

4

COMPLETE

Tennessee TCAP

Grade

MATH

5

PRACTICE TESTS

Standards-Based Test Prep with
Mixed Review, Word Problems,
and **Full Answer Key**



- ✓ **4 COMPLETE PRACTICE TESTS**
Built to reflect the test format and rigor



- ✓ **COVERS ALL ESSENTIAL TOPICS**
Numbers & Operations, Fractions, Decimals, Geometry, Measurement, Data & Probability, and more



- ✓ **STRENGTHEN SKILLS & CONFIDENCE**
Mixed review, challenging questions, and strategic practice



- ✓ **FULL ANSWER KEY INCLUDED**
Detailed explanations for every question



**BUILD STRONG
MATH SKILLS
& TEST READINESS**



**IMPROVE ACCURACY,
SPEED, AND
PROBLEM SOLVING**



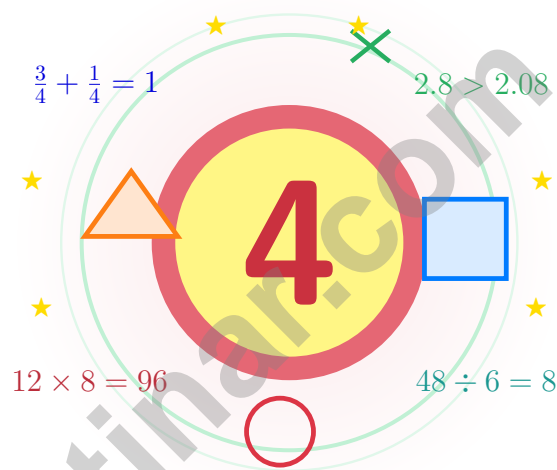
**PERFECT FOR
CLASSROOM,
HOME, OR
SELF-STUDY**



**ALIGNED TO
TENNESSEE
STATE STANDARDS
(TCAP)**

4 Tennessee TCAP Grade 5 Math Practice Tests

Four practice tests woven into one calm, steady routine



Four full tests, a smart quick review, mission-style strategy pages, and student-tested support that help Grade 5 mathematicians from The Volunteer State build calm, careful, confident habits.

Jay Daie and Reza Nazari



Copyright ©

Testinar Inc



Published by Testinar Inc

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 ©

Four Tests, One Strong Tennessee Mathematician

A four-test mission for curious, careful Grade 5 thinkers

Dear Tennessee Math Mission Crew

This book gives you four chances to read closely, solve carefully, and level up your math thinking. Math practice rolls like the Tennessee River – it bends, it widens, it keeps going, and so do you.

You do not need to feel perfect before you begin. You just need to stay curious, use strategies, and learn from every correction. That is how confident mathematicians are built.

Watch

Watch what the question really wants from you.

Try

Try a strategy that fits the size of the numbers.

Polish

Polish your steps, units, and the final answer.

A strong mission habit for Tennessee: keep your work neat, estimate when it helps, label units carefully, and never let one hard question decide your mood for the whole page.

Your Four-Step Game Plan

A four-step routine that turns practice into real improvement

Step 1: Open

Open the warm-up review and use it.

Wake up the big Grade 5 ideas before the test starts so your brain is already warmed up.

Step 2: Test

Take the test with steady focus.

Find a calm corner, settle in, and aim for careful, honest choices before quick ones.

Step 3: Reflect

Notice what was sharp and what was shaky.

Circle missed questions, sort out what went sideways, and notice which skills are calling for attention.

Step 4: Sharpen

Practice the shaky skills before the next round.

Read the explanation, fix the work, and carry that lesson into the very next test.

A Four-Week Tennessee Mission Map

Week	Mission Focus
Week 1	Take Test 1 like a Smoky morning – soft mist, slow steps.
Week 2	Take Test 2 and lift word problems and clear writing.
Week 3	Take Test 3 to polish fractions, decimals, and conversions.
Week 4	Take Test 4 with calm, careful, courageous work.



Scan me

Four-Test Walkthrough

What these four practice tests help Grade 5 students build

These three practice tests prepare Grade 5 students in the Volunteer State for the Tennessee TCAP with the steady spirit of a Smoky Mountain hike. The goal is bigger than collecting right answers. Students are practicing how to read carefully, choose a strategy, solve step by step, and explain their reasoning clearly – the same way mathematicians do every day.

