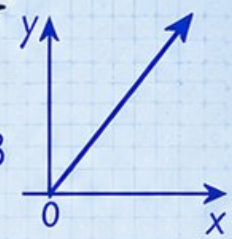
3 Kansas KAP

GRADE 6 MATH

PRACTICE TESTS

Standards Aligned Problem Solving
For Comprehensive Assessment Programs



$y = 2x + 3$

$\frac{3}{5} + \frac{2}{10} = \frac{8}{10} = \frac{4}{5}$

36% of 150 = ?

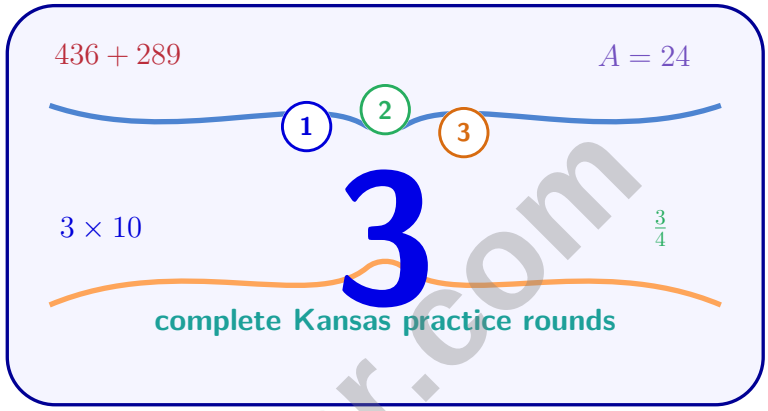
3 PRINTED TESTS

2 ONLINE TESTS

- Build Confidence
- Master Key Math Skills
- Answer Explanations for Every Question
- Test-Taking Strategies That Work

3 Kansas KAP Grade 6 Math Practice Tests

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



Three 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.

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Welcome, Kansas Math Explorer!

Three focused rounds using wide-open review focus

This book gives you three 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.

How to Use This Book

A three-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?

Three KAP tests, 120 questions, and a full review path

Part	What You Will Practice
Tests 1–2	Foundation rounds for ratios, rational numbers, operations, and careful reading.
Test 3	Final stamina round for expressions, equations, geometry, data, problem models, and mixed review.
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.

Table of Contents

1) Evaluate $x^2 - 3x$ when $x = -2$.

☐ A. -10
☐ B. -2
☐ C. 2
☐ D. 10

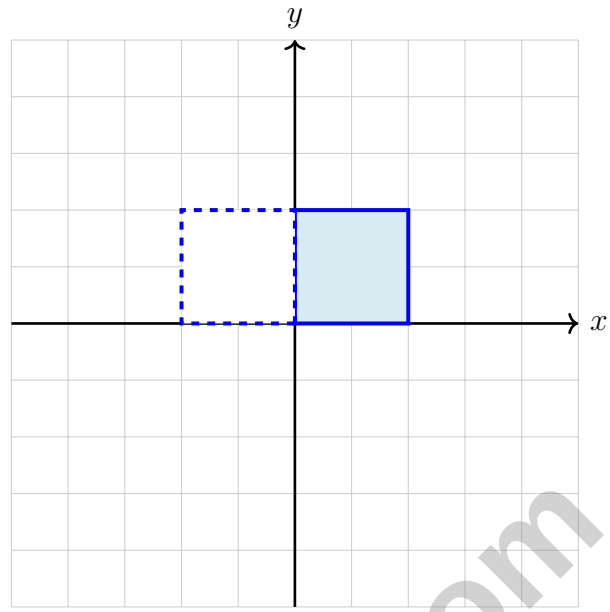
2) Convert $\frac{3}{4}$ to a percent.

☐ A. 34%
☐ B. 0.75%
☐ C. 75%
☐ D. 340%

3) A recipe calls for flour and sugar in a 5 : 2 ratio. If the recipe uses 10 cups of flour, how many cups of sugar are needed?

4) Sophia wants to buy a phone for $800. She currently has $300 in her bank account. Which payment method is most appropriate?

