

9

Delaware

DeSSA

GRADE 5 MATHEMATICS PRACTICE TESTS

Full-Length Standards-Aligned Practice
for Strong Math Performance

$$A = l \times w$$

$$x^2 + 3x - 4 = 0$$

$$y = 2x + 1$$



9

FULL-LENGTH
PRACTICE
TESTS

$$2,345 \times 6 = 14,070$$



$$\frac{3}{4} + \frac{1}{8} = \frac{7}{8}$$

$$7.2 \div 0.8 = 9$$



$$(12 + 8) \div 4 = 5$$



Build Confidence



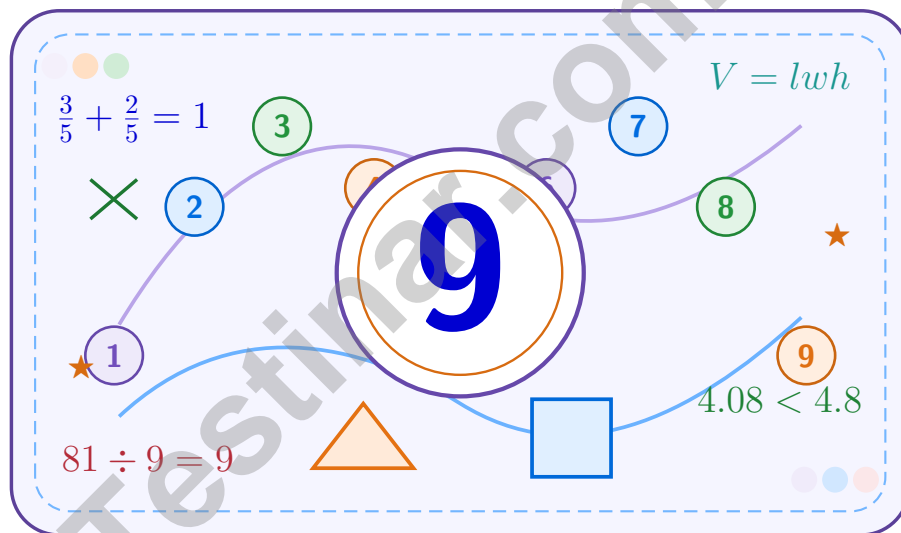
Improve Math Skills



Achieve Success

9 Delaware DeSSA Grade 5 Math Practice Tests

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



Nine full tests, focused skill boosters, 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 nine 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 nine tests into steady growth

A Nine-Session Climb Map

Session	Mission Focus
1	Take Test 1; review place value and operation slips.
2	Take Test 2; keep work neat and easy to read.
3	Take Test 3; give extra time to fractions and decimals.
4	Take Test 4; slow down on word problems and units.
5	Take Test 5; compare scores and habits with earlier rounds.
6	Take Test 6; notice which habits are now automatic.
7	Take Test 7; explain open-ended answers clearly.
8	Take Test 8; review topics that still need attention.
9	Take Test 9; finish with calm, careful, confident work.

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.



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 Delaware DeSSA. 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	_____	30
★ Practice Test 3	_____	44
★ Practice Test 4	_____	58
★ Practice Test 5	_____	73
★ Practice Test 6	_____	88
★ Practice Test 7	_____	103
★ Practice Test 8	_____	118
★ Practice Test 9	_____	133
Practice Test Answer Keys	_____	148
Practice Test Answers and Explanations	_____	154

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) Write 0.8 as a fraction.

- A. $\frac{8}{100}$
 B. $\frac{8}{1000}$

- C. $\frac{80}{10}$
 D. $\frac{8}{10}$

2) Find: $832 \div 16$.

Record your answer in the space provided.

3) Is the difference $11 - 6\frac{7}{9}$ estimated correctly as 4, and within how much of the true value?

- A. Yes, exact; no error
 B. Within 0.3

- C. Within 0.5 but not exact
 D. Off by more than 0.5

4) Pattern A has values 4, 8, 12, 16. Pattern B has values 8, 16, 24, 32. At the same position, how is Pattern B related to Pattern A?

- A. Pattern B is 4 more than Pattern A.
 B. Pattern B is twice Pattern A.

- C. Pattern B is half of Pattern A.
 D. Pattern B is equal to Pattern A.

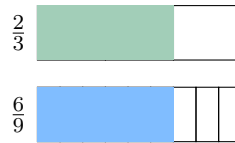
5) Round 15.349 to the nearest tenth.

- A. 15.3
 B. 15.35

- C. 15.4
 D. 15.5



6) Two fraction bars are shown below. Which equation do they demonstrate?



- A. $\frac{2}{3} = \frac{4}{9}$
 C. $\frac{2}{3} = \frac{3}{6}$
 B. $\frac{2}{3} > \frac{6}{9}$
 D. $\frac{2}{3} = \frac{6}{9}$

7) Which subtraction result is NOT in simplest form?