Selected-Response Questions

Students solve the problem and choose the best answer. Estimating first, crossing out weak choices, and checking for reasonableness can save time and points.

Constructed-Response Questions

Students show steps, explain a method, or support an answer with clear math. Strong reasoning matters because it shows how the answer was found.

Grade 5 Ideas That Show Up Again and Again

- place value, comparing numbers, and rounding
- multi-digit addition, subtraction, multiplication, and division
- fractions, mixed numbers, and decimals
- perimeter, area, volume, and measurement conversions
- tables, line plots, patterns, and coordinate points
- geometry and multi-step real-world problem solving

What strong TCAP-style work looks like: accurate math, readable steps, the right labels or units, and a final answer that really matches the question being asked.



Table of Contents

★ Practice Test 1	_____	18
★ Practice Test 2	_____	33
★ Practice Test 3	_____	48
★ Practice Test 4	_____	62
Practice Test Answer Keys	_____	77
Practice Test Answers and Explanations	_____	80

Grade 5 Mathematics Reference Materials

PERIMETER AND AREA

Perimeter of Rectangle $P = 2l + 2w$ or $P = 2(l + w)$

Area of Rectangle $A = l \times w$

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

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

LENGTH

Customary

1 foot (ft) = 12 inches (in.)

1 yard (yd) = 3 feet (ft)

1 yard (yd) = 36 inches (in.)

Metric

1 meter (m) = 100 centimeters (cm)

1 centimeter (cm) = 10 millimeters (mm)

1 kilometer (km) = 1,000 meters (m)

CAPACITY

Customary

1 cup (c) = 8 fluid ounces (fl oz)

1 pint (pt) = 2 cups (c)

1 quart (qt) = 2 pints (pt)

1 gallon (gal) = 4 quarts (qt)

Metric

1 liter (L) = 1,000 milliliters (mL)

WEIGHT AND MASS

Customary

1 pound (lb) = 16 ounces (oz)

Metric

1 kilogram (kg) = 1,000 grams (g)

1 gram (g) = 1,000 milligrams (mg)

TIME

1 minute (min) = 60 seconds (sec) 1 week = 7 days

1 hour (hr) = 60 minutes (min) 1 year = 12 months

1 day = 24 hours (hr) 1 year = 52 weeks

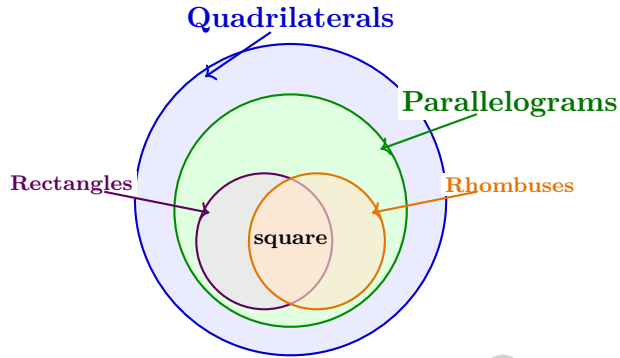


- 1) Which type of quadrilateral listed below always has four right angles?
- A. Trapezoid C. Rectangle
 B. Rhombus D. Parallelogram
- 2) During a bike-a-thon, a team rides 42.5 miles in the first stage, 38.25 miles in the second stage, and 45.75 miles in the third stage. What is the team's total distance?
- A. 115.5 miles C. 125.5 miles
 B. 130.5 miles D. 126.5 miles
- 3) What is $9 \div \frac{1}{3}$?
- A. 27 C. 18
 B. 9 D. 36
- 4) A model shows 4 wholes cut into halves. Which equation gives the number of half pieces?
- A. $\frac{1}{2} \div 4 = n$ C. $4 + \frac{1}{2} = n$
 B. $4 \times \frac{1}{2} = n$ D. $4 \div \frac{1}{2} = n$
- 5) A garden plot uses $\frac{2}{5}$ of the yard for vegetables and $\frac{1}{6}$ for flowers. What fraction is used together?
- A. $\frac{3}{11}$ C. $\frac{3}{30}$
 B. $\frac{17}{30}$ D. $\frac{7}{30}$
- 6) A board is $\frac{5}{6}$ m long. Three identical boards are joined end to end. What is the total length?

