

5

FULL-LENGTH

Connecticut

Smarter Balanced

GRADE 5 MATH

★ PRACTICE TESTS ★



**5 FULL-LENGTH
PRACTICE TESTS**



**COMPLETE
STANDARDS
REVIEW**



**SKILL PRACTICE,
WORD PROBLEMS,
AND MORE!**

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



$$12 \times 3 = 36$$



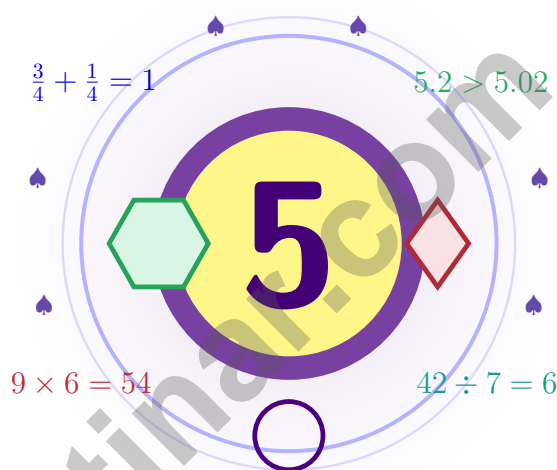
$$\frac{7}{10} = 0.7$$



BUILT FOR SUCCESS. DESIGNED TO HELP EVERY STUDENT.

5 Connecticut Smarter Balanced Grade 5 Math Practice Tests

Five chances to grow your math mind one careful step at a time



Five full tests, a friendly quick review, smart strategy pages, and student-tested support that turn Grade 5 practice in The Constitution State into a steady quest of real growth.

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 ©

Hello, Connecticut – Five-Checkpoint Adventure

Five chances to grow your math mind one careful step at a time

Connecticut Grade 5: This Quest Is for You

This book is your practice zone, not a place to be perfect. Each of the five tests gives you a chance to notice clues, choose a strategy, check your thinking, and come back stronger for the next round. Strong math practice is like a New England harbor: small, well-kept, and ready for any kind of weather.

Some questions will feel easy right away. Some will make you slow down, draw, estimate, or retry. That is excellent news. It means your math brain is doing real work.

Read Slow

Read every word, twice
when needed.

Choose Smart

Pick the operation,
sketch, or table that fits.

Grow

Lock the lesson in by
reflecting after each
problem.

A strong quest habit for Connecticut: slow down, write neatly, estimate before you solve, and keep going even when a problem looks tricky at first. That is exactly how confident math students are built.

Testinar.com



Scan me



Five Checkpoints, One Routine

A simple routine that turns five tests into real growth

Step 1: Set Up

Pencil ready, distractions gone.

Wake up important ideas before you begin so your brain is ready to use them.

Step 2: Work the Test

Take a full test like the real day.

Find a quiet space, work carefully, and let accuracy matter more than speed.

Step 3: Look Back

Walk through your answers without rushing.

Circle missed questions and look for patterns. Which skill or habit needs another try?

Step 4: Climb Higher

Pick one or two skills to sharpen next.

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



Table of Contents

| | | |
|---|-------|------------|
| ★ Practice Test 1 | _____ | 22 |
| ★ Practice Test 2 | _____ | 36 |
| ★ Practice Test 3 | _____ | 53 |
| ★ Practice Test 4 | _____ | 69 |
| ★ Practice Test 5 | _____ | 84 |
| Practice Test Answer Keys | _____ | 99 |
| Practice Test Answers and Explanations | _____ | 103 |

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) Multiply: $\frac{1}{2} \times \frac{1}{3}$

A. $\frac{1}{5}$

B. $\frac{1}{6}$

C. $\frac{2}{5}$

D. $\frac{1}{3}$

2) A place-value chart shows the number 24.6. Which value results from multiplying by 100?

| Thousands | Hundreds | Tens | Ones | . | Tenths |
|-----------|----------|------|------|---|--------|
| | | 2 | 4 | . | 6 |

A. 246

B. 2,460

C. 24,600

D. 0.246

3)

| Number | $\div 10$ | $\div 100$ | $\div 1,000$ |
|--------|-----------|------------|--------------|
| 356 | 35.6 | 3.56 | ? |

What is $356 \div 1,000$?

A. 0.356

B. 3.56

C. 35,600

D. 0.035

4) The ordered pairs (1, 4), (2, 8), and (3, 12) follow a number pattern on the coordinate plane. Which statement describes the relationship?

