

8

Kansas KAP

GRADE 6

MATH

PRACTICE TESTS

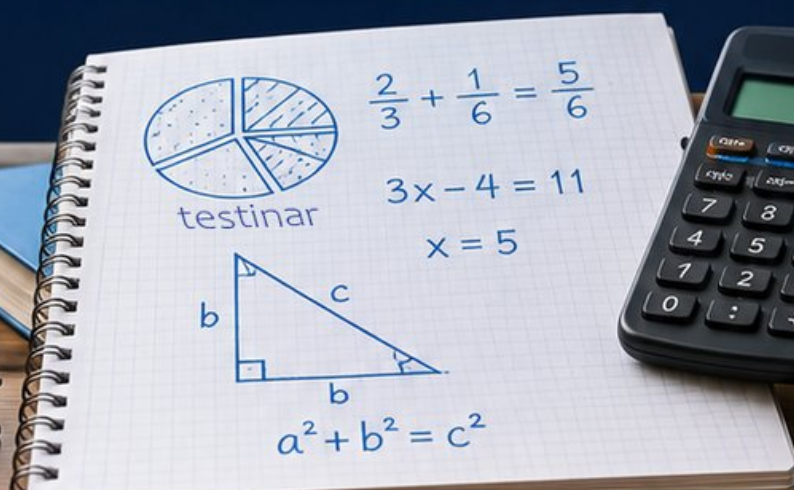
8
PRINTED
TESTS

+

2
ONLINE
TESTS

Use these two additional online practice tests for extra review after the printed tests in this book.

Standards-Aligned *Steady Southern* Problem Solving for Comprehensive Assessment Program



BUILT FOR
ACAP SUCCESS



REALISTIC TESTS
& QUESTION TYPES



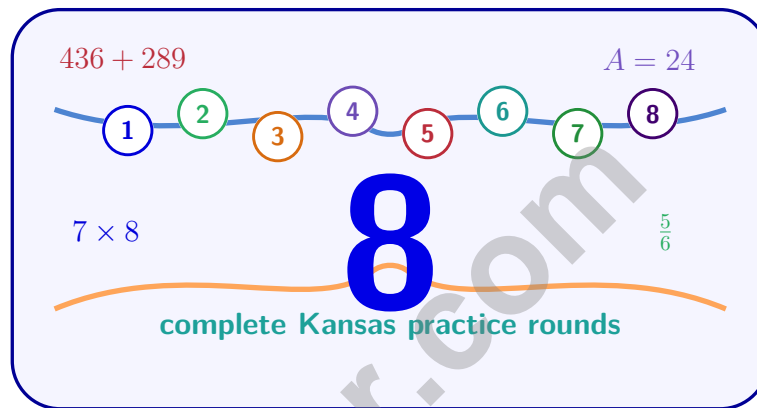
STRENGTHEN
MATH SKILLS



REVIEW, PRACTICE,
AND IMPROVE

8 Kansas KAP Grade 6 Math Practice Tests

Standards-Aligned Wide-Open Review Focus for Kansas Assessment Program



Eight complete 40-question Grade 6 practice rounds for KAP, built for wide-open review focus with ratios, rational numbers, expressions, equations, geometry, statistics, answer keys, and clear explanations for every item.

Jay Daie and Reza Nazari



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Welcome, Kansas Math Explorer!

Eight focused rounds using wide-open review focus

This book gives you eight full Grade 6 practice tests for KAP. Each round uses open horizons, wind-swept routes, and direct math thinking as a fresh mental backdrop while you read closely, choose a smart strategy, show your work, and check whether your answer makes sense.

Your Kansas Practice Promise

Keep the path straight: identify the question, write the model, and test the answer.

Read

Plan

Check

How to Use This Book

A eight-session routine for wide-open review focus

1. **Preview the skills.** Scan the quick review pages before beginning the first round.
2. **Work in order.** Take one 40-question test at a time in a quiet place.
3. **Mark confidence.** Put a small star beside problems where your plan felt strong.
4. **Correct actively.** Retry missed items before reading the full explanation.
5. **Plan the next round.** Use the growth log to choose one habit and one skill to practice.

Kansas review rhythm: Practice one round, review with a clear checklist, then return ready for the next test.



What Is Inside?

Eight KAP tests, 320 questions, and a full review path

Part	What You Will Practice
Tests 1–3	Foundation rounds for ratios, rational numbers, operations, and careful reading.
Tests 4–6	Skill-building rounds with expressions, equations, geometry, data, and problem models.
Tests 7–8	Final stamina rounds for mixed review, neat work, and flexible strategy choices.
Answer Pages	Compact keys and explanations that show why each answer works.

