, and level up your math thinking. Strong math thinking opens like a sunflower – slow at sunrise, steady all day, and turning to follow the light.

You do not need to feel perfect before you begin. You just need to stay curious, use strategies, and learn from every correction. That is how confident mathematicians are built.

Look

Look at the problem like a careful detective.

Test

Test your idea one careful step at a time.

Repair

Repair what was off and try the next one.

A strong mission habit for Kansas: keep your work neat, estimate when it helps, label units carefully, and never let one hard question decide your mood for the whole page.

Your Step-by-Step Plan

A four-step routine that turns practice into real improvement

Step 1: Read

Read the quick review pages first.
Wake up the big Grade 5 ideas before the test starts so your brain is already warmed up.

Step 2: Try

Try one full test with full attention.
Find a calm corner, settle in, and aim for careful, honest choices before quick ones.

Step 3: Reflect

Reflect on which skills want more sunlight.
Circle missed questions, sort out what went sideways, and notice which skills are calling for attention.

Step 4: Lift

Lift those skills before the next test.
Read the explanation, fix the work, and carry that lesson into the very next test.

A Four-Week Kansas Mission Map

Week	Mission Focus
Week 1	Take Test 1 and watch your math sunflower turn toward the next clear step.
Week 2	Take Test 2 and grow word-problem habits and step-showing.
Week 3	Take Test 3 to polish fractions, decimals, and unit conversions.
Week 4	Take Test 4 with calm, confident, careful work.



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Meet the Four Tests

What these four practice tests help Grade 5 students build

These three practice tests prepare Grade 5 students in Kansas for the Kansas KAP with the open focus of a wide prairie morning. The goal is bigger than collecting right answers. Students are practicing how to read carefully, choose a strategy, solve step by step, and explain their reasoning clearly – the same way mathematicians do every day.

Selected-Response Questions

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

Constructed-Response Questions

Students show steps, explain a method, or support an answer with clear math. Strong reasoning matters because it shows how the answer was found.

Grade 5 Ideas That Show Up Again and Again

- place value, comparing numbers, and rounding
- multi-digit addition, subtraction, multiplication, and division
- fractions, mixed numbers, and decimals
- perimeter, area, volume, and measurement conversions
- tables, line plots, patterns, and coordinate points
- geometry and multi-step real-world problem solving

What strong KAP-style work looks like: accurate math, readable steps, the right labels or units, and a final answer that really matches the question being asked.



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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)

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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



- 5) Pattern A: 0, 5, 10, 15, 20. Pattern B: 0, 1, 2, 3, 4. For the nonzero matching terms, each A value is how many times the corresponding B value?

Record your answer in the space provided.

- 6) Which student correctly applied the distributive property?

Student X: $1\frac{1}{2} \times 2 = (1 + \frac{1}{2}) \times 2 = 1 \times 2 + \frac{1}{2} \times 2 = 2 + 1 = 3$

Student Y: $1\frac{1}{2} \times 2 = 1 \times 2 + 1 \times 2 = 2 + 2 = 4$

- A. Student X
- B. Student Y
- C. Both students
- D. Neither student
- 7) A rectangular garden bed has dimensions 4 feet long, 3 feet wide, and 2 feet deep. What volume of soil can it hold?
- A. 12 cubic feet
- B. 18 cubic feet
- C. 24 cubic feet
- D. 36 cubic feet
- 8) Nora starts at (1, 2). She adds 2 to the x -coordinate and 3 to the y -coordinate to get her next point. If she continues this pattern, what will be her fourth point?
- A. (8, 14)
- B. (6, 10)
- C. (7, 11)
- D. (5, 8)
- 9) Pattern: 2, 4, 8, 16, 32, ... What is the 8th term?
- A. 64
- B. 128
- C. 256
- D. 512



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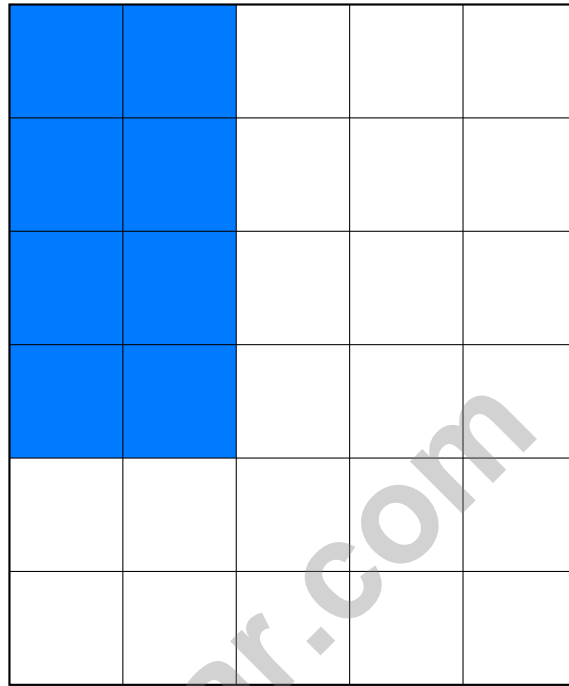
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1) Grid model for $\frac{2}{5} \times \frac{4}{6}$. Which statement correctly gives the total and shaded cells?



$$\frac{2}{5} \times \frac{4}{6}$$

- | | |
|--|--|
| <input type="checkbox"/> A. Total cells: 20; Shaded: 4 | <input type="checkbox"/> C. Total cells: 30; Shaded: 8 |
| <input type="checkbox"/> B. Total cells: 30; Shaded: 6 | <input type="checkbox"/> D. Total cells: 20; Shaded: 8 |

2) A prism has $L = 15$ ft, $W = 4$ ft, $H = 6$ ft. Find its volume.

