

# 3

# Kansas

# KAP

## GRADE 3

# MATH

## PRACTICE TESTS

+

%

=

Standards-Aligned  
Practice for Stronger  
Math Skills and  
Test Readiness



Build Confidence  
with Targeted Practice



Strengthen Skills  
in Key Math Concepts



Improve Test Readiness  
with Realistic Practice

Be Ready.  
Do Your Best!



# 3 Kansas KAP Grade 3 Math Practice Tests

*Standards-Aligned Practice for Stronger Math Skills and Test Readiness*



Three 30-question trail tests packed with Grade 3 review, Kansas KAP strategy tips, answer keys, and step-by-step explanations that turn every miss into the next move.

**Jay Daie and Reza Nazari**



# Copyright ©

## Testinar Inc



Published by Testinar Inc

[Testinar.com](http://Testinar.com)

All rights reserved. No part of this publication may be reproduced, distributed, or transmitted in any form or by any means, including photocopying, recording, or other electronic or mechanical methods, without the prior written permission of the author, except in the case of brief quotations embodied in critical reviews and certain other noncommercial uses permitted by copyright law, including Section 107 or 108 of the 1976 United States Copyright Act.

This publication is independently produced and has no official connection to any state, district, or national testing program.

Test names and organizational names used herein are the property of their respective trademark holders.



*Copyright ©*

# Welcome to the Kansas Math Trail

Three tests, one trail, and a stronger Grade 3 thinker at the end



## To the Grade 3 Trail Scout

This book is your practice trail for the Kansas KAP. You will multiply and divide, read graphs, work with fractions, measure time, find area, and explain your thinking – one trail marker at a time.

Some problems will feel quick, like a clear stretch of wide open trail. Some will ask you to slow down, draw, count, or try again. That slow part is where strong math grows. Every page gives your brain another chance to spot, choose, and build.

### Spot

Read carefully and find what the problem is really asking.

### Sketch

Use numbers, arrays, number lines, or labels to make your thinking visible.

### Signal

Check that your answer makes sense before you wave the next question on.

**Trail promise:** I will read like a tracker, sketch like a planner, and check like a careful scout. I do not have to be perfect to keep moving forward.

# How to Use This Book

A four-step trail plan that turns practice into progress

## Step 1: Pack Your Pack

**Read the Quick Review first.**  
Wake up the Grade 3 ideas you will need before you set foot on the trail.

## Step 2: Hit the Trail

**Take one full test.**  
Thirty questions. Pencil sharp, work shown, calm pace – one marker at a time.

## Step 3: Campfire Check

**Check answers honestly.**  
Circle missed questions. Star any problem that felt confusing – those are tomorrow’s clues.

## Step 4: Track Back

**Fix a few mistakes.**  
Read the explanation, rework the problem, and carry that lesson up the next stretch of trail.

## A Three-Week Trail Plan

<b>Week 1</b>	Hike Test 1. Map what feels strong and what needs a second look.
<b>Week 2</b>	Hike Test 2. Sharpen the habits: read slow, sketch the model, label every number.
<b>Week 3</b>	Hike Test 3. Bring everything – facts, models, checks, and calm focus.

**Best trail habit:** Do not only ask, “What did I score?” Ask, “What did I learn how to do better?”



# Test Overview

## What waits on the trail and what each practice test builds

Each practice test has 30 questions. Together they walk you through the kind of math thinking the Kansas KAP asks Grade 3 students to use: read carefully, choose a strategy, show work, and check whether an answer makes sense.

### Selected-Response Questions

Pick the best answer from the choices. Strong scouts estimate first, cross out answers that cannot be right, and reread the question before circling.

### Open-Ended Questions

Write the answer and show the thinking. A clear response uses neat numbers, helpful labels, and a short model or explanation.

### Grade 3 Ideas You Will Meet on the Trail

- multiplication, division, arrays, equal groups, and fact fluency
- rounding, adding, subtracting, and multiplying by multiples of 10
- fractions, number lines, equivalent fractions, and comparing fractions
- time, mass, liquid volume, picture graphs, bar graphs, and line plots
- area, perimeter, unit squares, rectangles, and shapes
- two-step word problems and explaining a solution path

**What strong KAP work looks like:** the scout reads the whole problem, picks a sensible strategy, writes numbers neatly, labels the answer, and checks that the answer truly fits the question.