The tests are mixed on purpose. Wide-open review focus means recognizing the skill even when the next question changes topic, changes format, or asks for an explanation.



Scan me!
For more practice
& answers

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- 1) A train travels at a miles per hour for 5 hours. Which expression shows the total distance traveled in miles?
- A. $a + 5$ C. $a - 5$
 B. $5a$ D. $\frac{a}{5}$
- 2) A gym membership requires members to be between a certain age range. The inequality $x \geq 13$ represents the minimum age. On a number line, how should the circle at 13 appear?
- A. Open circle, because the symbol is \geq C. Open circle, because we want people older than 13
 B. The symbol \geq does not use a circle on number lines D. Closed circle, because the symbol is \geq
- 3) Find the base of a triangle with area 45 m^2 and height 10 m.
- A. 4.5 m C. 18 m
 B. 90 m D. 9 m
- 4) A lottery picks one number from 1 to 100. What is the probability of picking a number that is a multiple of 10?
- A. $\frac{1}{100}$ C. $\frac{1}{5}$
 B. $\frac{1}{10}$ D. $\frac{1}{2}$



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5) A household has fixed expenses (rent, utilities) totaling \$1200 per month and variable expenses (groceries, gas) averaging \$500 per month. If monthly income is \$2000, how much is left for savings and discretionary spending?

A. \$300

C. \$500

B. \$400

D. \$700

6) The temperature is no more than 32°F . What is the greatest allowed temperature?

7) Compute: $\frac{8}{9} \div \frac{4}{5}$

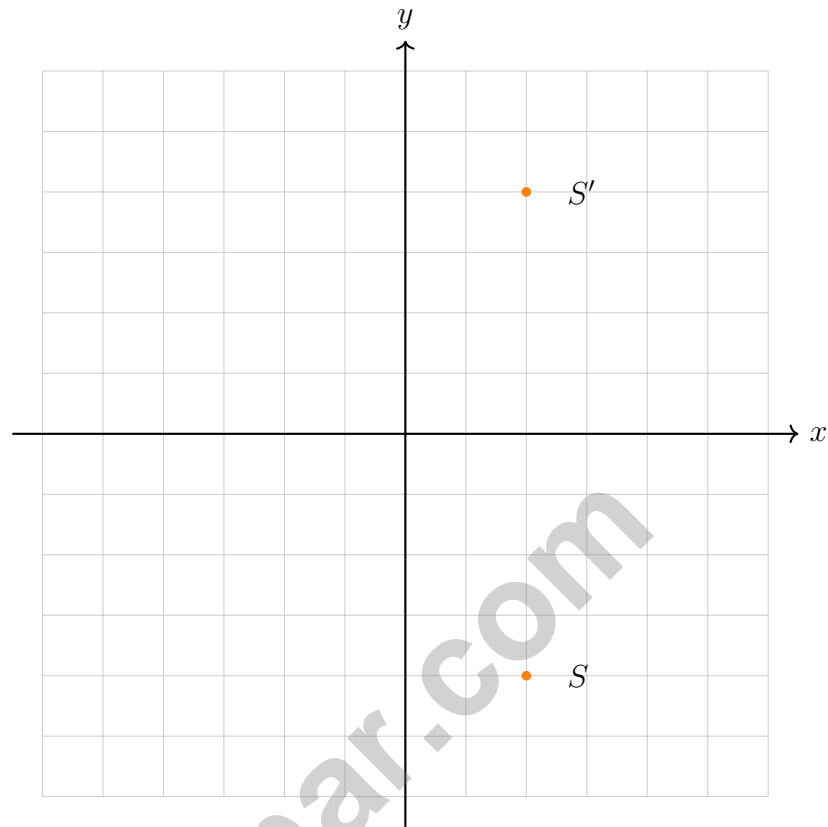
A. $\frac{32}{45}$

C. $\frac{36}{40}$

B. $\frac{10}{9}$

D. $\frac{9}{8}$





8)

Point S is reflected to create point S' . What is the relationship between the x -coordinates of S and S' ?

 A. They are opposites B. One is zero C. They are swapped D. They are equal

9) Which of the following equals 32?

 A. 2^5 B. 2^4 C. 4^2 D. 8^2 

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1) Divide $8,456 \div 56$ and determine the remainder.