Record your answer in the space provided.



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1) Which calculation is FALSE?

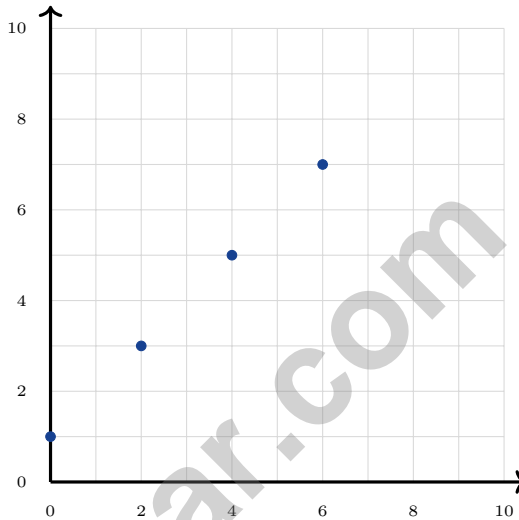
A. $0.95 \div 10 = 0.095$

C. $8.4 \div 10 = 8.4$

B. $37 \div 1000 = 0.037$

D. $6.1 \div 100 = 0.061$

2) Which ordered pair is NOT in the pattern defined by the graph?



A. (8, 9)

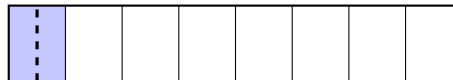
C. (4, 5)

B. (2, 3)

D. (5, 7)

3) The model shows $\frac{1}{8}$ of a whole split into 2 equal parts. What fraction of the whole is each small part?