 A. The first coordinate is 4 times the second.

 B. The second coordinate is 4 more than the first.

 C. The second coordinate is 2 times the first.

 D. The second coordinate is 4 times the first.


5) Add: $\frac{5}{6} + \frac{1}{3}$ and express as a mixed number.

A. $\frac{6}{9}$

B. $\frac{7}{9}$

C. $1\frac{1}{6}$

D. $\frac{5}{6}$

6) Find the missing addend: $2.45 + ? = 5.72$

A. 3.27

B. 3.37

C. 3.47

D. 3.57

7) Estimate: $\frac{5}{9} + \frac{5}{11}$.

A. Close to 0

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

C. Close to 1

D. Close to 2

8) A runner completes $\frac{7}{10}$ of a race, then completes $\frac{1}{5}$ more of the same race. What fraction of the race is left?

A. $\frac{2}{15}$

B. $\frac{8}{10}$

C. $\frac{9}{10}$

D. $\frac{1}{10}$

9) Estimate $1,456 \div 48$ using rounding:

A. $1,500 \div 50 = 30$

B. $1,400 \div 40 = 35$

C. $1,500 \div 50 = 40$

D. $1,400 \div 50 = 28$

10) Order from least to greatest: 19×100 , 190×10 , 1900×1

= ?

= ?

= ?

A. All three are equal

B. $1900 \times 1 < 190 \times 10 < 19 \times 100$

C. $19 \times 100 < 190 \times 10 < 1900 \times 1$

D. $1900 \times 1 < 19 \times 100 < 190 \times 10$



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 | Metric |
|-------------------------------|---|
| 1 foot (ft) = 12 inches (in.) | 1 meter (m) = 100 centimeters (cm) |
| 1 yard (yd) = 3 feet (ft) | 1 centimeter (cm) = 10 millimeters (mm) |
| 1 yard (yd) = 36 inches (in.) | 1 kilometer (km) = 1,000 meters (m) |

CAPACITY

| Customary | Metric |
|------------------------------------|--------------------------------------|
| 1 cup (c) = 8 fluid ounces (fl oz) | 1 liter (L) = 1,000 milliliters (mL) |
| 1 pint (pt) = 2 cups (c) | |
| 1 quart (qt) = 2 pints (pt) | |
| 1 gallon (gal) = 4 quarts (qt) | |

WEIGHT AND MASS

| Customary | Metric |
|-------------------------------|------------------------------------|
| 1 pound (lb) = 16 ounces (oz) | 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 science measurement is 19.455 cm. Which shows correct rounding to nearest tenth?

A. $19.455 \rightarrow 19.4$

C. $19.455 \rightarrow 19.45$

B. $19.455 \rightarrow 19.5$

D. $19.455 \rightarrow 20$

2) Evaluate: $(7 \times 3) - 2 \times (6 - 4)$

A. 17

C. 21

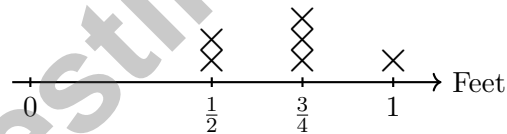
B. 19

D. 38

3) Find the sum: $1\frac{3}{8} + 2\frac{1}{4}$.

Record your answer in the space provided.

4) The line plot shows ribbon lengths, in feet. What is the total length of all the ribbons?



Record your answer in the space provided.



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) If $15.42 - ? = 8.67$, what is the missing value?

A. 7.15

C. 6.75

B. 6.85

D. 7.25

2) A storage box has length 9 in, width 4 in, height 5 in. Find its volume.

Record your answer in the space provided.

3) A triangle has angles of 112 degrees, 38 degrees, and 30 degrees. What type of triangle is it based on its angles?

A. Acute

C. Obtuse

B. Right

D. Equilateral

4) Which expression represents “multiply the sum of 3 and 5 by 2”?

A. $3 + 5 \times 2$

B. $(3 + 5) \times 2$

C. $3 \times (5 + 2)$

D. $3 + (5 \times 2)$

5) Liam said $1 - \frac{2}{6} = \frac{0}{6}$. Is Liam correct?

A. Correct

C. Wrong; answer is $\frac{1}{6}$

B. Wrong; answer is $\frac{4}{6} = \frac{2}{3}$

D. Wrong; answer is $\frac{3}{6}$



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) Kelly wrote $5 + (6 \times 8)$. Which sentence best describes her expression?
- A. Add 5 to the product of 6 and 8
 - B. Multiply 5 and 6, then add 8
 - C. Subtract 5 from 6×8
 - D. Divide 6×8 by 5
- 2) A sporting goods company ships items in cartons of 100. To ship 4200 items, how many cartons are needed?
- A. 42
 - B. 100
 - C. 4200
 - D. 420000
- 3) Round 12.652 to the nearest hundredth.