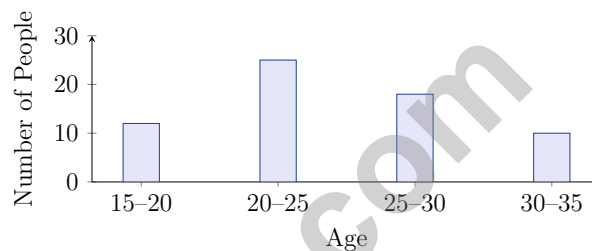
A. 151 R 0

C. 151 R 0

B. 150 R 56

D. 152 R 24

2) A histogram displays the ages of people at a concert. The bars show frequencies: Ages 15–20: 12; Ages 20–25: 25; Ages 25–30: 18; Ages 30–35: 10. What is the total number of people at the concert?



A. 55 people

C. 65 people

B. 60 people

D. 70 people

3) A triangle has a base of 18 feet. If its area is 63 ft^2 , what is the height?

A. 3.5 ft

C. 10.5 ft

B. 14 ft

D. 7 ft

4) A science class recorded temperatures: 18, 20, 22, 24, 26, 28. What is the median?

A. 22

C. 24

B. 23

D. 25

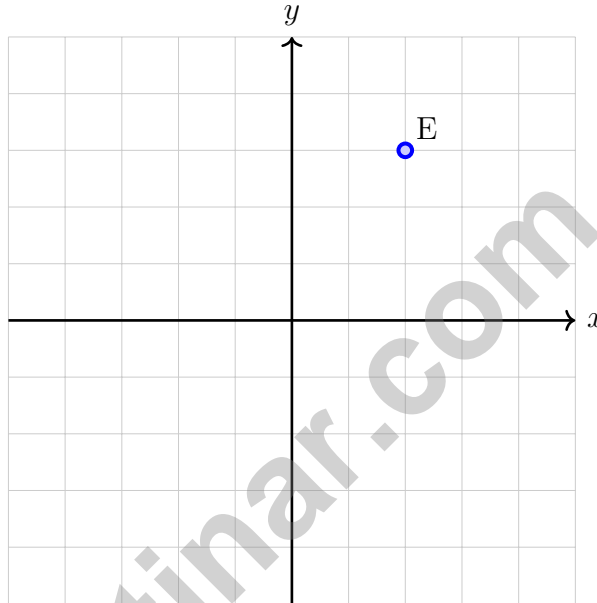


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5) A bag contains 3 red marbles, 5 blue marbles, and 2 green marbles. If one marble is drawn at random, what is the probability that it is blue?

- A. $\frac{1}{10}$
- B. $\frac{1}{5}$

- C. $\frac{1}{2}$
- D. $\frac{5}{8}$



6)

Point E is located at $(2, 3)$. If it is translated 3 units to the right and 2 units down, what are the coordinates of its image E' ?

1) What is the value of $10 - 2^2 \times 2 + 3$?

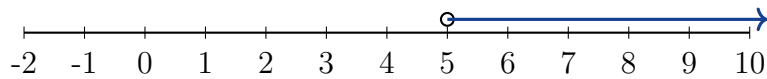
A. 5

C. 11

B. 7

D. 15

2) Examine this number line. Which inequality does it represent?



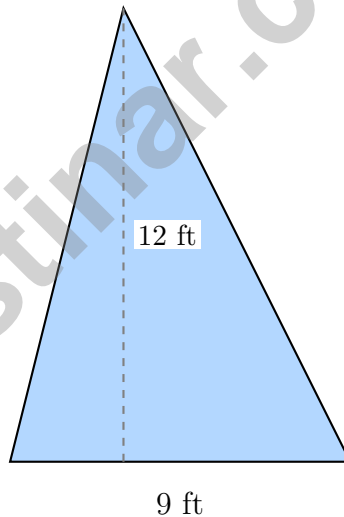
A. $x \leq 5$

C. $x > 5$

B. $x < 5$

D. $x \geq 5$

3) A triangular sail has a base of 9 feet and a height of 12 feet. What is its area?