Record your answer in the space provided.

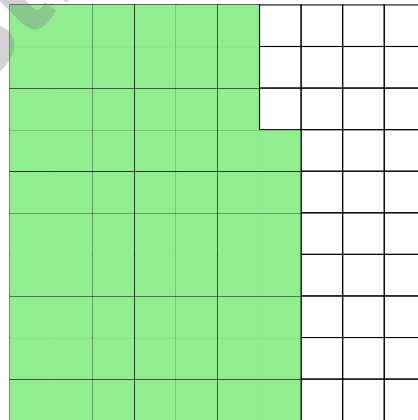


- 7) A Venn diagram has circles for quadrilaterals, rectangles, rhombuses, and parallelograms. A square belongs to how many of these circles?



Record your answer in the space provided.

- 8) Decimal grid with 67 shaded squares (out of 100). What is the decimal?



- A. 0.76 C. 6.7
 B. 67 D. 0.67



Grade 5 Mathematics Reference Materials

PERIMETER AND AREA

Perimeter of Rectangle $P = 2l + 2w$ or $P = 2(l + w)$

Area of Rectangle $A = l \times w$

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

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

LENGTH

Customary

1 foot (ft) = 12 inches (in.)

1 yard (yd) = 3 feet (ft)

1 yard (yd) = 36 inches (in.)

Metric

1 meter (m) = 100 centimeters (cm)

1 centimeter (cm) = 10 millimeters (mm)

1 kilometer (km) = 1,000 meters (m)

CAPACITY

Customary

1 cup (c) = 8 fluid ounces (fl oz)

1 pint (pt) = 2 cups (c)

1 quart (qt) = 2 pints (pt)

1 gallon (gal) = 4 quarts (qt)

Metric

1 liter (L) = 1,000 milliliters (mL)

WEIGHT AND MASS

Customary

1 pound (lb) = 16 ounces (oz)

Metric

1 kilogram (kg) = 1,000 grams (g)

1 gram (g) = 1,000 milligrams (mg)

TIME

1 minute (min) = 60 seconds (sec) 1 week = 7 days

1 hour (hr) = 60 minutes (min) 1 year = 12 months

1 day = 24 hours (hr) 1 year = 52 weeks



1) A recipe calls for 16 ounces of sugar. If you make $\frac{3}{2}$ of the recipe, how much sugar do you need?

A. $10\frac{2}{3}$ ounces

C. 16 ounces

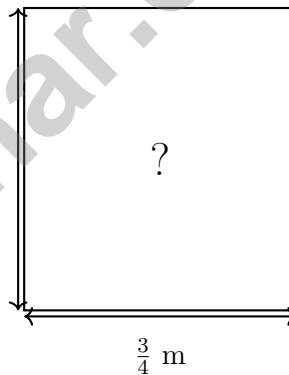
B. 8 ounces

D. 24 ounces

2) Convert: 750 cm = ? m.

Record your answer in the space provided.

3) A small tile is $\frac{3}{4}$ meter by $\frac{5}{6}$ meter. What is the area? Give the answer in simplest form.



A. $\frac{15}{10}$ m²

C. $\frac{8}{10}$ m²

B. 1 m²

D. $\frac{5}{8}$ m²



Grade 5 Mathematics Reference Materials

PERIMETER AND AREA

Perimeter of Rectangle $P = 2l + 2w$ or $P = 2(l + w)$

Area of Rectangle $A = l \times w$

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

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

LENGTH

Customary

1 foot (ft) = 12 inches (in.)

1 yard (yd) = 3 feet (ft)

1 yard (yd) = 36 inches (in.)