- A. $7\frac{3}{8} - 2\frac{2}{8}$ gives $5\frac{1}{8}$
 C. $8\frac{6}{9} - 3\frac{2}{9}$ gives $5\frac{4}{9}$
 B. $6\frac{4}{10} - 1\frac{1}{10}$ gives $5\frac{3}{10}$
 D. $9\frac{8}{12} - 4\frac{5}{12}$ gives $5\frac{3}{12}$

8) Find the least common denominator of $\frac{5}{12}$ and $\frac{7}{8}$.

Record your answer in the space provided.

9) Multiply: $\frac{2}{5} \times \frac{2}{3}$

- A. $\frac{4}{8}$
 C. $\frac{4}{15}$
 B. $\frac{5}{8}$
 D. $\frac{2}{3}$

10) A rectangular prism measures 5 cm by 4 cm by 9 cm. What is its volume?

- A. 160 cm^3
 C. 200 cm^3
 B. 180 cm^3
 D. 220 cm^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) Multiply: $\frac{2}{3} \times \frac{3}{4}$

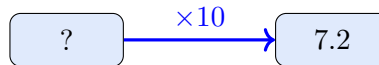
A. $\frac{5}{7}$

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

C. $\frac{6}{7}$

D. $\frac{8}{12}$

2) A place-value relationship is shown. Fill in the missing value.



A. 720

B. 72

C. 0.072

D. 0.72

3)

$30 \times 10 = 300$	$2 \times 10 = 20$
$30 \times 5 = 150$	$2 \times 5 = 10$

Using the area model above, what is 32×15 ?

A. 470

B. 480

C. 490

D. 500

4) A small greenhouse model measures 12 meters long, 7 meters wide, and 2 meters tall. What is its volume?

A. 84 cubic meters

B. 24 cubic meters

C. 14 cubic meters

D. 168 cubic meters



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

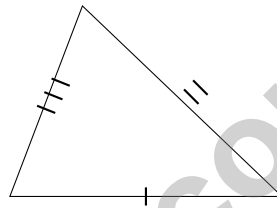
1 day = 24 hours (hr) 1 year = 52 weeks



- 1) A rectangular aquarium has a base measuring 18 in \times 12 in and a height of 10 in. What is its volume?

Aquarium
Base 18 in \times 12 in, Height 10 in

- A. 1800 in³ C. 2160 in³
 B. 2000 in³ D. 2400 in³
- 2) Look at the triangle. The sides have different tick marks. What type is it?



- A. Equilateral C. Scalene
 B. Isosceles D. Right
- 3) Maria has \$25.00 and spends \$8.65 on a book and \$3.50 on a pen. How much does she have left?

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 Delaware scores.

