

5 Full-Length Kentucky KSA Grade 6 Math Practice Tests

Extra Practice for Test Day Success

Dr. A. Nazari

Copyright © 2026 Dr. A. Nazari

Published by View Math Education

ViewMath.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.

The information in this book is distributed on an “as is” basis, without warranty. While every precaution has been taken in the preparation of this work, neither the author nor the publisher shall have any liability to any person or entity with respect to any loss or damage caused or alleged to be caused directly or indirectly by the information contained in this book.

Copyright © 2026



EXPLORER'S JOURNEY

5 Practice Tests to Map Your Math Skills!



Welcome, Math Explorer! 

*This book is your map through **5 full practice tests**, each one a new trail through every Grade 6 topic — from ratios and integers to geometry and statistics.*

Discover what you already know!

Explore the topics that need more work!

Chart your path to test-day confidence!

Every explorer needs a plan. Let's start mapping yours!



“ Five tests means five chances to discover something new about your math skills. Enjoy the journey! ”



Your Exploration Guide

Five trails to discover, five weeks to grow

What's Inside This Book

- **5 Full-Length Practice Tests** — each covers all Grade 6 topics: ratios, integers, expressions, geometry, and statistics.
- **Detailed Answer Explanations** — understand the why behind every answer, not just the what.
- **Formula Reference Sheet** — your trusty map of key formulas.
- **Explorer's Log** — chart your scores and track discoveries!

Your 5-Week Exploration Schedule

One test per week keeps the journey manageable:

Trail 1: Take Test 1 untimed. Explore the terrain and note what you find.

Trail 2: Review weak spots. Take Test 2 with a gentle timer (75 min).

Trail 3: Test 3 timed (60 min). Compare with Test 1 — see the progress!

Trail 4: Deep-focus on remaining tricky topics. Test 4 timed.

Trail 5: Full test conditions. Your final exploration — celebrate the finish!

Multiple Choice

Choose the **best answer** from A, B, C, or D.

 **Explorer's tip:** Read every option before deciding. The correct answer sometimes hides in the last choice!

Open Response

Show your work and write your answer clearly.

 **Explorer's tip:** Think of your solution as a trail map — show every step so someone else could follow your path!

“ After Each Trail ”

Check the Answer Key and read every explanation — especially for questions you missed. Write the tricky topics in your Explorer's Log. If you need a deeper dive, grab our **Grade 6 Math Study Guide!**

PREVIEW



Get Online



Find more at
[ViewMath.com/Grade6](https://www.viewmath.com/Grade6)



ViewMath.com



The Explorer's Toolkit

Essential strategies for navigating every test

Pack Your Gear (Before the Test)

- ✓ Clear your workspace — remove distractions.
- ✓ Gather pencils, eraser, scratch paper.
- ✓ Take 3 deep breaths.
- ✓ Set your goal: "I'll read carefully and show my work."

Navigate the Trail (During the Test)

1. **Scout first.** Flip through the test to see what's ahead.
2. **Start with what you know.** Answer confident questions first.
3. **Mark the unknowns.** Put a  by tricky ones and return later.
4. **Show every step.** Your solution path matters as much as the answer.
5. **Check the map.** Does your answer make sense in context?

Navigation Tips by Topic

- **Ratios:** Set up a proportion and cross-multiply
- **Integers:** Use a number line to check signs
- **Expressions:** Follow PEMDAS step by step
- **Equations:** Inverse operations to isolate x
- **Geometry:** Draw and label diagrams
- **Statistics:** Order data before finding median

Trail Hazards

- Confusing ratio 3:5 with $\frac{3}{5}$
- Wrong signs when adding integers
- Forgetting exponents in PEMDAS
- Mixing up area formulas
- Reading the wrong axis
- Finding mean instead of **median**



Explorer's Debrief: After each test, go through the answer key carefully. For every wrong answer, ask: did I make a careless mistake, or do I need to study this topic more? Write your findings in the Explorer's Log. That's how real explorers improve — they learn from every expedition!