Scan me!  
For more practice  
& answers

+ - ..... 3 ..... × ÷

# Table of Contents

★ Practice Test 1	_____	17
★ Practice Test 2	_____	29
★ Practice Test 3	_____	41
Practice Test Answer Keys	_____	52
Practice Test Answers and Explanations	_____	55

1) What number makes the equation true?

$$\square \times 5 = 35$$

A. 9

C. 6

B. 8

D. 7

2) A rectangle has 5 rows of unit squares and 2 columns of unit squares. What is the area?

A. 7

C. 14

B. 10

D. 52

3) Ben has one whole cookie. Which fraction represents this?

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

C.  $\frac{1}{0}$

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

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

4) Add  $375 + 248$  using the standard algorithm (aligning by place value).

5) Two identical squares are divided into equal parts. Square A has 2 parts shaded out of 4. Square B has 3 parts shaded out of 6. Is the shaded area the same?

A. Cannot tell without measuring.

C. Yes, same area.

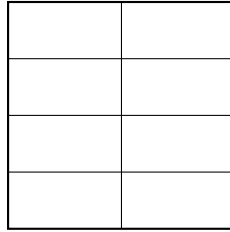
B. No, Square B is larger.

D. No, Square A is larger.



Scan me!  
For more practice  
& answers

- 6) A square is divided into 8 equal parts by drawing 1 vertical line and 3 horizontal lines through the middle. What fraction of the square is one part?



- A.  $\frac{1}{4}$                        C.  $\frac{2}{8}$   
 B.  $\frac{1}{8}$                        D.  $\frac{1}{2}$
- 7) A picture graph shows apples collected. Red apples: 6 icons (scale: 2 apples per icon). Green apples: 4 icons (scale: 2 apples per icon). How many more red apples than green apples?
- A. 2                               C. 6  
 B. 4                               D. 12
- 8) Lily bakes 36 cupcakes. She divides them equally into 4 boxes. She sells 2 boxes. How many cupcakes does she have left?
- A. 9                               C. 27  
 B. 18                              D. 36
- 9) Look at odd numbers: 1, 3, 5, 7, 9, 11.  
What is the next odd number?
- A. 12                               C. 14  
 B. 15                               D. 13



10) What multiplication sentence helps you solve  $21 \div 3$ ?

A.  $3 \times 7 = 21$

C.  $3 \times 8 = 24$

B.  $3 \times 6 = 18$

D.  $3 \times 9 = 27$

11) Ordering fractions: which list goes from smallest to largest?

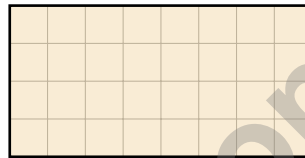
A.  $\frac{1}{8}, \frac{1}{4}, \frac{1}{2}$

C.  $\frac{1}{4}, \frac{1}{8}, \frac{1}{2}$

B.  $\frac{1}{2}, \frac{1}{4}, \frac{1}{8}$

D.  $\frac{1}{8}, \frac{1}{2}, \frac{1}{4}$

12) This shape is made of unit squares on a grid.



Count all the unit squares. What is the area?

A. 12 sq units

C. 32 sq units

B. 24 sq units

D. 36 sq units

13) If a rectangle has a length of 7 units and a width of 5 units, what is the area in square units?

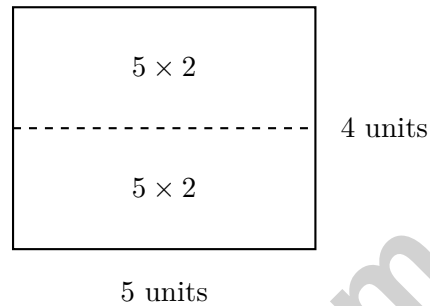


Scan me!  
For more practice  
& answers

1) A store has boxes of toy cars. Each box holds 9 cars. How many cars are in 6 boxes?

- A. 48 cars                       C. 56 cars  
 B. 60 cars                       D. 54 cars

2) Ava tiled two rectangles with the same width:



Which is the best way to write the total area?

