



6

Connecticut

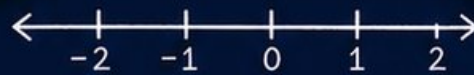
Smarter Balanced



GRADE 5 MATH

PRACTICE TESTS

Complete Standards-Based Practice
— for Grade 5 Math Success —



$$5^2 = 25$$



6 FULL-LENGTH PRACTICE TESTS
Realistic style questions



STANDARDS-BASED PRACTICE
Covers all Grade 5 Math standards

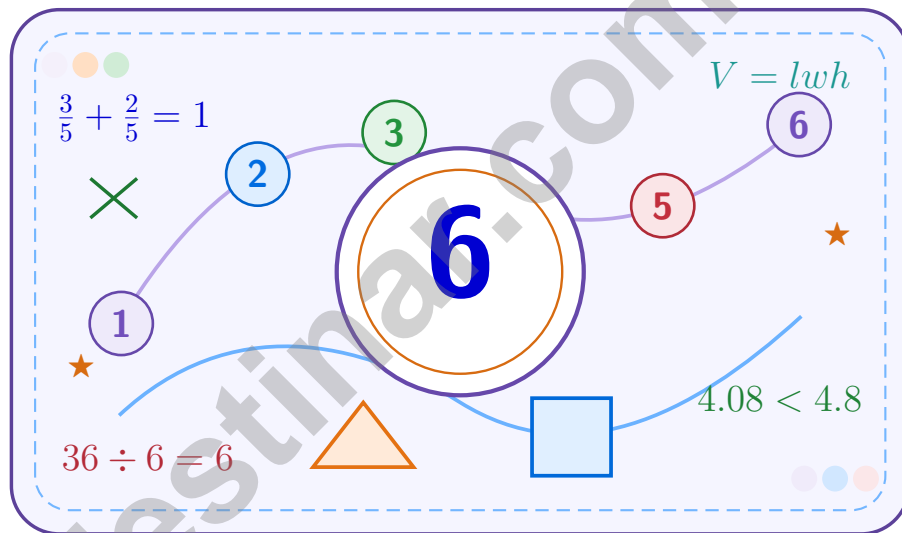


BUILD CONFIDENCE. IMPROVE SCORES.
Target weak areas and achieve success

★ STRONG PRACTICE. BRIGHT FUTURE. ★

6 Connecticut Smarter Balanced Grade 5 Math Practice Tests

A six-step confidence climb with clear review, smart strategy, and practice that gets stronger every round



Six full tests, a focused skill booster, and student-friendly support from start to finish for Grade 5 mathematicians who want to climb higher.

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 ©

Welcome to the Confidence Climb

This book is here to help you practice with purpose and rise step by step

To the Grade 5 Mathematician

This practice book is a place to think, try, fix, and grow. You do not have to be perfect on the first question or the first test. What matters most is careful effort, clear work, and learning from each round of practice.

Use these six tests like stepping-stones. Take one test at a time, check your answers honestly, and notice which skills need more attention. Small improvements add up fast.

Try

Give each problem your best thinking.

Check

Study mistakes and learn what happened.

Rise

Bring that lesson into the next round.

A strong habit for every page: read carefully, estimate when it helps, show your steps, and keep going even when a question feels tricky. That is how steady math confidence is built.

How to Use This Book

A simple practice routine that turns six tests into steady growth

Step 1: Warm Up

Start with the quick review.
Spend a few minutes refreshing the ideas before you start a test.

Step 2: Take the Test

Take one full practice test.
Work in a quiet space and let accuracy matter more than speed.

Step 3: Study the Pattern

Check your work honestly.
Circle missed questions and notice patterns in the mistakes.

Step 4: Learn, Then Retry

Read the explanation and try again.
Learning happens after the test too. Fixing mistakes is one of the smartest parts of practice.

A Six-Week Climb Map

Week	Mission Focus
Week 1	Take Test 1 and review any place-value or operation slips.
Week 2	Take Test 2 and focus on showing neat, easy-to-read work.
Week 3	Take Test 3 and give extra time to fractions or decimals if needed.
Week 4	Take Test 4 and slow down on word problems and units.
Week 5	Take Test 5 and compare your score and habits with earlier rounds.
Week 6	Take Test 6 and finish with calm, careful, confident work that uses everything you practiced before.