Pack Your Explorer's Kit

Gather everything you need before each expedition

Your Expedition Gear

- ☒ **Two sharpened pencils** *so you never have to stop mid-trail*
- ☒ **A good eraser** *every explorer course-corrects!*
- ☒ **Scratch paper** *for drawing diagrams and working out steps*
- ☒ **A quiet workspace** *your base camp for concentration*
- ☒ **A timer** *start using around Trail 3*
- ☒ **Curiosity and confidence!** *the explorer's greatest tools*

Allowed on Real Tests

- ✓ Pencil and eraser
- ✓ Scratch paper (provided)
- ✓ Ruler (if specified)
- ✓ Reference sheets (in this book)

Not Allowed

- ✗ Calculator
- ✗ Phone or tablet
- ✗ Textbooks or notes
- ✗ Help from others

For Parents & Teachers

- Spread the 5 tests across **5 weeks** for best results. This gives time to review and study between expeditions.
- Test 1 should be untimed to establish a baseline.
- After each test, review the Answer Key together. Focus on **reasoning**, not just scores.
- Pair this book with our **Grade 6 Math Study Guide** for topics that need extra attention.
- Celebrate progress — every improvement, no matter how small, is a discovery worth noting!

Formula Reference Sheet

Area Formulas

Rectangle $A = l \times w$

Parallelogram $A = b \times h$

Triangle $A = \frac{1}{2} \times b \times h$

Trapezoid $A = \frac{1}{2}(b_1 + b_2) \times h$

Volume

Rectangular Prism $V = l \times w \times h$

Prism

Surface Area

Find the area of each face, then add them all up.

Rectangular Prism:

$$SA = 2lw + 2lh + 2wh$$

Order of Operations

P Parentheses first

E Exponents

M/D Multiply & Divide (left to right)

A/S Add & Subtract (left to right)

Ratios & Percents

Ratio: $a : b$ or $\frac{a}{b}$

Unit rate: amount per 1 unit

Percent: a ratio out of 100

$$\text{Part} = \text{Percent} \times \text{Whole}$$

Integers & Absolute Value

Integers:

$\dots, -3, -2, -1, 0, 1, 2, 3, \dots$

$$|-5| = 5 \quad |5| = 5$$

Absolute value = distance from 0

Expressions & Equations

Exponent: $3^4 = 3 \times 3 \times 3 \times 3 = 81$

Variable: a letter that stands for a number

Equation: two expressions joined by =

Inequality: uses $<$, $>$, $\leq$, $\geq$

Coordinate Plane

Ordered pair: (x, y)

x-axis: horizontal **y-axis:** vertical

Origin: $(0, 0)$

Four quadrants (I, II, III, IV)

Statistics

Mean: sum of values $\div$ count

Median: middle value (sorted)

Range: max $-$ min

My Explorer's Log

Record each expedition's results and discoveries

Explorer's Name: _____

Trail	 Date	★ Score	 Confidence
1	_____	____ / ____	
2	_____	____ / ____	
3	_____	____ / ____	
4	_____	____ / ____	
5	_____	____ / ____	

 My Discovery Journal

Topics I explored with confidence:

Uncharted territory (topics I need to study more):

My biggest improvement from Trail 1 → Trail 5:

One new strategy I discovered along the way:

One strategy that helped me the most:



Find more at
[ViewMath.com/Grade6](https://www.viewmath.com/Grade6)





★ Table of Contents ★

Here's what we'll explore together!

★ Practice Test 1	2
-------------------------	---



Let's learn and have fun!

PREVIEW



PRACTICE TEST

1

Practice Test 1

 30 Questions

Before You Start

- ✓ *Read each question carefully before choosing your answer.*
- ✓ *Show your work on scratch paper when you need to.*
- ✓ *Skip hard questions and come back to them later.*
- ✓ *Check your answers when you're done.*
- ✓ *Take your time — there's no rush!*

★ *You've Got This!* ★

Do your best and show what you know!



