

# 9

# Kansas KAP

GRADE

# 6

MATH

## PRACTICE TESTS

Standards-Aligned Review  
Mixed Practice & Answer Key



### 9 PRINTED TESTS

Realistic practice to build confidence and mastery



### DETAILED ANSWER EXPLANATIONS

Learn with step-by-step solutions



### FOCUSED & EFFECTIVE

Target key math skills with purposeful practice



### BUILD CONFIDENCE

Strengthen problem solving and test-taking skills



**9 PRINTED TESTS**  
**+2 ONLINE TESTS**

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

**PRACTICE TODAY.**  
**SUCCEED TOMORROW.**



PRACTICE



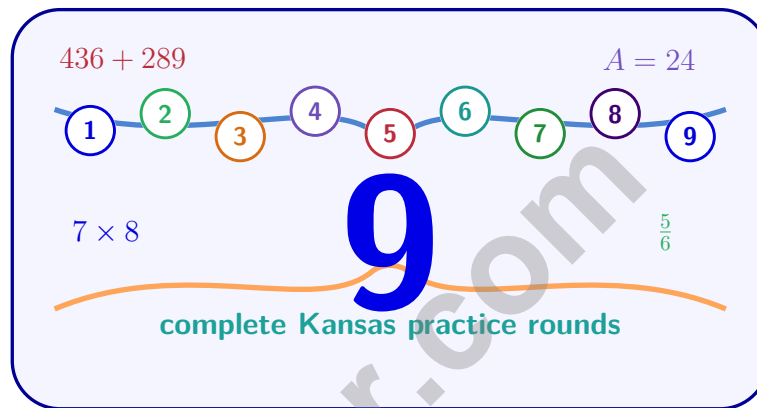
REVIEW



SUCCEED

# 9 Kansas KAP Grade 6 Math Practice Tests

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



Nine 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!

Nine focused rounds using wide-open review focus

This book gives you nine 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 nine-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?

Nine KAP tests, 360 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 7–9	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 baker makes cookies. For every batch, she uses 3 cups of flour. After making  $b$  batches, she has used  $f$  cups of flour. Which equation shows this relationship?

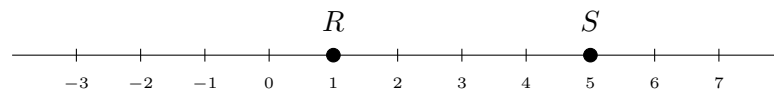
A.  $b = 3f$

C.  $b + f = 3$

B.  $b = f + 3$

D.  $f = 3b$

2)



If  $R = 1$  and  $S = 5$ , which statement is true?

A.  $R > S$

C.  $R < S$

B.  $S - R = 3$

D.  $R + S = 5$

3) A student has a scale of  $1 \text{ cm} = 6 \text{ m}$  for a model. The actual object is 24 m long. The student calculates the drawing length as  $24 \times 6 = 144 \text{ cm}$ . What is the student's error?

 A. The answer is correct. C. The student only changed the unit label to meters. B. The student multiplied instead of dividing; the correct answer is 4 cm. D. The student used the wrong scale entirely.

4) What is the quotient of  $6,435 \div 33$ ?

A. 195

C. 199

B. 197

D. 205



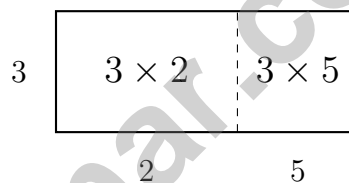
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& answers

5) Find the GCF of 38 and 57 using prime factorization.

- A. 1                       C. 38  
 B. 57                      D. 19

6) A company sells 480 products in one month. If 25% of the sales were online, how many products were sold online?

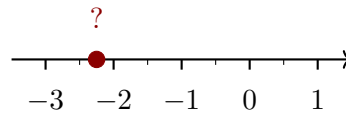
7) The area model below shows a rectangle divided into two parts. Which expression does it represent?