☐ A. Save more money first, then buy with debit card
☐ B. Use a debit card (she has enough)
☐ C. Use a debit card and go into negative balance
☐ D. Use a credit card and pay it back over time

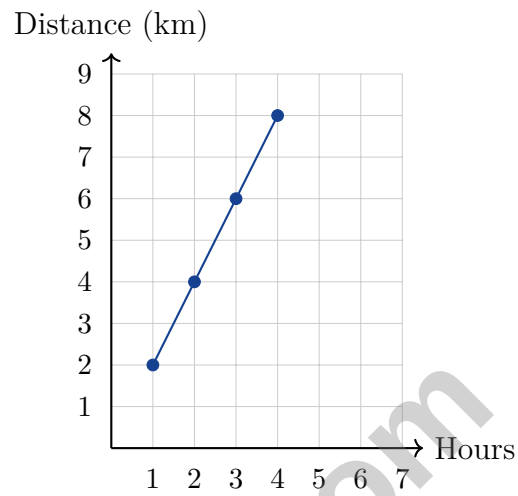


5)

The solid rectangle is reflected over the y-axis to create the dashed rectangle. This confirms that reflection over the y-axis:

☐ A. Keeps the same shape and size
☐ B. Changes the orientation
☐ C. Changes the shape
☐ D. Makes the figure smaller

6) Which scenario best matches the graph showing hours on the x-axis and total distance in kilometers on the y-axis?



☐ A. Traveling at 2 km per hour
☐ B. Traveling at 4 km per hour
☐ C. Traveling at 6 km per hour
☐ D. Traveling at 8 km per hour

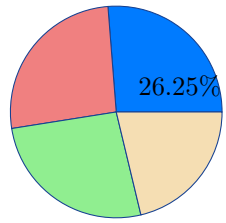
7) A warehouse contains 800 boxes. Of these, 37.5% are marked fragile. How many boxes are marked fragile?

☐ A. 300
☐ B. 250
☐ C. 200
☐ D. 500

8) A recipe for 4 servings uses 2 cups of rice. How much rice is needed for 10 servings?

☐ A. 4 cups
☐ B. 4.5 cups
☐ C. 5 cups
☐ D. 6 cups

1)



A store sold 640 items. The circle graph shows 26.25% were on sale. How many items were on sale?

☐ A. 168
☐ B. 156
☐ C. 174
☐ D. 188

2) A rectangular prism has volume 120 cubic feet. Its length is 8 ft and its width is 5 ft. What is the height in feet?

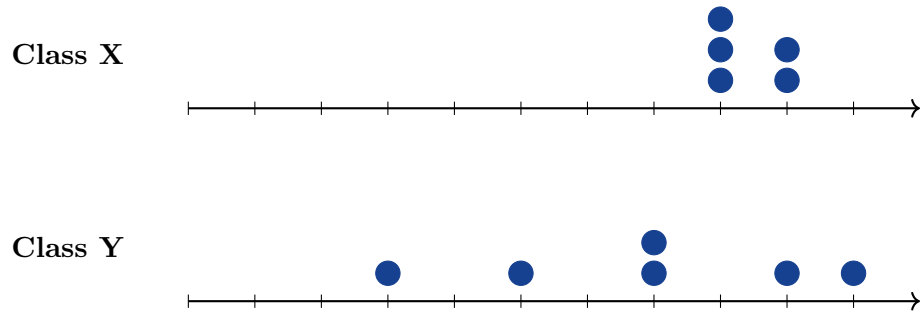
3) A student mistakenly uses the formula $A = \pi d^2$ instead of $A = \pi r^2$ for a circle with radius 3 inches and $\pi \approx 3.14$. What incorrect area would they calculate?

☐ A. 113.04 in^2
☐ B. 28.26 in^2
☐ C. 56.52 in^2
☐ D. 9.42 in^2

4) A student asks: "How many hours per week do students in my grade spend exercising?" Why is this a statistical question?

☐ A. Because exercise is healthy.
☐ B. Because it involves numbers and hours.
☐ C. Because different students exercise different amounts, requiring data from many people.
☐ D. Because the question is asked in science class.

5) Two classes compared their quiz scores using dot plots. Class X has dots clustered at 8–9. Class Y has dots spread from 3–10. What can you infer?



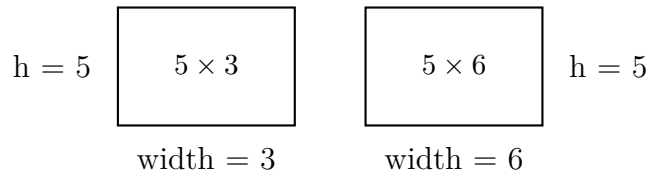
☐ A. Class X has a smaller range (more consistent)
☐ B. Class Y has a smaller range (more consistent)
☐ C. Both classes have the same range
☐ D. You cannot compare ranges from dot plots

6) A box plot shows the distribution of test scores. The line inside the box marks the:

☐ A. Mean
☐ B. Range
☐ C. Mode
☐ D. Median

7) A rectangle has vertices at $(1, 1)$, $(10, 1)$, $(10, 4)$, and $(1, 4)$. What is the perimeter of this rectangle?

1) Which expression represents the total area of the two rectangles shown?



☐ A. $(5+3)(5+6)$
☐ B. $5(3+6)$
☐ C. $3+5+6+5$
☐ D. $5+3+5+6$

2) A trapezoid has an area of 112 cm^2, a height of 8 cm, and one base of 9 cm. What is the other base?