Scan me

Test Overview

What this practice book helps students do

These practice tests are designed to help Grade 5 students get comfortable with the kind of thinking used on the Connecticut Smarter Balanced. The goal is bigger than only getting answers right. Students are practicing how to read closely, choose a strategy, solve carefully, and explain their work when needed.

Selected-Response Questions

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

Constructed-Response Questions

Students show their thinking, steps, models, or explanations. Even when unsure, writing what they know can help organize the problem.

Grade 5 Skills You Will Practice Often

- place value, comparing numbers, and rounding
- multi-digit addition, subtraction, multiplication, and division
- fractions, decimals, and mixed numbers
- perimeter, area, volume, and measurement conversions
- coordinate points, patterns, graphs, and tables
- geometry and multi-step word problems

What strong work looks like: the answer is correct, the steps are clear, the labels or units are included, and the final result makes sense.



Table of Contents

★ Practice Test 1	_____	16
★ Practice Test 2	_____	32
★ Practice Test 3	_____	46
★ Practice Test 4	_____	61
★ Practice Test 5	_____	74
★ Practice Test 6	_____	90
Practice Test Answer Keys	_____	105
Practice Test Answers and Explanations	_____	109

Grade 5 Mathematics

1

Questions: 40 Duration: No time limit

Calculator Policy: Calculators are not allowed



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

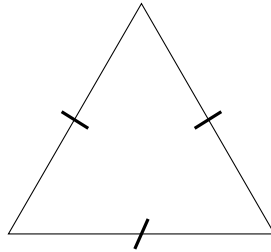
1 minute (min) = 60 seconds (sec) 1 week = 7 days

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

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



- 1) All three sides of the triangle are marked equal. Identify both its side and angle classifications.



- A. Isosceles acute C. Scalene acute
 B. Equilateral right D. Equilateral acute
- 2) A runner jogs 5 laps. Each lap is $\frac{3}{8}$ mile. How far does the runner jog in all?
- A. $1\frac{1}{2}$ miles C. $2\frac{1}{8}$ miles
 B. $\frac{3}{8}$ mile D. $1\frac{7}{8}$ miles
- 3) Write the number that is 10 times 0.045.

Record your answer in the space provided.

- 4) A shipping container is 15 feet long, 10 feet wide, and 8 feet tall. How much space is inside?
- A. 800 ft^3 C. 1200 ft^3
 B. 1000 ft^3 D. 1400 ft^3



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 plant grew 0.35 inches in week 1 and 0.53 inches in week 2. In which week did it grow more?

- A. Week 1
 B. Week 2
 C. Equal growth
 D. Cannot determine

2) Pattern A starts at 1. Pattern B starts at 3.

Step	0	1	2	3	4
Pattern A	1	10	100	1,000	10,000
Pattern B	3	30	300	3,000	30,000

Which statement explains the relationship between the two patterns?

- A. Each Pattern B value is 3 times the matching Pattern A value.
 B. Each Pattern B value is 10 times the matching Pattern A value.
 C. Each Pattern B value is 3 more than the matching Pattern A value.
 D. Each Pattern B value is 10 more than the matching Pattern A value.
- 3) At a school carnival, tickets cost \$0.75 each. How much do 48 tickets cost?
- A. \$30.00
 B. \$24.00
 C. \$36.00
 D. \$42.00
- 4) A rectangular prism has volume 300 cm^3 , length 15 cm, and width 5 cm. Find the height.
- A. 2 cm
 B. 3 cm
 C. 4 cm
 D. 5 cm
- 5) A juice container holds 120 cubic centimeters. A second container holds 80 cubic centimeters. How much more volume does the first container hold?
- A. 20 cubic centimeters
 B. 40 cubic centimeters
 C. 80 cubic centimeters
 D. 200 cubic centimeters



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



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 rectangular prism has the greatest volume?

Prism	Dimensions
A	$6 \times 5 \times 3$
B	$7 \times 4 \times 4$
C	$8 \times 3 \times 4$
D	$5 \times 5 \times 4$

A. Prism A

C. Prism C

B. Prism B

D. Prism D

2) Find the volume: $L = 10$ in, $W = 5$ in, $H = 2$ in. Include cubic inches in your answer.