- A.  $(5 \times 2) + (5 \times 2) = 10$                        C.  $5 + 2 + 2 = 9$   
 B.  $5 \times (2 + 2) = 5 \times 4 = 20$                        D.  $5 + 2 + 2 = 10$
- 3) A square is 8 units on each side. A rectangle is 4 units by 16 units. Compare their areas. Which statement is true?
- A. The square has more area                       C. They have exactly the same area  
 B. The rectangle has more area                       D. The square is longer
- 4) Two numbers round to 300 when rounded to the nearest 100. Which pair could they be?
- A. 250 and 350                       C. 251 and 349  
 B. 249 and 299                       D. 350 and 400

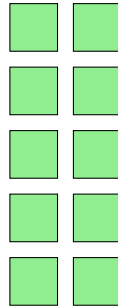


Scan me!  
For more practice  
& answers

5) If a number line from 0 to 1 has 8 equal parts, how far is the fifth tick from 0?

- A.  $\frac{1}{8}$   
 B.  $\frac{4}{8}$

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



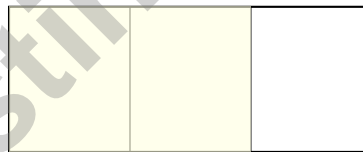
6)

How many small squares are in this array?

- A. 8 squares  
 B. 7 squares

- C. 12 squares  
 D. 10 squares

7) A rectangle is divided with 2 vertical lines making 3 equal columns. What fraction of the rectangle is 2 columns?



- A.  $\frac{1}{3}$   
 B.  $\frac{2}{3}$

- C.  $\frac{3}{3}$   
 D.  $\frac{1}{2}$

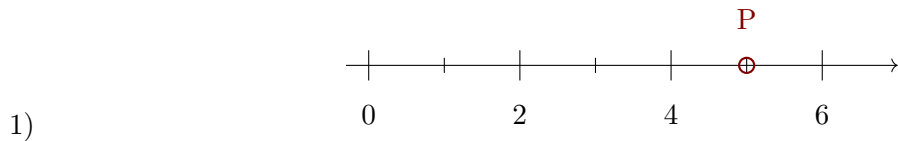
8) Sam has 8 groups of 10 stickers. How many stickers does Sam have in total?

Tens	Ones
8	0

- A. 18  
 B. 108

- C. 810  
 D. 80





The number line from 0 to 6 is divided into 6 equal parts. Point  $P$  is shown. What fraction of the distance from 0 to 6 is point  $P$ ?

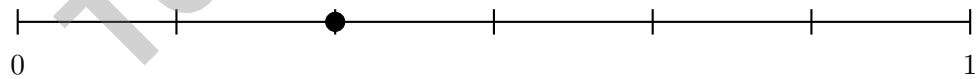
- |   |   |
|---|---|
| <input type="checkbox"/> A. $\frac{4}{6}$ | <input type="checkbox"/> C. $\frac{1}{6}$ |
| <input type="checkbox"/> B. $\frac{6}{5}$ | <input type="checkbox"/> D. $\frac{5}{6}$ |

2) A sheet of paper is folded to make 2 equal halves. What unit fraction is one half?

- |   |   |
|---|---|
| <input type="checkbox"/> A. $\frac{1}{3}$ | <input type="checkbox"/> C. $\frac{1}{2}$ |
| <input type="checkbox"/> B. $\frac{2}{1}$ | <input type="checkbox"/> D. $\frac{1}{1}$ |

3) A circle is divided into 6 equal parts. Write the fraction that represents one part of the circle.

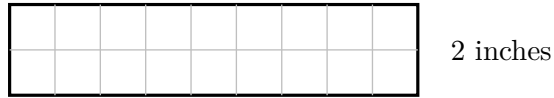
4) On this number line, the distance from 0 to 1 is divided into 6 equal parts. The point shown is at which fraction?



- |   |   |
|---|---|
| <input type="checkbox"/> A. $\frac{1}{6}$ | <input type="checkbox"/> C. $\frac{3}{4}$ |
| <input type="checkbox"/> B. $\frac{2}{6}$ | <input type="checkbox"/> D. $\frac{4}{6}$ |



Scan me!  
For more practice & answers



5) 9 inches

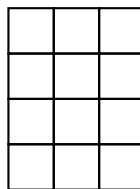
Count the unit squares in the grid. What is the area?

- A. 11 sq in
  - B. 20 sq in
  - C. 18 sq in
  - D. 36 sq in
- 6) Ava has 3 bags of marbles. Each bag has 7 marbles. How many marbles does Ava have altogether?