Metric

1 meter (m) = 100 centimeters (cm)

1 centimeter (cm) = 10 millimeters (mm)

1 kilometer (km) = 1,000 meters (m)

CAPACITY

Customary

1 cup (c) = 8 fluid ounces (fl oz)

1 pint (pt) = 2 cups (c)

1 quart (qt) = 2 pints (pt)

1 gallon (gal) = 4 quarts (qt)

Metric

1 liter (L) = 1,000 milliliters (mL)

WEIGHT AND MASS

Customary

1 pound (lb) = 16 ounces (oz)

Metric

1 kilogram (kg) = 1,000 grams (g)

1 gram (g) = 1,000 milligrams (mg)

TIME

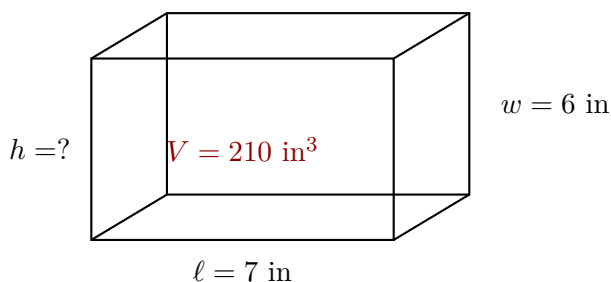
1 minute (min) = 60 seconds (sec) 1 week = 7 days

1 hour (hr) = 60 minutes (min) 1 year = 12 months

1 day = 24 hours (hr) 1 year = 52 weeks



- 1) Find the height.



- A. 4 in C. 6 in
 B. 5 in D. 7 in
- 2) A prism has 8 cubes in each row, 3 rows per layer, and 2 layers. Total cubes?

Record your answer in the space provided.

- 3) A spool of ribbon has $\frac{4}{5}$ meter of ribbon. A craftsperson buys 3 spools. How much ribbon does she have?
- A. $\frac{4}{5}$ meter C. $\frac{4}{15}$ meters
 B. $\frac{12}{5}$ meters or $2\frac{2}{5}$ meters D. $\frac{7}{5}$ meters
- 4) A recipe calls for $1\frac{1}{2}$ cups of flour. If you triple the recipe, how many cups do you need?
- A. 5 C. 4
 B. 6 D. $4\frac{1}{2}$



Grade 5 Mathematics Reference Materials

PERIMETER AND AREA

Perimeter of Rectangle $P = 2l + 2w$ or $P = 2(l + w)$

Area of Rectangle $A = l \times w$

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

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

LENGTH

Customary

1 foot (ft) = 12 inches (in.)

1 yard (yd) = 3 feet (ft)

1 yard (yd) = 36 inches (in.)

Metric

1 meter (m) = 100 centimeters (cm)

1 centimeter (cm) = 10 millimeters (mm)

1 kilometer (km) = 1,000 meters (m)

CAPACITY

Customary

1 cup (c) = 8 fluid ounces (fl oz)

1 pint (pt) = 2 cups (c)

1 quart (qt) = 2 pints (pt)

1 gallon (gal) = 4 quarts (qt)

Metric

1 liter (L) = 1,000 milliliters (mL)

WEIGHT AND MASS

Customary

1 pound (lb) = 16 ounces (oz)

Metric

1 kilogram (kg) = 1,000 grams (g)

1 gram (g) = 1,000 milligrams (mg)

TIME

1 minute (min) = 60 seconds (sec) 1 week = 7 days

1 hour (hr) = 60 minutes (min) 1 year = 12 months

1 day = 24 hours (hr) 1 year = 52 weeks



1) Find missing: $\frac{7}{10} - \boxed{} = \frac{1}{5}$

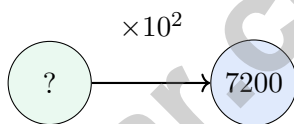
- A. $\frac{3}{10}$
- B. $\frac{6}{10}$

- C. $\frac{1}{10}$
- D. $\frac{5}{10}$

2) Which strategy correctly finds the volume of a composite solid made from non-overlapping rectangular prisms?

- A. Add all the side lengths of the prisms.
- B. Multiply only the longest dimensions.
- C. Use area because the solid is made of rectangles.
- D. Find each prism's volume, then add the volumes.

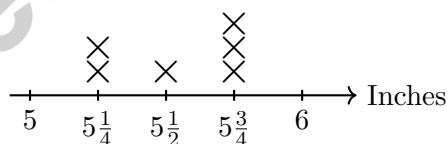
3) Emma multiplies a number by 10^2 and gets 7200. What was the original number?