$\frac{1}{8}$ split into 2



1 whole split into 8 equal parts

A. $\frac{1}{8}$

C. $\frac{1}{2}$

B. $\frac{1}{16}$

D. $\frac{1}{10}$



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 D is correct.** **(5.NF.7c)** Sharing $\frac{1}{4}$ cup into 2 equal parts means $\frac{1}{4} \div 2 = \frac{1}{8}$ cup for each mini loaf.
- 2) **Choice C is correct.** **(5.MD.5)** First find the amount still needed: $156.00 - 18.50 = 137.50$. Then divide by the weekly savings: $137.50 \div 12.50 = 11$ weeks.
- 3) **Choice A is correct.** **(5.G.2)** P terms: 0, 3, 6, 9. Q terms: 0, 6, 12, 18.
- 4) **Choice D is correct.** **(5.OA.2)** Because 3 books are removed from each shelf, each shelf now has $15 - 3 = 12$ books. With 8 shelves, the new total is $8 \times 12 = 96$.
- 5) **The correct answer is 5.** **(5.G.2)** $5 = 5 \times 1$, $10 = 5 \times 2$, etc. Each A term is 5 times its B term.
- 6) **Choice A is correct.** **(5.NF.5b)** Student X correctly broke $1\frac{1}{2}$ into $1 + \frac{1}{2}$ and distributed: $(1 + \frac{1}{2}) \times 2 = 2 + 1 = 3$. Student Y duplicated the whole number.
- 7) **Choice C is correct.** **(5.MD.5a)** The base is $4 \times 3 = 12$ square feet. With a depth of 2 feet, the volume is $12 \times 2 = 24$ cubic feet.
- 8) **Choice C is correct.** **(5.G.2)** Following the pattern: point 1 is (1, 2), point 2 is (3, 5), point 3 is (5, 8), point 4 is (7, 11).
- 9) **Choice C is correct.** **(5.G.1)** Starting with 2, double each term: 2, 4, 8, 16, 32, 64, 128, 256. The 8th term is 256.
- 10) **Choice B is correct.** **(5.NBT.2)** Multiplying by 1000 moves the decimal point 3 places to the right: $0.45 \times 1000 = 450$.
- 11) **Choice D is correct.** **(5.NBT.2)** A: 400 (whole number); B: 70 (whole number); C: 80 (whole number); D: 3.2 (non-whole-number decimal).
- 12) **The correct answer is 9.** **(5.OA.1)** Start with the grouped subtraction: $20 - 5 = 15$. Then divide: $15 \div 3 = 5$. Finally add: $5 + 4 = 9$.
- 13) **Choice C is correct.** **(5.NF.2)** $\frac{2}{3}$ and $\frac{3}{4}$ have LCD 12, not 20. The first two matches are correct.
- 14) **Choice D is correct.** **(5.NBT.2)** Dividing by 1,000 moves the decimal three places left, so 8.1 becomes 0.0081.
- 15) **Choice C is correct.** **(5.MD.2)** Greatest value is 6, least is 1. Range = $6 - 1 = 5$.
- 16) **The correct answer is 12.** **(5.NF.6)** Find $\frac{2}{5}$ of 30 by multiplying. One fifth of 30 is 6, and two fifths is $2 \times 6 = 12$.
- 17) **The correct answer is <.** **(5.NBT.3b)** 1.408 has 4 tenths and 0 hundredths. 1.48 has 4 tenths and 8 hundredths. So $1.408 < 1.48$.
- 18) **Choice D is correct.** **(5.G.3)** Every rectangle has 4 right angles (90° each). Not all rectangles have equal sides (only squares do).
- 19) **Choice C is correct.** **(5.MD.5)** The base area is $9 \times 9 = 81$ square feet. Since $324 \div 81 = 4$, the height is 4 ft.
- 20) **Choices A, B are correct.** **(5.MD.3b)** Volume uses cubic units because it measures three-dimensional space. Square centimeters measure area, and inches measure length, so C and D are not volume units.
- 21) **Choice B is correct.** **(5.G.2)** Moving 5 units to the right adds 5 to the x -coordinate: $3 + 5 = 8$. The y -coordinate stays the same, so the new coordinates are (8, 3).
- 22) **Choice D is correct.** **(5.NBT.7)** Add: $\$2.35 + \$1.64 = \$3.99$ (hundredths: $5 + 4 = 9$; tenths: $3 + 6 = 9$; dollars: $2 + 1 = 3$).
- 23) **Choice A is correct.** **(5.MD.1)** 3 yards = $3 \times 3 = 9$ feet. Add 2 feet: $9 + 2 = 11$ feet.
- 24) **Choice B is correct.** **(5.NF.2)** True values: $7\frac{3}{11} + 2\frac{9}{10} \approx 7.27 + 2.90 = 10.17$. Estimate is 10. Difference: $0.17 < 0.5$. Close enough.
- 25) **Choice A is correct.** **(5.MD.2)** Add the fractional measurements shown: $3(\frac{1}{2}) + 2(1) + 3(1\frac{1}{2}) + 2 + 2\frac{1}{2} = 12\frac{1}{2}$ hours.
- 26) **Choice B is correct.** **(5.NBT.2)** The diagram shows $73.5 \div 10 = 7.35$ grams. Dividing by 10 moves decimal 1 place left.
- 27) **Choice A is correct.** **(5.NBT.7)** $8.75 - 2.36 = 6.39$ inches. Requires borrowing from tenths.
- 28) **The correct answer is 700.** **(5.NBT.2)** $10^2 = 100$, so $7 \times 10^2 = 7 \times 100 = 700$.
- 29) **Choice A is correct.** **(5.NF.4b)** The overlap region has 2 shaded squares out of 20 total squares, giving $\frac{1}{4} \times \frac{2}{5} = \frac{2}{20} = \frac{1}{10}$.
- 30) **Choice B is correct.** **(5.NF.4)** $\frac{2}{3} \times 6 = \frac{12}{3} = 4$.



Champion in Training!

◇ What a season! You've completed 4 full practice tests, and that's the kind of training that builds real champions. Every test was a workout, and your math muscles are stronger today than they were before. Your stamina, focus, and accuracy have all leveled up. ◇

★ **Here's what every great coach knows:** the team that practices the most plays the best. You've put in the practice. You know the plays. You've handled the drills. Now it's almost game day, and you are ready. ★

Your Training Camp Stats

- **Math Stamina:** HIGH! You can stay focused for a full test.
- **Strategy Playbook:** LOADED! You have multiple ways to attack a problem.
- **Mistake Recovery:** STRONG! You can pick yourself up and keep going.
- **Game Day Mindset:** READY! You know how to stay calm under pressure.

Pre-game tip: the night before test day, get a great sleep. Eat a good breakfast. Bring a sharp pencil and a positive attitude. And remember—you have already trained for this. Trust your training.

If you want to share a proud moment or ask a question, please email me at jay@testinar.com. I'd love to hear from you!

Jay Daie

Your Math Coaches (Game On!)

4 COMPLETE TESTS. CONFIDENCE. SUCCESS.



Give your child the practice and confidence they need to excel in **Grade 5 Math**. This book includes **4 full-length** practice tests designed to build skills, improve test readiness, and help students reach their full potential.

WHAT'S INSIDE:



4 COMPLETE PRACTICE TESTS

Full-length tests that reflect real test format and rigor.



COVERS ALL GRADE 5 TOPICS

Numbers & Operations, Fractions, Decimals, Geometry, Measurement, Data & Probability, and more.



MIXED REVIEW & WORD PROBLEMS

Build problem-solving skills with mixed review questions and real-world word problems.



DETAILED ANSWER KEY

Step-by-step explanations for every question to help students learn and improve.



BUILD CONFIDENCE & IMPROVE SCORES

Practice consistently, reduce test anxiety, and achieve your best score!



PRACTICE SMART. LEARN MORE. ACHIEVE YOUR BEST.



Strengthen
Math Skills



Improve
Accuracy
& Speed



Master
Essential
Concepts



Boost
Confidence
on Test Day



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