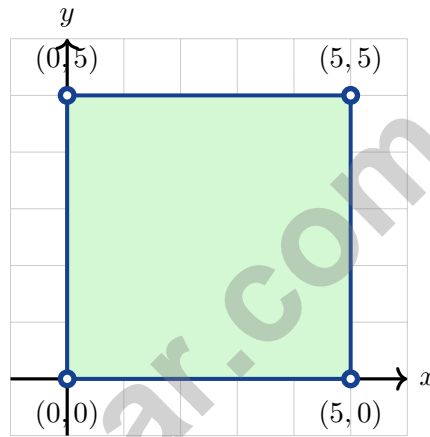
- A.  $3(2 + 5)$                        C.  $5(3 + 2)$   
 B.  $2(3 + 5)$                        D.  $(3 + 2)(3 + 5)$
- 8) What is  $|-5| + |-3| - |2|$ ?
- A. -6                                   C. 6  
 B. 0                                     D. 10



9) Which number line correctly shows the position of  $-2.25$ ?



- A. Halfway between  $-3$  and  $-2$        C. At  $-2$   
 B. Halfway between  $-2.5$  and  $-2$        D. Halfway between  $-2$  and  $-1$



10)

A square has vertices at  $(0,0)$ ,  $(5,0)$ ,  $(5,5)$ , and  $(0,5)$ . What is the perimeter?

- A. 15 units       C. 20 units  
 B. 18 units       D. 25 units

11) At sunrise, the temperature is  $-4^{\circ}\text{C}$ . At sunset, the temperature is  $6^{\circ}\text{C}$ . What is the change in temperature?

- A.  $-10^{\circ}\text{C}$        C.  $10^{\circ}\text{C}$   
 B.  $2^{\circ}\text{C}$        D.  $-2^{\circ}\text{C}$



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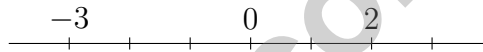
1) A printer produces pages at a constant rate. The graph passes through (4, 240) and the origin. What is the value of pages when minutes = 1?

- A. 40 pages per minute                       C. 60 pages per minute  
 B. 50 pages per minute                       D. 80 pages per minute

2) Which pair are unlike terms?

- A.  $6x$  and  $2x$                                        C.  $4a$  and  $4b$   
 B.  $7y$  and  $-3y$                                        D.  $5n$  and  $n$

3) Which number line correctly shows three points:  $-3$ ,  $0$ , and  $2$ ?



Based on the number line, which statement is true?

- A.  $-3 > 2$      C.  $-3 < 0 < 2$   
 B.  $0 < -3$      D.  $2 < 0$

4) Which ordered pair is in Quadrant I?

- A.  $(-5, 7)$      C.  $(-2, -4)$   
 B.  $(1, -8)$      D.  $(8, 3)$

5) Write an expression for “the quotient of 3 times a number  $n$  and 4”.

- A.  $\frac{3n}{4}$      C.  $\frac{3}{4n}$   
 B.  $3 \cdot \frac{n}{4}$      D.  $\frac{4}{3n}$



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& answers

6) Identify the error: A student wrote  $2(4x + 3) = 8x + 3$ . What mistake did the student make?

- A. Did not distribute 2 to the 3       C. Combined unlike terms  
 B. Incorrectly multiplied  $2 \times 4$        D. Subtracted instead of multiplying

7) Which number has an absolute value of 20?

- A. 20 only       C. Only zero  
 B. -20 only       D. Both 20 and -20

8) On a number line, the midpoint between two numbers is  $-0.5$ . If one number is  $-2$ , what is the other number?

- A.  $-3.5$        C. 1.5  
 B.  $-1$        D. 1

9) Divide 5,940 by 36 and write the quotient.

10) A square has vertices at  $(0, 0)$ ,  $(4, 0)$ ,  $(4, 4)$ , and  $(0, 4)$ . What is the side length of the square?

- A. 3 units       C. 5 units  
 B. 4 units       D. 6 units





4) The median of 7, 11,  $x$ , 15, 18 is 12. What is  $x$ ?

A. 10

C. 12

B. 11

D. 13

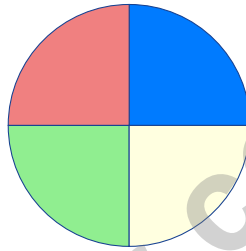
5) A bag contains 6 white socks and 4 black socks. If one sock is drawn randomly, what is the probability of drawing a black sock expressed as a decimal?