A. 21 ft^2

C. 108 ft^2

B. 54 ft^2

D. 216 ft^2



- 4) A point is on the y -axis between Quadrants I and II. Which of the following could be its coordinates?
- A. $(0, -3)$ C. $(4, 0)$
 B. $(0, 4)$ D. $(-4, 0)$
- 5) Which expression matches “the product of 2 and the difference of a number r and 5”?
- A. $2r - 5$ C. $2 - r - 5$
 B. $(2 - r)(5)$ D. $2(r - 5)$
- 6) Simplify $9c - 4c + c$.
- A. $5c$ C. $8c$
 B. $14c$ D. $6c$
- 7) A discount applies when you spend less than \$50. If d represents the amount you spend, which inequality is correct?
- A. $d < 50$ C. $d > 50$
 B. $d \leq 50$ D. $d \geq 50$
- 8) In the relationship between hours worked and earnings, which is always the independent variable?
- A. Earnings C. The hourly rate
 B. Hours worked D. The day of the week
- 9) A chocolate box has length 5 in, width 3 in, and height $\frac{1}{2}$ in. What is its volume?
- A. 4.5 in^3 C. 15 in^3
 B. 7.5 in^3 D. 30 in^3



Scan me!
For more practice
& answers

Kansas KAP Practice Test Answer Keys

How to use this Kansas KAP answer section with a Grade 6 student:

1. check the answer first, then write one quick reason the choice is correct
2. mark questions to try again, especially the skills that feel connected to wide-open review focus
3. rework the problem before reading the full explanation, using this reminder:
Keep the path straight: identify the question, write the model, and test the answer.

A calm Kansas correction routine turns every missed item into useful practice. Practice one round, review with a clear checklist, then return ready for the next test.



Kansas Practice Test Answers and Explanations

Review the eight printed KAP tests with direct, steady, and ready for another horizon habits.

Practice Test 1 Answers and Explanations

- 1) **Choice B is correct.** **(6.EE.5)** Distance = speed \times time = $a \times 5 = 5a$ miles.
- 2) **Choice D is correct.** **(6.EE.7)** The symbol \geq includes the boundary value (people age 13 can join), so a closed circle indicates 13 is part of the solution.
- 3) **Choice D is correct.** **(6.G.1)** Solving $45 = \frac{1}{2} \times b \times 10 \Rightarrow b = 9$ m.
- 4) **Choice B is correct.** **(6.NS.3)** Multiples of 10 from 1 to 100: 10, 20, 30, ..., 100 (10 numbers). Probability = $\frac{10}{100} = \frac{1}{10}$.
- 5) **Choice A is correct.** **(6.EE.8c)** Total expenses: $\$1200 + \$500 = \$1700$. Remaining: $\$2000 - \$1700 = \$300$.
- 6) **The correct answer is 32.** **(6.EE.7)** No more than 32 means 32 is the maximum allowed value.
- 7) **Choice B is correct.** **(6.NS.1)** $\frac{8}{9} \times \frac{5}{4} = \frac{40}{36} = \frac{10}{9}$.
- 8) **Choice D is correct.** **(6.NS.8)** Point S is at $(2, -4)$ and S' is at $(2, 4)$. Both have $x = 2$. Reflection across the x -axis keeps the x -coordinate the same.
- 9) **Choice A is correct.** **(6.EE.1)** $2^5 = 2 \times 2 \times 2 \times 2 \times 2 = 32$. Option B: $2^4 = 16$. Option C: $4^2 = 16$. Option D: $8^2 = 64$.
- 10) **Choice D is correct.** **(6.EE.3)** "The product of 5 and 3" is $5 \cdot 3 = 15$. " p increased by" that product is $p + 5 \cdot 3$.
- 11) **Choice A is correct.** **(6.EE.2b)** The coefficient is the number (including fractions) multiplied by the variable. Here it is $\frac{3}{4}$.
- 12) **Choice B is correct.** **(6.EE.8)** Each row shows cost = $15 \times$ number of tickets. For example, 1 ticket costs \$15; 5 tickets cost $\$75 = 15 \times 5$.
- 13) **Choice C is correct.** **(6.G.2)** $V = 3.5 \times 2.5 \times 3 = 8.75 \times 3 = 26.25$ in³.
- 14) **Choice D is correct.** **(6.RP.3c)** Area = $\pi r^2 \approx 3.14 \times 15^2 = 3.14 \times 225 = 706.5$ ft².
- 15) **Choice A is correct.** **(6.SP.1)** While it is true that different students might like different colors, a statistical question must be worded to ask about variability across a group. The original question asks about ONE student's preference (one fixed answer). To be statistical, it should ask about the group's favorite color.
- 16) **Choice D is correct.** **(6.SP.2)** IQR = $Q3 - Q1$ measures the spread of the middle 50% of data. A large IQR means those middle values are far apart.
- 17) **Choice A is correct.** **(6.SP.3)** Range = $\max - \min = 14 - 2 = 12$. IQR = $Q3 - Q1 = 10 - 4.5 = 5.5$.
- 18) **The correct answer is 35% of \$40 = $0.35 \times 40 = \$14$ (discount); Sale price is $\$40 - \$14 = \$26$. Choices A and B are correct..** **(6.RP.3b)** Discount: 35% of \$40 = $0.35 \times 40 = \$14$, so choice A is correct. Sale price: $\$40 - \$14 = \$26$, so choice B is correct. Choice C (\$28) and choice D (\$25) are incorrect discount/price combinations. Choice E (\$35) confuses the percent with the original price and is incorrect.
- 19) **Choice C is correct.** **(6.SP.4)** Stem 12 (representing 12.1 to 12.9) has 5 leaves: 1, 3, 5, 7, 9, giving 5 runners.
- 20) **Choice D is correct.** **(6.RP.3)** A double-bar graph places two bars side-by-side for each category, making direct comparison easy. Single bars, histograms, and stem-and-leaf plots don't show side-by-side comparison.
- 21) **Choice D is correct.** **(6.RP.1)** The 6 chicken parts represent 18 chickens, so one part is $18 \div 6 = 3$. Ducks are 4 parts, and $4 \times 3 = 12$ ducks.
- 22) **Choice A is correct.** **(6.RP.2)** The student used the yellow count as the total. There are 3 blue and 5 yellow dots, so the total is $3 + 5 = 8$ and the part-to-whole ratio is 3 : 8.
- 23) **Choice D is correct.** **(6.RP.3c)** Divide area by time: $48 \div 2 = 24$ square feet per hour.
- 24) **The correct answer is 36.** **(6.G.3)** Length = $8 - 2 = 6$ units; width = $9 - 3 = 6$ units. Area = $6 \times 6 = 36$ square units.
- 25) **Choice B is correct.** **(6.RP.3b)** Line A: $240 \div 4 = 60$ pages/min. Line B: $300 \div 6 = 50$ pages/min. Line A is faster at 60 pages per minute.
- 26) **Choice D is correct.** **(6.RP.3)** Batting average is $\frac{3}{10}$. Expected hits for 40 at-bats: $\frac{3}{10} \times 40 = 12$ hits.