Record your answer in the space provided.

- 4) What is the y-coordinate of $(8, 0)$?

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

- 1) **Choice B is correct.** **(5.NF.B.5b)** Multiply numerators and denominators: $\frac{1 \times 1}{2 \times 3} = \frac{1}{6}$.
- 2) **Choice B is correct.** **(5.NBT.A.2)** Multiplying by 100 moves each digit two places to a larger place value. That changes 24.6 to 2,460.
- 3) **Choice A is correct.** **(5.NBT.A.2)** Dividing by 1,000 moves the decimal 3 places left: $356 \div 1,000 = 0.356$.
- 4) **Choice D is correct.** **(5.G.A.2)** For each point, multiply the first coordinate by 4: $1 \times 4 = 4$, $2 \times 4 = 8$, and $3 \times 4 = 12$.
- 5) **Choice C is correct.** **(5.NF.A.1)** $\text{LCM}(6,3) = 6$. $\frac{1}{3} = \frac{2}{6}$. $\frac{5}{6} + \frac{2}{6} = \frac{7}{6} = 1\frac{1}{6}$.
- 6) **Choice A is correct.** **(5.NBT.B.7)** Subtract: $5.72 - 2.45 = 3.27$. Check: $2.45 + 3.27 = 5.72$.
- 7) **Choice C is correct.** **(5.NF.A.2)** $\frac{5}{9} \approx \frac{1}{2}$ and $\frac{5}{11} \approx \frac{1}{2}$. So $\frac{5}{9} + \frac{5}{11} \approx 1$.
- 8) **Choice D is correct.** **(5.NF.A.2)** Completed: $\frac{7}{10} + \frac{1}{5} = \frac{7}{10} + \frac{2}{10} = \frac{9}{10}$. Left: $1 - \frac{9}{10} = \frac{1}{10}$.
- 9) **Choice A is correct.** **(5.NBT.B.6)** Round: $1,456 \approx 1,500$ and $48 \approx 50$. So $1,500 \div 50 = 30$. Actual: $1,456 \div 48 = 30 \text{ R}16$.
- 10) **Choice A is correct.** **(5.NBT.A.2)** $19 \times 100 = 1900$, $190 \times 10 = 1900$, and $1900 \times 1 = 1900$. All equal 1900.
- 11) **Choice A is correct.** **(5.OA.A.2)** First find all the cookies on the trays: $5 \times 12 = 60$. Then subtract the 20 cookies sold, leaving $60 - 20 = 40$ cookies.
- 12) **Choice C is correct.** **(5.NF.B.7c)** $5 \div \frac{1}{3} = 5 \times 3 = 15$. She uses 15 batches.
- 13) **Choice C is correct.** **(5.NBT.B.5)** Round 47 to 50 and 21 to 20. Then $50 \times 20 = 1,000$.
- 14) **The correct answer is $3\frac{1}{3}$.** **(5.NF.B.4)** Five copies of $\frac{2}{3}$ give $\frac{10}{3}$. Three thirds make each whole, so $\frac{10}{3} = 3\frac{1}{3}$.
- 15) **Choice B is correct.** **(5.NF.B.7c)** One slice is $\frac{1}{8}$. Dividing by 2: $\frac{1}{8} \div 2 = \frac{1}{16}$.
- 16) **Choice A is correct.** **(5.NF.B.4b)** $\frac{2}{3} \times \frac{2}{5} = \frac{4}{15}$. The overlap covers 4 squares out of 15 total.
- 17) **Choice A is correct.** **(5.MD.A.1)** Since 1 pound = 16 ounces, 3 pounds = $3 \times 16 = 48$ ounces. Carlos is correct.
- 18) **Choice D is correct.** **(5.NF.B.5b)** A, B, and D each equal 5. C gives $\frac{11}{4} \times 2 = \frac{11}{2} = 5\frac{1}{2}$, which is between 5 and 6.
- 19) **Choice A is correct.** **(5.NF.A.2)** Multiples of 12: 12, 24, 36, ... Multiples of 9: 9, 18, 27, 36, ... The first common multiple is 36, so the LCD is 36.
- 20) **Choice A is correct.** **(5.G.B.4)** Each angle, 50° , 60° , and 70° , is less than 90° . A triangle with three acute angles is an acute triangle.
- 21) **Choices A, B are correct.** **(5.NBT.B.7)** Align decimals and subtract. A and B are true. C should be 0.70, and D should be 2.97.
- 22) **Choice C is correct.** **(5.NF.A.2)** $\frac{1}{4} = \frac{3}{12}$. $\frac{11}{12} - \frac{3}{12} = \frac{8}{12} = \frac{2}{3}$.
- 23) **Choice C is correct.** **(5.NBT.A.2)** Move the decimal point 1 place right: $2.13 \times 10 = 21.3$.
- 24) **The correct answer is 5 polygons.** **(5.G.B.4)** $12 - 7 = 5$ polygons are outside the quadrilateral part of the diagram.
- 25) **Choice B is correct.** **(5.OA.B.3)** Add 0.5 each time. Term 12: $0.5 + 11(0.5) = 0.5 + 5.5 = 6.0$.
- 26) **Choice C is correct.** **(5.OA.A.2)** Splitting the whole sum into 5 equal parts gives the same result as splitting 40 into 5 equal parts, splitting 60 into 5 equal parts, and then adding.
- 27) **Choice A is correct.** **(5.NF.B.7c)** Start with one unit fraction, $\frac{1}{7}$, and share it into 4 equal parts. Each part is $\frac{1}{7} \div 4 = \frac{1}{28}$ of the whole.
- 28) **Choice D is correct.** **(5.MD.C.4)** Correct volume: $4 \times 3 \times 2 = 24$ unit cubes. Front face only is an error that ignores depth.
- 29) **Choice D is correct.** **(5.NF.B.7c)** The unit fraction is the amount being shared, so divide $\frac{1}{5}$ by 2. The equation is $\frac{1}{5} \div 2 = n$.
- 30) **Choice B is correct.** **(5.NBT.A.4)** 4.58 is between 4.5 and 4.6. The tenths digit is 5, hundredths is 8. Since $8 \geq 5$, round tenths up: $5 \rightarrow 6$, giving 4.6.
- 31) **Choice A is correct.** **(5.NF.A.2)** Divide both numerator and denominator by 50: $\frac{50}{100} = \frac{1}{2}$.