- A. 10
  - B. 20
  - C. 28
  - D. 21
- 7) Ava's book cover is shaped like a square with sides of 9 inches. What is the area?

- A. 18 sq in
  - B. 36 sq in
  - C. 72 sq in
  - D. 81 sq in
- 8) A recipe calls for 3 eggs. If Chloe wants to make 8 batches, how many eggs does she need?

- A. 11 eggs
  - B. 27 eggs
  - C. 30 eggs
  - D. 24 eggs
- 9) Ava is looking at this shape made of unit squares:



How many unit squares cover this shape?

- A. 7 unit squares
- B. 10 unit squares
- C. 12 unit squares
- D. 15 unit squares



## Practice Test Answer Keys

**How to use this section with a Grade 3 student:**

1. check the answer first
2. mark questions to try again
3. rework the problem before reading the full explanation

**A calm correction routine builds stronger math habits.**

Testinar.com



## Practice Test Answers and Explanations

### Practice Test 1 Answers and Explanations

- 1) **Choice D is correct.** **(3.OA.4)** Use the inverse:  $35 \div 5 = 7$ . Check:  $7 \times 5 = 35$ .
- 2) **Choice B is correct.** **(3.MD.8a)** 5 rows  $\times$  2 columns =  $5 \times 2 = 10$  square units. A is sum error.
- 3) **Choice D is correct.** **(3.NF.3c)** One whole can be written as  $\frac{1}{1}$ , where numerator = denominator.
- 4) **The correct answer is 623.** **(3.NBT.2)** Ones:  $5 + 8 = 13$  (write 3, carry 1). Tens:  $7 + 4 + 1 = 12$  (write 2, carry 1). Hundreds:  $3 + 2 + 1 = 6$ . Final answer: 623.
- 5) **Choice C is correct.** **(3.NF.3a)**  $\frac{2}{4} = \frac{3}{6} = \frac{1}{2}$ . Both show one-half of their squares shaded.
- 6) **Choice B is correct.** **(3.G.2)** When divided into 8 equal parts, each part is  $\frac{1}{8}$  of the whole square.
- 7) **Choice B is correct.** **(3.MD.4)** Red:  $6 \times 2 = 12$ . Green:  $4 \times 2 = 8$ . Difference:  $12 - 8 = 4$ .
- 8) **Choice B is correct.** **(3.OA.8)** Step 1: Divide:  $36 \div 4 = 9$  cupcakes per box. Step 2: Find unsold:  $4 - 2 = 2$  boxes left, which is  $2 \times 9 = 18$  cupcakes. (Choice A is step 1 only.)
- 9) **Choice D is correct.** **(3.OA.9)** Odd numbers increase by 2 each time:  $11 + 2 = 13$ .
- 10) **Choice A is correct.** **(3.OA.6)**  $21 \div 3 = \square$  asks:  $\square \times 3 = 21$ . Since  $7 \times 3 = 21$ , the answer is 7.
- 11) **Choice A is correct.** **(3.NF.3d)** All have numerator 1. Larger denominators mean smaller pieces. So eighths  $<$  fourths  $<$  halves.
- 12) **Choice C is correct.** **(3.MD.7)**  $8 \times 4 = 32$  unit squares.
- 13) **The correct answer is 35 square units.** **(3.MD.6)** Multiply length by width:  $7 \times 5 = 35$  square units.
- 14) **Choice C is correct.** **(3.MD.8d)** Bottom rectangle:  $4 \times 3 = 12$  sq units. Top rectangle:  $2 \times 2 = 4$  sq units. Total:  $12 + 4 = 16$  sq units.
- 15) **Choice A is correct.** **(3.NF.2)** The first tick out of 3 equal parts is  $\frac{1}{3}$  of the way from 0 to 1.
- 16) **Choice C is correct.** **(3.NF.2a)** Two parts split in half each gives  $2 \times 2 = 4$  parts.
- 17) **Choices A and C are correct.** **(3.OA.7)**  $4 \times 5 = 20$  is right.  $6 \times 6 = 36$  not 35.  $9 \times 7 = 63$  is right.  $5 \times 7 = 35$  not 36.  $3 \times 9 = 27$  not 28.
- 18) **Choice C is correct.** **(3.MD.6a)** The rectangle is 2 feet wide and 3 feet tall:  $2 \times 3 = 6$  unit squares.
- 19) **Choice C is correct.** **(3.G.1)** A diagonal divides a square into two congruent right triangles.
- 20) **Choice C is correct.** **(3.MD.6b)**  $6 \times 6 = 36$  unit square tiles.
- 21) **Choice D is correct.** **(3.MD.8)** The grid shows 5 columns and 2 rows. Area =  $5 \times 2 = 10$  square units. You can also count:  $5 + 5 = 10$  (two rows of five).
- 22) **Choice B is correct.** **(3.NF.3)**  $\frac{4}{6}$  and  $\frac{2}{3}$  mark the same point on the line.
- 23) **Choice A is correct.** **(3.OA.2)** Division and multiplication are inverse operations. Since  $2 \times 5 = 10$ , then  $10 \div 2 = 5$ .
- 24) **Choice A is correct.** **(3.MD.9)**  $P = 2(10) + 2(4) = 20 + 8 = 28$  in.
- 25) **Choice B is correct.** **(3.NBT.3)** When we multiply  $8 \times 40$ , we can break it down:  $8 \times 40 = 8 \times (4 \times 10) = (8 \times 4) \times 10 = 32 \times 10 = 320$ . The zero comes from multiplying by 10, not from the zero in "40".
- 26) **The correct answer is 32 square units.** **(3.MD.8c)**  $5 + 3 = 8$ , and  $4 \times 8 = 32$  square units.
- 27) **Choice C is correct.** **(3.NF.1)** A candy bar divided into 2 equal pieces means each piece is a unit fraction of  $\frac{1}{2}$  (one-half).
- 28) **Choice B is correct.** **(3.NF.3b)** The denominator was multiplied by 2 (from 2 to 4). Multiply the numerator by 2:  $1 \times 2 = 2$ . So  $\frac{1}{2} = \frac{2}{4}$ .
- 29) **Choice C is correct.** **(3.MD.8b)** Area = height  $\times$  width =  $7 \times 4 = 28$  square feet.
- 30) **Choice D is correct.** **(3.OA.5)** Commutative property means we can switch the order of the factors. Both sides have the same factors in a different order.