Scan me!
For more practice
& answers

Lab Notes for a Young Scientist

Hi, Curious Scientist!

◇ 8 tests. So many experiments! You tested ideas. You watched what worked. You learned a lot. That's how scientists work—and how you work! ◇

★ **Scientists know:** mistakes are facts, not failures. Every problem you missed taught you something. You used those facts to do better next time. ★

Lab Results

- **Hypothesis:** CONFIRMED! Practice makes you better.
- **Method:** STRONG! You try, watch, and adjust.
- **Data:** CAREFUL! You read and copy numbers right.
- **Conclusion:** READY! You can do this test.

Scientist tip: on test day, stay curious. Ask, "What is this asking?" Then experiment with your math tools. You will find the answer!

If you want to share something or ask a question, please email me at jay@testinar.com.

Jay Daie

Your Math Scientist

MASTER MATH. ACE YOUR TESTS.

This Grade 6 Math Practice Tests book is designed to help students build confidence, strengthen math skills, and excel on comprehensive assessments.

With 8 full-length printed tests and 2 online tests, this resource provides realistic practice, a variety of question types, and detailed answer explanations to help students achieve their best.

Perfect for classroom use, homework, test preparation, and extra practice at home.



PERFECT FOR

- ✓ Classroom Practice
- ✓ Homework & Review
- ✓ Independent Learning
- ✓ Test Preparation
- ✓ Skill Reinforcement
- ✓ Building Confidence



**PRACTICE TODAY.
SUCCEED TOMORROW.**

WHAT STUDENTS WILL GAIN



Stronger Math Skills

Build a solid foundation through targeted practice and review.



Better Problem Solving

Develop logical thinking and effective solution strategies.



Understand Key Concepts

Reinforce important math ideas aligned with standards.



Test Confidence

Get familiar with test formats and improve accuracy.



Achieve Success

Build confidence and perform your best on test day.

TOPICS COVERED

- ✓ Ratios & Rates
- ✓ Percents
- ✓ The Number System
- ✓ Statistics & Probability
- ✓ Expressions & Equations
- ✓ Data Analysis
- ✓ Geometry
- ✓ Measurement & Conversions
- ✓ Fractions & Decimals
- ✓ And More!



2 ONLINE TESTS

Extra online practice to reinforce learning and build confidence.

MORE PRACTICE. GREATER RESULTS.

Give your child the tools needed to develop strong math skills, confidence, and a positive attitude toward learning.



8 FULL-LENGTH
PRACTICE TESTS



2 ONLINE
PRACTICE TESTS



DETAILED ANSWER
EXPLANATIONS