Record your answer in the space provided.

3) Pattern Eta: 4, 8, 12, 16. Pattern Theta: 7, 11, 15, 19. Analyze the table. Which rule applies?

Eta	Theta
4	7
8	11
12	15
16	19

A. Theta is 3 more than Eta

C. Theta is 3 less than Eta

B. Theta is twice Eta

D. Theta is 7 more than Eta



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 D is correct.** (5.G.B.4) All three sides are equal (equilateral). An equilateral triangle always has three 60-degree angles (acute).
- Choice D is correct.** (5.NF.B.4) Five laps means 5 copies of $\frac{3}{8}$ mile. $5 \times \frac{3}{8} = \frac{15}{8} = 1\frac{7}{8}$ miles.
- The correct answer is 0.45.** (5.NBT.A.1) Multiplying by 10 moves the decimal point one place right: $0.045 \rightarrow 0.45$.
- Choice C is correct.** (5.MD.C.5a) Volume = $15 \times 10 \times 8 = 150 \times 8 = 1200$ ft³.
- Choice B is correct.** (5.G.B.4) Opposite sides parallel and equal makes it a parallelogram. All sides equal makes it a rhombus. No right angles means it is NOT a rectangle or square.
- 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 C is correct.** (5.NF.B.7c) $13 \div \frac{1}{4} = 13 \times 4 = 52$.
- Choice B is correct.** (5.MD.A.1) Total rice: $400 + 400 = 800$ g. Convert: $800 \div 1000 = 0.8$ kg.
- Choice B is correct.** (5.OA.B.3) Multiplying input by 5 gives output: $2 \times 5 = 10$, $4 \times 5 = 20$, $6 \times 5 = 30$, $8 \times 5 = 40$.
- Choice B is correct.** (5.NBT.B.7) Multiplying by 10 shifts the decimal point 1 place to the right. For example, $3.4 \times 10 = 34$.
- Choice B is correct.** (5.NBT.A.2) $156 \times 10 = 1,560$. The total cost is \$1,560.
- Choice B is correct.** (5.MD.C.5a) The known length and height make groups of $9 \times 6 = 54$ cubic inches. Since $432 \div 54 = 8$, the width is 8 inches.
- Choice B is correct.** (5.NF.B.7c) Splitting $\frac{1}{6}$ into 2 equal parts means $\frac{1}{6} \div 2 = \frac{1}{12}$. Each small part is $\frac{1}{12}$ of the whole.
- Choice D is correct.** (5.G.A.2) Rule A gives 6, 9, 12, 15 and Rule B gives 1, 3, 5, 7. The next ordered pair is (15, 7).
- Choice B is correct.** (5.NF.B.5a) Any positive number multiplied by a factor between 0 and 1 produces a smaller result than the original number.
- Choice B is correct.** (5.NF.B.5b) Grid: $5 \times 4 = 20$ cells. Shaded (2 of 4 rows, 3 of 5 columns): $2 \times 3 = 6$ cells. Answer: $\frac{6}{20} = \frac{3}{10}$.
- The correct answer is $5 \div \frac{1}{4} = n$.** (5.NF.B.7c) The total is 5 cups and each serving is one fourth cup, so divide total by serving size.
- Choice D is correct.** (5.MD.C.5a) The base area is $18 \times 7 = 126$ square centimeters. Since $630 \div 126 = 5$, the height is 5 cm.
- Choice B is correct.** (5.OA.A.1) Substitute the values into the expression: $A \times (B + C) = 3 \times (7 + 5)$. The parentheses give 12, and $3 \times 12 = 36$.
- Choice A is correct.** (5.MD.B.2) Each X mark represents one student. Count the marks: $2 + 3 + 3 + 1 = 9$ students.
- Choices A, B are correct.** (5.MD.A.1) C is not true because 1 gallon is 16 cups. D is not true because 1 mile is 5,280 feet.
- Choice C is correct.** (5.G.A.2) Point (3, 7) has neither the same x -coordinate (6) nor the same y -coordinate (5) as (6, 5). The other three points share either an x - or y -coordinate with (6, 5).
- Choice D is correct.** (5.NBT.A.3b) Both represent 2 ones and 5 tenths. Trailing zeros are equivalent.
- The correct answer is 216.** (5.MD.C.3b) One layer has $6 \times 6 = 36$ unit cubes. With 6 layers, the cube has $36 \times 6 = 216$ unit cubes.
- Choice A is correct.** (5.NF.B.7c) $5 \div \frac{1}{2} = 5 \times 2 = 10$ pieces.
- Choice A is correct.** (5.G.A.2) Check the rows: $3 \times 1 - 1 = 2$, $3 \times 2 - 1 = 5$, $3 \times 3 - 1 = 8$, and $3 \times 4 - 1 = 11$.
- Choice B is correct.** (5.MD.C.5) Use the rectangular-prism volume formula: $7 \times 3 \times 2 = 42$. So the volume is 42 cubic inches.
- Choice A is correct.** (5.NF.B.7c) The bar shows one seventh split into 2 equal parts. Each part is half of $\frac{1}{7}$, so $\frac{1}{7} \div 2 = \frac{1}{14}$.
- Choice B is correct.** (5.NBT.A.2) Dividing by 10: $52.3 \div 10 = 5.23$ kg per classroom.