1. A recipe calls for 4 cups of water **to** 1 cup of rice. If you use 3 cups of rice, how many cups of water do you need?

- (A) 7
- (B) 8
- (C) 12
- (D) 4

2. Ana types 225 words in 5 minutes. Ben types 180 words in 4 minutes. Who types faster?

- (A) Ana, at 45 words per minute
- (B) Ben, at 45 words per minute
- (C) They type at the same speed.
- (D) Ben, at 44 words per minute

3. A recipe uses 4 eggs for every 6 cups of flour. How many eggs are needed for 18 cups of flour?

- (A) 6
- (B) 10
- (C) 12
- (D) 8

4. A lemonade stand sells cups at \$3 each. Which graph shows the correct relationship?

- (A) A line through $(1, 3)$ and $(2, 5)$
- (B) A line through $(1, 3)$ and $(2, 6)$
- (C) A line through $(1, 3)$ and $(3, 6)$
- (D) A line through $(3, 1)$ and $(6, 2)$

5. 60% of 45 is closest to which number?

- (A) 25
- (B) 27
- (C) 30
- (D) 36



Find more at
ViewMath.com/Grade6



6. A sprinter runs at 9 meters per second. What is her speed in kilometers per hour? (1 km = 1,000 m, 1 hour = 3,600 seconds)

Your Answer:

7. A student solved the problem below using "Keep, Change, Flip." Look at the student's work.

Problem: $\frac{4}{5} \div \frac{2}{3}$

Step 1: Keep $\frac{4}{5}$ Change $\div$ to $\times$

Step 2: Flip $\frac{4}{5}$ to get $\frac{5}{4}$

Step 3: $\frac{5}{4} \times \frac{2}{3} = \frac{10}{12} = \frac{5}{6}$

What error did the student make?

- (A) The student forgot to change $\div$ to $\times$ (B) The student made a multiplication error in Step 3
(C) The student forgot to simplify (D) The student flipped the wrong fraction

8. Compute $9,072 \div 42$.

Your Answer:

9. Which of the following statements about zero is true?

- (A) Zero is a positive number. (B) Zero is a negative number.
(C) Zero is neither positive nor negative. (D) Zero is both positive and negative.



Get Online



Find more at
[ViewMath.com/Grade6](https://www.viewmath.com/Grade6)



10. A point M is marked on the number line below.



$[M, \text{above}]-5$

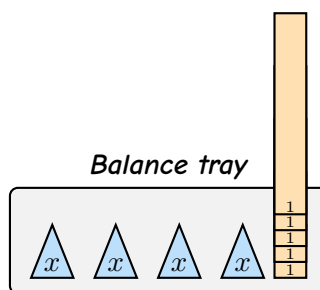
What number is the opposite of the value at point M ?

- (A) -5 (B) 0
(C) 5 (D) $-(-(-5))$

11. Evaluate: $(7 + 3) \times 2$

- (A) 13 (B) 17
(C) 20 (D) 24

12. Look at the balance model below. Each triangle represents the same unknown number x , and each small square represents 1. Write an expression for the total value shown on the balance.



Your Answer:



Find more at
[ViewMath.com/Grade6](https://www.viewmath.com/Grade6)



13. Look at the expression map below. Which label correctly identifies Part C?

$$\underbrace{5}_A \underbrace{x}_B + \underbrace{3}_C$$

- (A) A variable (B) A coefficient
(C) A constant (D) A factor

14. Evaluate $6x - x^2$ when $x = 4$.

- (A) 8 (B) 20
(C) -8 (D) 40

15. Which expression is equivalent to $10a - 2a + 7$?

- (A) $12a + 7$ (B) $8a + 7$
(C) $8a - 7$ (D) $15a$

16. A school has s students and wants to form teams of 6. Which expression gives the number of teams?

- (A) $6s$ (B) $s + 6$
(C) $s \div 6$ (D) $s - 6$

17. Solve: $m + 17 = 30$

Your Answer:



Find more at
ViewMath.com/Grade6



18. The table below matches phrases to inequality symbols. Which row has an error?

Row	Phrase	Symbol
1	At least	$\geq$
2	No more than	$\leq$
3	Fewer than	$<$
4	At most	$<$

(A) Row 1

(B) Row 2

(C) Row 3

(D) Row 4

19. Pick two values that ARE solutions to $x > -1$ and one value that is NOT.

Your Answer:

20. What is the area of a triangle with base 10 cm and height 6 cm?



(A) 60 cm^2

(B) 30 cm^2

(C) 16 cm^2

(D) 32 cm^2



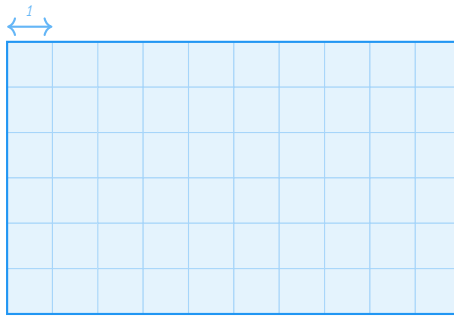
Get Online



Find more at
ViewMath.com/Grade6



21. What is the area of a trapezoid with bases 6 in and 10 in and height 4 in?



- (A) 32 in^2 (B) 20 in^2
(C) 60 in^2 (D) 40 in^2

22. A box has a volume of 72 in^3 . The base is 6 in by 4 in. What is the height?

- (A) 2 in (B) 3 in
(C) 6 in (D) 12 in

23. Points $A(-1, -4)$ and $B(-1, 8)$ form a vertical segment. What is its length?

Your Answer:

24. A rectangle has vertices $(-3, 2)$, $(5, 2)$, $(5, -4)$, and $(-3, -4)$. What is the area?

- (A) 24 square units (B) 36 square units
(C) 48 square units (D) 28 square units



Get Online



Find more at
ViewMath.com/Grade6



25. Write a statistical question you could ask your classmates about food.

Your Answer:

26. Two students collected data. Student A: range = 5. Student B: range = 40. Whose data is more consistent?

Your Answer:

27. Data: 5, 5, 5, 5, 5. What are the mean and median?

(A) Mean = 5, Median = 0

(B) Mean = 0, Median = 5

(C) Mean = 5, Median = 5

(D) Mean = 25, Median = 5

28. A dot plot of students' shoe sizes shows a cluster from size 6 to size 8, with a gap at size 10 and one dot at size 12. What is the dot at size 12?

(A) A cluster

(B) A gap

(C) A peak

(D) An outlier

29. Data (in order): 10, 15, 20, 25, 30, 35, 40. Find the five-number summary.

Your Answer:



Get Online



Find more at
[ViewMath.com/Grade6](https://www.viewmath.com/Grade6)



30. The table below shows statistics for two basketball teams this season.

	Team A	Team B
Mean points	72	70
MAD	8	3

Team A scored more on average. But which team would you trust more in a close game? Why?

- (A) Team A, because they score higher on average.
- (B) Team B, because their scores are more predictable (smaller MAD).
- (C) Team A, because a higher MAD means more exciting games.
- (D) Both teams are equally trustworthy.



Find more at
[ViewMath.com/Grade6](https://www.viewmath.com/Grade6)



★ End of Practice Test 1 ★

Great job finishing the test!

My Score

I got _____ out of 30 questions right.

*Check your answers in the **Answer Key** at the back of the book.*

 *Review any questions you missed. That's how we learn!*

THANK YOU

Enjoyed This Preview?

Get the Full Book!

This preview shows just a small sample of what's inside.

The complete book includes:

- ✓ *All chapters and topics*
- ✓ *Hundreds of practice problems*
- ✓ *Complete answer key with explanations*
- ✓ *Colorful visuals and step-by-step examples*
- ✓ *Reference sheets and progress trackers*

Available on Amazon and Teachers Pay Teachers

 Visit us at [ViewMath.com](https://www.viewmath.com) for free resources and more books!