☐ A. 19 cm
☐ B. 16 cm
☐ C. 14 cm
☐ D. 22 cm

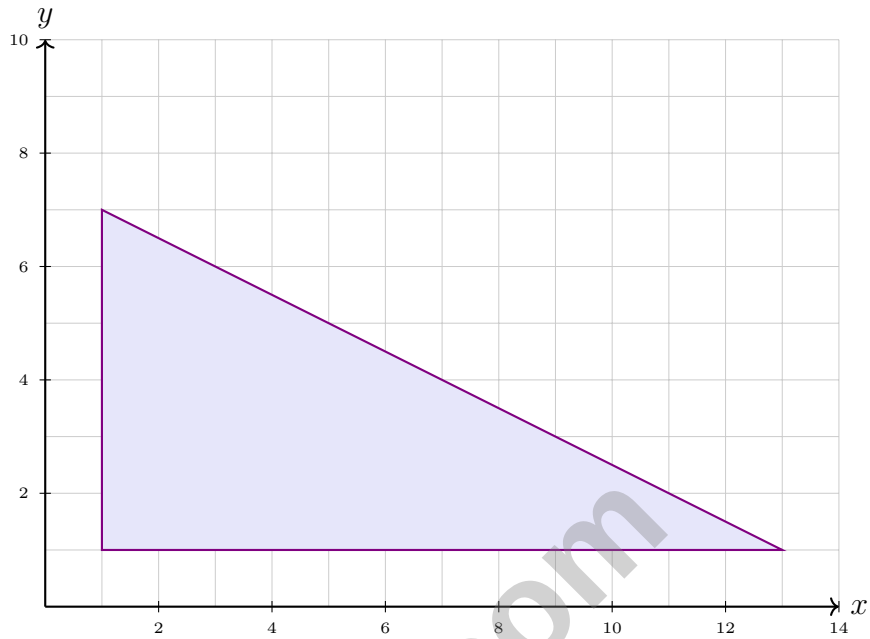
3) A rectangular prism has volume $\frac{80}{3}$ cm^3, length $\frac{10}{3}$ cm, and width 4 cm. What is its height?

☐ A. 1 cm
☐ B. 4 cm
☐ C. 3 cm
☐ D. 2 cm

4) A pentagon has vertices at $(1,1)$, $(5,1)$, $(7,4)$, $(4,7)$, and $(1,5)$. How many sides does it have?

☐ A. 4 sides
☐ B. 5 sides
☐ C. 6 sides
☐ D. 7 sides

5)



A right triangle has vertices at $(1, 1)$, $(13, 1)$, and $(1, 7)$. What is its area in square units?

☐ A. 36 square units
☐ B. 40 square units
☐ C. 44 square units
☐ D. 48 square units

6) The point $(4, 2)$ is reflected across the y-axis. What is the new x-coordinate?