Director's Notes: Final Scene

Greetings, Star Performer!

★ Spectacular performance! You've rehearsed six complete mathematical productions, perfecting your delivery and timing like a professional actor! Each test was a dress rehearsal, allowing you to fine-tune your performance, discover your strengths, and polish your techniques. Opening night (test day) approaches, and you're absolutely ready for the spotlight! ★

◇ **Here's what acclaimed performers understand:** confidence comes from thorough preparation. Professional actors rehearse extensively so that when the curtain rises, they can perform naturally and confidently. You've completed your rehearsals—six of them! Your mathematical performance skills are polished and ready. Trust your preparation and deliver an outstanding show! ◇

Performance Review Notes

1. **Character Development:** You understand your mathematical role completely!
2. **Stage Presence:** You approach problems with confidence and poise!
3. **Line Delivery:** You express solutions clearly and accurately!
4. **Show Ready:** You're prepared for a standing ovation!

Remember this performance wisdom: great actors don't memorize words; they understand characters. You haven't just memorized procedures; you understand mathematical concepts. That deep understanding means you can adapt to any question variation. When the test begins, step into your role confidently and perform brilliantly!

Want to share your mathematical performance insights or celebrate a particularly elegant solution? Send your reviews to reza@testinar.com. I appreciate mathematical artistry!

Reza Nazari & Jay Daie

Your Math Coaches for Confident Answers

6 FULL-LENGTH TESTS. ENDLESS POTENTIAL.

PRACTICE TODAY. SUCCEED TOMORROW.

Give your child the tools they need to build strong math skills and test-taking confidence! This book includes **6 full-length practice tests** along with standards-based practice, mixed review, word problems, and a complete answer key.

★★★
PRACTICE
WITH PURPOSE.
ACHIEVE WITH
CONFIDENCE.

WHAT'S INSIDE:



6 FULL-LENGTH PRACTICE TESTS

Realistic tests designed to reflect the actual test format and help build confidence.



STANDARDS-BASED PRACTICE

Covers all essential Grade 5 math standards with clear explanations and examples.



MIXED REVIEW

Reinforces key concepts with a variety of question types and review exercises.



WORD PROBLEMS

Build critical thinking and problem-solving skills with real-world scenarios.



COMPLETE ANSWER KEY

Step-by-step explanations for every question to support learning and growth.



IMPROVE. PRACTICE. ACHIEVE.

Consistent practice leads to stronger skills, higher scores, and greater success.



WHY PRACTICE MAKES A DIFFERENCE



BUILD CONFIDENCE

Feel prepared and ready for any challenge.



IMPROVE ACCURACY

Strengthen skills and reduce careless mistakes.



THINK STRATEGICALLY

Develop problem-solving skills and deepen understanding.



MANAGE TIME

Practice under timed conditions to build stamina.



STAY MOTIVATED

Track progress and celebrate every win.



ACHIEVE SUCCESS

Reach goals and unlock your full potential!



Visit testinar.com/math5

for more Grade 5 math resources and practice materials!



Testinar

Smart Practice. Stronger Results.