A. 0.4

C. 0.25

B. 0.6

D. 0.75



6)

If a circle graph is divided into 4 equal sections, how many degrees is each central angle?

A.  $90^\circ$

C.  $60^\circ$

B.  $72^\circ$

D.  $120^\circ$

7) A student asks: “How tall are the students in my class?”

Identify the population being sampled.

A. The height measurement in inches

C. All students in the school

B. The students in the class who are measured

D. The students in the class



## 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.**



Scan me!  
For more practice  
& answers

## Kansas Practice Test Answers and Explanations

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

### Practice Test 1 Answers and Explanations

- 1) **Choice D is correct.** **(6.EE.8)** Flour used equals 3 cups per batch times the number of batches:  $f = 3b$ .
- 2) **Choice C is correct.** **(6.NS.7c)**  $R = 1$  and  $S = 5$ , so  $1 < 5$ . Note:  $S - R = 4$ , not 3.
- 3) **Choice B is correct.** **(6.RP.3)** To find drawing length from actual length, divide by the scale factor:  $24 \text{ m} \div 6 \text{ m/cm} = 4 \text{ cm}$ . The student confused the direction of the ratio.
- 4) **Choice A is correct.** **(6.NS.2)**  $6,435 \div 33 = 195$ . Check:  $33 \times 195 = 6,435$ .
- 5) **Choice D is correct.** **(6.NS.4)** Prime factorization:  $38 = 2 \times 19$  and  $57 = 3 \times 19$ . The only common prime factor is 19, so GCF is 19.
- 6) **The correct answer is 120.** **(6.RP.3b)**  $25\%$  of  $480 = 0.25 \times 480 = 120$  products were sold online.
- 7) **Choice A is correct.** **(6.NS.4)** The rectangle has height 3 and is divided horizontally into two widths: 2 and 5. The total area is  $3 \times 2 + 3 \times 5 = 3(2 + 5)$ .
- 8) **Choice C is correct.** **(6.NS.7c)**  $|-5| = 5$ ,  $|-3| = 3$ ,  $|2| = 2$ . So  $5 + 3 - 2 = 6$ .
- 9) **Choice B is correct.** **(6.NS.6c)**  $-2.25$  is exactly halfway between  $-2.5$  and  $-2$ , found by:  $\frac{-2.5 + (-2)}{2} = -2.25$ .
- 10) **Choice C is correct.** **(6.NS.8)** Side length: 5 units. Perimeter:  $4 \times 5 = 20$  units.
- 11) **Choice C is correct.** **(6.NS.3)** Change:  $6 - (-4) = 6 + 4 = 10^\circ\text{C}$ .
- 12) **Choice D is correct.** **(6.NS.3)** Starting at  $-50$  and withdrawing (going more negative)  $\$15$ :  $-50 - 15 = -65$ .
- 13) **Choice B is correct.** **(6.EE.8)** Total score is the sum:  $-4 + 2 = -2$  (2 under par).
- 14) **Choice D is correct.** **(6.EE.1)** An exponent shows how many times to multiply the base by itself.  $2^4$  means 2 multiplied 4 times, which is  $2 \times 2 \times 2 \times 2 = 16$ .
- 15) **Choice A is correct.** **(6.EE.7)**  $x \leq -2$  includes  $-2$  itself (closed circle) plus all values less than  $-2$  (arrow points left).
- 16) **Choice C is correct.** **(6.G.1)** Triangle X:  $A = \frac{1}{2} \times 12 \times 5 = 30 \text{ in}^2$ . Triangle Y:  $A = \frac{1}{2} \times 5 \times 12 = 30 \text{ in}^2$ . Both equal  $30 \text{ in}^2$ .
- 17) **Choice B is correct.** **(6.G.1)** Using  $140 = 20 \times h$ , we get  $h = 7 \text{ cm}$ .
- 18) **Choice A is correct.** **(6.NS.8)** Translate right 4 by adding 4 to the  $x$ -coordinate, and translate down 3 by subtracting 3 from the  $y$ -coordinate:  $(-4 + 4, 6 - 3) = (0, 3)$ .
- 19) **Choice A is correct.** **(6.RP.1)** The lower whisker extends from the minimum to  $Q_1$ , representing the bottom 25% of the data.
- 20) **Choice C is correct.** **(6.SP.5)** With 6 values, the median is the average of the 3rd and 4th values:  $(37 + 42)/2 = 39.5$ .
- 21) **The correct answer is Housing and Food are correctly calculated.** **(6.EE.8c)** A: Housing is  $40\% \times 2500 = \$1000$ . Correct. B: Food is  $24\% \times 2500 = \$600$ . Correct. C: Utilities is  $10\% \times 2500 = \$250$ , not  $\$200$ . Incorrect. D: Transportation is  $12\% \times 2500 = \$300$ , not  $\$250$ . Incorrect. E: Savings is  $14\% \times 2500 = \$350$ , not  $\$400$ . Incorrect.
- 22) **The correct answer is 600.** **(6.RP.3)** Step 1: Find the unit rate:  $240 \div 8 = 30$  widgets per hour. Step 2: In 20 hours:  $30 \times 20 = 600$  widgets.
- 23) **Choice D is correct.** **(6.NS.3)** Align decimal points:  $12.70 + 8.45 = 21.15$ . Stack and add, carrying as needed.
- 24) **Choice B is correct.** **(6.NS.5)** Starting at floor 0: up 6 brings us to floor 6. Down 10 from floor 6 brings us to floor  $6 - 10 = -4$  (four floors below ground level).
- 25) **Choice C is correct.** **(6.NS.8)** First reflect across the  $x$ -axis:  $(a, b) \rightarrow (a, -b)$ . Then reflect across the  $y$ -axis:  $(a, -b) \rightarrow (-a, -b)$ .
- 26) **Choice A is correct.** **(6.EE.3)** "Half a number  $j$ " is  $\frac{j}{2}$ . "Twice the same number" is  $2j$ . "The sum" of these is  $\frac{j}{2} + 2j$ .
- 27) **Choice D is correct.** **(6.EE.3)** Distribute:  $6(3x - 1) = 6 \cdot 3x - 6 \cdot 1 = 18x - 6$ .
- 28) **Choice B is correct.** **(6.EE.7)** "Fewer than" means strictly less than:  $i < 20$ .