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 three 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.2c Substitute $x = -2$: $(-2)^2 - 3(-2) = 4 + 6 = 10$.
2) **Choice C is correct.** 6.RP.3b To convert a fraction to a percent, write it as a fraction with denominator 100. $\frac{3}{4} = \frac{75}{100} = 75\%$.
3) **The correct answer is** 4. 6.RP.2 Flour is the 5-part amount. Since $10 \div 5 = 2$, each part is 2 cups, and sugar is 2 parts: $2 \times 2 = 4$ cups.
4) **Choice A is correct.** 6.RP.1 With only \$300 and needing \$800, Sophia should save more money first. Using a debit card would overdraw her account (negative balance), and using credit card debt for a purchase like this is not recommended at this grade level.
5) **Choice A is correct.** 6.NS.8 Reflections preserve shape and size; only position and possibly orientation change.
6) **Choice A is correct.** 6.RP.3a Using two points on the line, e.g., $(1, 2)$ and $(2, 4)$: slope $= \frac{4-2}{2-1} = 2$ km/hr. Verify with $(4, 8)$: $8 \div 4 = 2$ km/hr. The constant rate is 2 km per hour.
7) **Choice A is correct.** 6.RP.3b $37.5\% = \frac{3}{8}$. So $\frac{3}{8} \times 800 = 300$ boxes.
8) **Choice C is correct.** 6.RP.3 Unit rate: $2 \div 4 = 0.5$ cups per serving. For 10 servings: $0.5 \times 10 = 5$ cups.
9) **The correct answer is** 40 **miles per hour.** 6.RP.3c Divide distance by time: $360 \div 9 = 40$ miles per hour.
10) **Choice C is correct.** 6.RP.3c Multiply: $80 \times 3 = 240$ feet.
11) **Choice C is correct.** 6.EE.8c A proportional distance-time graph is a straight line through the origin. Here, the line passes through $(0, 0)$, $(1, 3)$, and $(2, 6)$, so the speed stays constant at 3 miles per hour.
12) **Choice A is correct.** 6.EE.8c Surplus is \$300 − \$180 = \$120. As percent: \$120 ÷ \$300 = 0.40 = 40%.
13) **Choice C is correct.** 6.RP.3 Convert to the same units: 1 inch = 3 feet = 36 inches. Scale factor is 36 : 1.
14) **Choice D is correct.** 6.NS.1 $\frac{7}{10} \div \frac{1}{5} = \frac{7}{10} \times 5 = \frac{35}{10} = \frac{7}{2} = 3\frac{1}{2}$. So the chef can make $3\frac{1}{2}$ small batches.
15) **Choice C is correct.** 6.NS.2 $5{,}280 \div 16 = 330$. Verify: $16 \times 330 = 5{,}280$.
16) **The correct answer is** \$405. 6.RP.3b Unit rate: \$360 ÷ 40 = \$9 per hour. Total hours: $40 + 5 = 45$ hours. Total earnings: $45 \times \$9 = \$405$.
17) **Choice A is correct.** 6.NS.3 Multiply divisor and dividend by 10: $240 \div 15 = 16$.
18) **Choice A is correct.** 6.NS.4 Multiples of 5: $5, 10, 15, 20, 25, 30, 35, 40, 45, \ldots$. Multiples of 9: $9, 18, 27, 36, 45, \ldots$. The least common multiple is 45 because 5 and 9 share no common factors.
19) **The correct answer is** 6. 6.RP.3 The ratio is 3 : 600 or 1 : 200. For 1200 square feet: $1200 \div 200 = 6$ gallons.
20) **Choice B is correct.** 6.NS.4 GCF of 8 and 12 is 4. So $8 + 12 = 4(2 + 3)$. Choice A uses 2 (a common factor but not greatest); Choices C and D include decimals, violating whole-number arithmetic.
21) **Choice B is correct.** 6.NS.5 Starting at 0: $+50 - 35 + 20 = 35$ points.
22) **The correct answer is Girls to boys is** 10 : 15 = 2 : 3 **(Choice A is correct). Boys to total is** 15 : 25 = 3 : 5 **(Choice B is correct)..** 6.RP.1 Choice A is correct because girls to boys is 10 : 15, which simplifies to 2 : 3. Choice B is correct because boys to total is 15 : 25, which simplifies to 3 : 5. The other choices either flip the order, swap which group is named first, or use the wrong total (10 girls out of 25 students is 2 : 5, not 1 : 3).
23) **Choice B is correct.** 6.NS.7c Opposites are numbers equidistant from zero on opposite sides of the number line. −4 and 4 are opposites.
24) **Choice B is correct.** 6.NS.6c Point F is at $2 + \frac{3}{8} = 2\frac{3}{8}$, which equals 2.375.
25) **Choice D is correct.** 6.NS.8 The point in Quadrant III (lower left) has both negative coordinates. The point $(-3, -4)$ fits this description.

Hi, Math Gardener!

◇ Look at how much you grew! 3 tests is like 3 weeks of taking care of your math garden. Every problem was a seed. Every try was water. ◇

⋆ **Gardeners say:** growth takes time. You can't see roots, but they are there. You can't always feel smarter, but you are. Your math garden is full! ⋆

Garden Check-Up

- **Roots:** STRONG! Your basic math is solid.
- **Stems:** STURDY! You can do step-by-step problems.
- **Leaves:** GREEN! You have lots of math tools.
- **Flowers:** BRIGHT! You feel proud of your work.

Gardener tip: keep watering your math garden long after the test. Every habit you built will grow with you for years!

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

Jay Daie

Your Math Gardener

PRACTICE TODAY. SUCCEED TOMORROW!

This book includes 3 full-length Math practice tests and 2 online tests to help Grade 6 students build confidence, strengthen skills, and excel on standardized assessments.

Each practice test is carefully crafted to reflect the latest standards and includes a variety of question types, realistic test conditions, and detailed answer explanations.

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

THIS BOOK INCLUDES:

- 3 Full-Length Printed Tests
- 2 Online Practice Tests
- Detailed Answer Explanations

MORE PRACTICE. GREATER RESULTS.

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

WHAT YOU'LL 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 concepts with clear explanations and meaningful practice.

Test Confidence
Familiarize with test formats and improve accuracy and speed.

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

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

VISIT TESTINAR.COM/MATH6

FOR MORE PRACTICE TESTS AND LEARNING RESOURCES

PRACTICE REGULARLY | STAY FOCUSED | SOLVE CONFIDENTLY | SUCCEED BRIGHTLY

PREPARE TODAY. SUCCEED TOMORROW!