- A. 720
- B. 72000

- C. 7200
- D. 72

4) The line plot shows pencil lengths, in inches. What is the total length of all 6 pencils?



Record your answer in the space provided.



Practice Test Answer Keys

How to use this section:

1. check your answer
2. circle missed questions
3. rework them before reading the explanation

Good correction habits build strong scores.

Testinar.com



Practice Test Answers and Explanations

Practice Test 1 Answers and Explanations

- Choice C is correct.** (5.G.B.3) A rectangle is defined as a quadrilateral with all four angles equal to 90° . Trapezoids, rhombuses, and general parallelograms do not have this property.
- Choice D is correct.** (5.MD.A.1) Choose the operation from the story, then keep the unit with the answer. Add: $42.5 + 38.25 + 45.75 = 126.5$ miles.
- Choice A is correct.** (5.NF.B.7) $9 \div \frac{1}{3} = 9 \times 3 = 27$.
- Choice D is correct.** (5.NF.B.6) The model counts half-size pieces in 4 wholes. So the matching equation is $4 \div \frac{1}{2} = n$.
- Choice B is correct.** (5.NF.A.2) Common denominator is 30: $\frac{2}{5} = \frac{12}{30}$ and $\frac{1}{6} = \frac{5}{30}$. So $\frac{12}{30} + \frac{5}{30} = \frac{17}{30}$.
- The correct answer is $2\frac{1}{2}$ m.** (5.NF.B.6) $3 \times \frac{5}{6} = \frac{15}{6} = \frac{5}{2} = 2\frac{1}{2}$ m.
- The correct answer is 4.** (5.G.B.3) A square is a quadrilateral, a rectangle, a rhombus, and a parallelogram.
- Choice D is correct.** (5.NBT.A.3) 67 out of 100 squares shaded represents $\frac{67}{100} = 0.67$.
- Choice A is correct.** (5.NF.A.1) $6 = 5\frac{9}{9}$. Then $5\frac{9}{9} - 1\frac{4}{9} = 4\frac{5}{9}$.
- Choice B is correct.** (5.OA.A.2) The machine first adds 5 to 4, so that step needs to be grouped as $(4 + 5)$. Then the result is multiplied by 3.
- Choice C is correct.** (5.NBT.A.2) A power of 10 tells how many factors of 10 to use. $50000 = 5 \times 10000 = 5 \times 10^4$. This confirms the answer.
- Choice A is correct.** (5.NBT.A.3) Grid shows: Grid 1 (0.3) fills 3 columns. Grid 2 (0.5) fills 5 columns. Grid 3 (0.21) fills 2 columns plus small part. Order: $0.21 < 0.3 < 0.5$.
- Choice A is correct.** (5.NBT.B.5) Multiply: $34 \times 25 = 34 \times (20 + 5) = (34 \times 20) + (34 \times 5) = 680 + 170 = 850$ tickets.
- Choice D is correct.** (5.MD.C.4) Volume = $2 \times 3 \times 6 = 36$ ft³.
- Choice A is correct.** (5.MD.C.4) Using $V = l \times w \times h$: $V = 5 \times 3 \times 4 = 60$ ft³.
- Choice A is correct.** (5.NF.B.6) Each full cup makes 5 one-fifth-cup sauce cups. $9 \div \frac{1}{5} = 9 \times 5 = 45$ small cups.
- Choice A is correct.** (5.NBT.B.7) Line up decimal points and subtract place by place. $4.80 - 1.95 = 2.85$ meters. This confirms the answer.
- Choice C is correct.** (5.NF.B.6) Each whole contains 6 pieces of size $\frac{1}{6}$. With 3 wholes, there are $3 \times 6 = 18$ pieces.
- The correct answer is 7.21.** (5.NBT.B.7) Align by place value. Hundredths: $6 + 5 = 11$, write 1 carry 1. Tenths: $3 + 8 + 1 = 12$, write 2 carry 1. Ones: $4 + 2 + 1 = 7$. Result 7.21.
- The correct answer is $\frac{11}{12}$.** (5.NF.A.1) Use a common denominator of 12. $\frac{1}{4} = \frac{3}{12}$, $\frac{1}{6} = \frac{2}{12}$, and $\frac{1}{2} = \frac{6}{12}$. Then $\frac{3}{12} + \frac{2}{12} + \frac{6}{12} = \frac{11}{12}$.
- Choices A, B are correct.** (5.NBT.A.2) Multiplying 23 by 10 gives 230, and multiplying by 100 gives 2,300. C is false because the number of digits does not double, and D is false because 23,000 ends with three zeros.
- Choice C is correct.** (5.G.B.3) An equilateral triangle has all angles equal to 60 degrees (acute). It cannot be obtuse. All other pairs are possible.
- Choice C is correct.** (5.G.A.1) For two points with the same y-coordinate, the horizontal distance is the difference in x-coordinates: $9 - 2 = 7$ units.
- Choice A is correct.** (5.NF.A.2) $\frac{7}{15} \approx 0.47$ and $\frac{5}{13} \approx 0.38$, so true sum ≈ 0.85 . Estimate is 1. Difference: $1 - 0.85 = 0.15 < 0.5$. The estimate is reasonable.
- Choice A is correct.** (5.NBT.B.6) Use nearby friendly numbers that are easy to divide: $572 \approx 600$ and $28 \approx 30$. Then $600 \div 30 = 20$, so the quotient is about 20.
- Choice D is correct.** (5.NF.B.4) $1\frac{3}{4} = \frac{1 \times 4 + 3}{4} = \frac{7}{4}$. Then $\frac{7}{4} \times 2 = \frac{14}{4} = 3\frac{1}{2}$.
- Choice B is correct.** (5.G.A.2) Moving 6 units right from the origin gives $x = 6$. Moving 3 units up gives $y = 3$. The endpoint is (6, 3).
- Choice D is correct.** (5.NBT.A.1) In 87.456, the digit 4 is in the tenths place, which has a value of 0.4 or $\frac{4}{10}$.
- Choice B is correct.** (5.OA.A.1) Do the division and multiplication first: $72 \div 8 = 9$ and $3 \times 3 = 9$. Then finish left to right: $9 + 9 - 5 = 13$.