Scan me!  
For more practice  
& answers

**A Note From Your Math Friend**

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**Hi, Math Star!**

◇ Wow! You finished 9 full practice tests. That is a LOT of math problems. You worked hard, and your brain got stronger every time. ◇

★ **Here is a big idea:** mistakes are okay! Every time you got something wrong, you got smarter. Through 9 tests, you learned that trying is the most important thing. ★

**Look What You Did!**

- **Hard Worker:** You did not give up!
- **Smart Thinker:** You used your math tools.
- **Brave Learner:** You tried hard problems.
- **Test Ready:** You feel proud and prepared.

**Big tip for test day:** take your time. Read each problem twice. Show your work. Check your answer. You can do this!

If you want to share something or ask a question, please email me at [jay@testinar.com](mailto:jay@testinar.com).

**Jay Daie**

Your Math Friend

# PRACTICE MORE. ACHIEVE MORE.

This **Grade 6 Math Practice Tests** book is designed to help students strengthen their math skills, master important concepts, and build the confidence they need to excel on any test.

With 9 full-length printed tests and 2 online tests, students get the review, practice, and realistic test experience they need to improve accuracy, develop problem-solving abilities, and reach their full potential.

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.



### Deeper Understanding

Reinforce key math concepts 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
- ✓ The Number System
- ✓ Expressions & Equations
- ✓ Geometry
- ✓ Fractions & Decimals
- ✓ Percents
- ✓ Statistics & Probability
- ✓ Data Analysis
- ✓ Measurement & Conversions
- ✓ 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.



9 PRINTED  
PRACTICE TESTS



2 ONLINE  
PRACTICE TESTS



DETAILED ANSWER  
EXPLANATIONS