Testinar.com



Scan me

Practice Test Answers and Explanations

Practice Test 1 Answers and Explanations

- Choice D is correct.** (5.NBT.A.3a) 0.8 has one decimal place, which represents tenths. So $0.8 = \frac{8}{10}$.
- The correct answer is 52.** (5.NBT.A.3a) $16 \times 50 = 800$, leaving 32. $32 \div 16 = 2$. So quotient is $50 + 2 = 52$.
- Choice C is correct.** (5.NBT.B.6) $6\frac{7}{9} \approx 7$. So $11 - 6\frac{7}{9} \approx 11 - 7 = 4$. True: $11 - 6\frac{7}{9} = 4\frac{2}{9} \approx 4.22$. Difference: $4.22 - 4 = 0.22 < 0.5$. Close estimate.
- Choice B is correct.** (5.OA.B.3) Compare corresponding terms: $8 = 2 \times 4$, $16 = 2 \times 8$, $24 = 2 \times 12$, and $32 = 2 \times 16$. Pattern B is twice Pattern A.
- Choice A is correct.** (5.NBT.A.4) The tenths digit is 3. The hundredths digit is 4. Since $4 < 5$, round down. 15.349 rounded to the nearest tenth is 15.3.
- Choice D is correct.** (5.NBT.A.4) Both shaded regions cover the same length of bar. Multiplying numerator and denominator of $\frac{2}{3}$ by 3 gives $\frac{6}{9}$, so the fractions are equivalent.
- Choice D is correct.** (5.NF.A.1) D is not in simplest form because $5\frac{3}{12}$ simplifies to $5\frac{1}{4}$. A, B, and C are already in simplest form.
- The correct answer is 24.** (5.NF.A.2) The least common multiple of 12 and 8 is 24.
- Choice C is correct.** (5.NF.A.2) $\frac{2}{5} \times \frac{2}{3} = \frac{2 \times 2}{5 \times 3} = \frac{4}{15}$.
- Choice B is correct.** (5.NF.B.5b) $5 \times 4 \times 9 = 20 \times 9 = 180 \text{ cm}^3$.
- Choice C is correct.** (5.MD.C.5a) Convert: $\frac{3}{4} = \frac{6}{8}$. Then $\frac{6}{8} + \frac{2}{8} = \frac{8}{8} = 1$ mile total.
- Choice D is correct.** (5.OA.A.1) The student added before multiplying, as if the expression were $(8 + 3) \times 2$. In the original expression, multiplication comes first: $8 + (3 \times 2) = 8 + 6 = 14$.
- Choice A is correct.** (5.NF.B.5b) $3\frac{3}{4} \times 3 = \frac{15}{4} \times 3 = \frac{45}{4} = 11\frac{1}{4}$ feet.
- The correct answer is $(20 - 6) \div 7$.** (5.OA.A.2) The phrase "then divide by 7" applies to the result of $20 - 6$, so use $(20 - 6) \div 7$.
- Choice C is correct.** (5.OA.A.2) Front face: $2 \times 3 = 6$ cubes per layer. With depth 4: $6 \times 4 = 24$ unit cubes.
- Choice B is correct.** (5.NF.B.7c) The unit fraction is the amount being shared, so divide $\frac{1}{6}$ by 3. The equation is $\frac{1}{6} \div 3 = n$.
- Choice D is correct.** (5.NF.B.7c) Dividing by 10 moves each digit one place to the right in the place-value chart, so $7 \div 10 = 0.7$.
- Choice D is correct.** (5.NBT.A.2) $12 \times \frac{1}{4} = 3$ feet. Multiplying by a fraction less than 1 shrinks the quantity.
- Choice B is correct.** (5.NF.B.5a) Each whole contains 8 pieces of size $\frac{1}{8}$. With 2 wholes, there are $2 \times 8 = 16$ 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.
- Choices A, B are correct.** (5.NBT.B.7) A is true because 3 copies of $(6 + 4)$ can be written as 2 copies plus 1 more copy. B is true because 10 groups of 7 are greater than 10 groups of $7 - 1$. C adds an extra 9, and D leaves out one group of 5.
- Choice D is correct.** (5.NBT.B.7) $0.5 \div 2 = 0.25$, which is indeed less than 0.5. Dividing by a whole number greater than 1 makes the result smaller.
- Choice B is correct.** (5.G.A.2) The ordered pairs should be (2,1), (4,2), and (6,3), so Student 2 is correct.
- Choice D is correct.** (5.NF.A.2) LCD = 12. $\frac{3}{4} = \frac{9}{12}$; $\frac{1}{3} = \frac{4}{12}$. $\frac{9}{12} - \frac{4}{12} = \frac{5}{12}$.
- Choice D is correct.** (5.NF.A.2) A parallelogram has two pairs of parallel sides. Figure D has two pairs of opposite sides parallel; Figures A, B, and C do not.
- Choice D is correct.** (5.G.B.3) The right trapezoid shown has 2 right angles (on the left side, marked with squares) and 2 non-right angles on the right.
- Choice B is correct.** (5.G.A.1) The y-coordinate tells the vertical distance above the x-axis. A y-coordinate of 10 means the point is 10 units above the x-axis.
- Choice A is correct.** (5.NF.B.4b) $\frac{4}{7} \times \frac{1}{2} = \frac{4}{14}$. The overlap has 4 squares out of 14 total.



Case Closed: Success Ahead

Greetings, Math Detective!

◇ Outstanding investigation! You've cracked the code on 9 complete practice tests, examining every clue and solving every mathematical mystery like a brilliant detective! Each problem was a puzzle, and you methodically gathered evidence, analyzed patterns, and reached accurate conclusions. That analytical thinking you've developed will serve you well on test day and beyond! ◇

★ **Here's what master detectives know:** not every case solves itself immediately. Sometimes you need to examine the evidence from different angles, try various approaches, and remain persistent until you crack the code. You've practiced exactly that through these 9 tests! Your investigative skills have sharpened considerably, and you're ready to solve any mathematical mystery that comes your way! ★

Detective's Case File: Your Skills

- **Clue Collection:** You gather all important information from problems before solving!
- **Pattern Recognition:** You identify mathematical patterns like a trained investigator!
- **Evidence Analysis:** You evaluate which strategies work best for each problem type!
- **Case Resolution:** You stay focused until you've found the correct solution!

Detective wisdom: the best investigators take notes about their methods so they can solve similar cases faster in the future. Your brain has been doing exactly that throughout these 9 tests, storing successful strategies in your mental filing cabinet. On test day, you'll be able to retrieve those proven methods instantly!

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 Detective Coach

PRACTICE MORE. ACHIEVE MORE.

Give your child the edge they need to excel in **Grade 5 Math!** This book includes **9 full-length** practice tests designed to build confidence, sharpen skills, and improve test performance.

9

**FULL-LENGTH
PRACTICE
TESTS**

- ✓ Realistic.
- ✓ Rigorous.
- ✓ Results-Driven.

More practice today for a **stronger** tomorrow.



THIS BOOK HELPS YOUR CHILD:



Build Confidence

Familiar, focused practice reduces anxiety and boosts self-belief.



Strengthen Skills

Reinforces key math concepts through high-quality, standards-aligned questions.



Improve Test Readiness

Full-length tests help students understand test format, pacing, and question types.



Track Progress

Identify strengths and target areas with purposeful practice.



Achieve Success

Better preparation leads to higher scores and bright futures.

COVERS ALL ESSENTIAL TOPICS

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



Visit testinar.com/math5

for more Grade 5 math resources and practice materials!



Aligned to Standards



Created by Educators



Trusted by Parents & Teachers