Gallery Exhibition Preview

Hello, Mathematical Artist!

★ Magnificent gallery! You've created five complete collections of mathematical artwork, carefully crafting solutions with precision and creativity like a master artist! Each problem was a blank canvas waiting for your artistic mathematical expression. You've filled your gallery with beautiful work that demonstrates both technical skill and creative insight! ★

◇ **Here's what accomplished artists know:** creating masterpieces requires vision, technique, and practice. Artists sketch ideas, experiment with methods, and refine their work through multiple iterations. You've practiced that artistic process through these five tests! Your mathematical artistry has matured, and your techniques have become refined and confident! ◇

Artist's Portfolio Review

1. **Creative Vision:** You see multiple approaches to mathematical challenges!
2. **Technical Skill:** Your execution of procedures is precise and clean!
3. **Artistic Expression:** Your solutions show both logic and elegance!
4. **Exhibition Ready:** Your portfolio is complete and impressive!

Remember this artistic wisdom: great artists develop their unique style through practice. Your mathematical style your way of approaching problems, organizing work, and verifying answers has become distinctly yours. On test day, express your mathematical artistry confidently. The world is ready to admire your work!

Want to display a particularly beautiful solution or discuss mathematical aesthetics? Send your artwork to reza@testinar.com. I celebrate mathematical creativity!

Reza Nazari & Jay Daie

Your Math Coaches for Neat Work and Clear Steps

5 FULL-LENGTH TESTS. STRONG SKILLS. BRIGHTER RESULTS.



Build confidence and master math with **5 full-length** practice tests designed to reflect the real test experience. This book provides the practice, review, and support students need to succeed in Grade 5 and beyond!

WHAT'S INSIDE:



5 FULL-LENGTH PRACTICE TESTS

Realistic tests that build familiarity, boost focus, and improve test readiness.



COMPLETE STANDARDS REVIEW

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



SKILL PRACTICE

Strengthen key math skills through a wide variety of practice questions.



WORD PROBLEMS

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



FULL ANSWER KEY

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



PRACTICE MORE. LEARN BETTER. SUCCEED ANYWHERE.



Build Confidence
with consistent
practice



Improve Accuracy
and problem-
solving skills



Time Management
strategies for
test success



**Achieve Your
Best Score!**



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



Testinar
Smart Practice. Stronger Results.