Champion's Training Log

Dear Math Champion,

◇ Look at what you did. 4 full practice tests. Hundreds of math problems. Every one of them strengthened your mind. You walked into this prep series as a learner, and you are walking out as a math athlete who knows how to compete. ◇

★ **What champions know:** talent is helpful, but training is everything. You trained. You showed up. You did the work. That is why your skills are sharp today. ★

Champion's Skill Card

- **Focus:** MAXED OUT! You can lock onto a problem and stay there.
- **Speed:** CALIBRATED! You move quickly without rushing.
- **Accuracy:** HIGH! You catch your own mistakes.
- **Mindset:** CHAMPION-LEVEL! You believe in your skills.

Final champion tip: on test day, walk in like you have trained for it—because you have. Sit down. Breathe. Read carefully. Work steadily. Check confidently. You will be amazed at how prepared you actually are.

If you want to share a proud moment or ask a question, please email me at jay@testinar.com. I'd love to hear from you!

Jay Daie

Your Math Coaches (Champion-in-Training)

4 COMPLETE TESTS. CONFIDENCE. SUCCESS.



Give your child the practice and confidence they need to excel in **Grade 5 Math**. This book includes **4 full-length** practice tests designed to build skills, improve test readiness, and help students reach their full potential.

WHAT'S INSIDE:



4 COMPLETE PRACTICE TESTS

Full-length tests that reflect real test format and rigor.



COVERS ALL GRADE 5 TOPICS

Numbers & Operations, Fractions, Decimals, Geometry, Measurement, Data & Probability, and more.



MIXED REVIEW & WORD PROBLEMS

Build problem-solving skills with mixed review questions and real-world word problems.



DETAILED ANSWER KEY

Step-by-step explanations for every question to help students learn and improve.



BUILD CONFIDENCE & IMPROVE SCORES

Practice consistently, reduce test anxiety, and achieve your best score!



PRACTICE SMART. LEARN MORE. ACHIEVE YOUR BEST.



Strengthen
Math Skills



Improve
Accuracy
& Speed



Master
Essential
Concepts



Boost
Confidence
on Test Day



Visit testinar.com/math5
for more Grade 5 math resources
and practice materials!



Testinar

Smart Practice. Stronger Results.