### Practice Test 2 Answers and Explanations



Scan me!  
For more practice  
& answers

## Hi, Strong Climber!

◇ You climbed all 3 tests. One step at a time. That takes patience and grit. The view from the top is amazing because you earned it! ◇

★ **Mountain guides say:** steady steps win the climb. You climbed steady. You stayed strong. ★

### Climber's Skills

- **Strong Steps:** You move forward, problem by problem.
- **Steady Pace:** You don't rush. You don't stop.
- **Map Skills:** You read questions carefully.
- **Top of the Mountain:** You can finish a long test.

**Guide's tip:** on test day, take small breaths between problems. One foot, then the next. You'll reach the top!

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 Trail Guide

# 3 GRADE 3 MATH PRACTICE TESTS

Practice Today. Succeed Tomorrow!



Give your child the tools to build strong math skills and test confidence!

This book includes 3 full-length Grade 3 Math practice tests that mirror real test formats and cover all key math standards. With a wide range of question types and real-world problems, students will gain the practice and confidence they need to do their best!

## What's Inside?



### Standards-Aligned Practice

Questions designed to cover essential Grade 3 math standards.



### Variety of Question Types

Multiple-choice, short answer, and more to build well-rounded skills.



### Real-World Applications

Engaging problems that connect math to everyday life.



### Step-by-Step Progress

Track improvement and build confidence with every test.



### Build Skills & Boost Confidence

Strengthen understanding and feel prepared for test day.

## COVERS ALL ESSENTIAL TOPICS

- ✓ Whole Numbers & Operations
- ✓ Fractions & Decimals
- ✓ Algebraic Thinking
- ✓ Geometry
- ✓ Measurement & Data
- ✓ Number Patterns
- ✓ Word Problems
- ✓ Ratio & Proportion
- ✓ Perimeter, Area & Volume
- ✓ Graphing & Data Analysis
- ✓ And More!



More Grade 3 Math Resources & Practice Materials

[testinar.com/math3](https://testinar.com/math3)

**PRACTICE. PREPARE. SUCCEED.**