

4 Delaware DeSSA

GRADE
6
MATH

PRACTICE TESTS

Standards Aligned Problem Solving
For Comprehensive Assessment Programs

4

**PRINTED
TESTS**



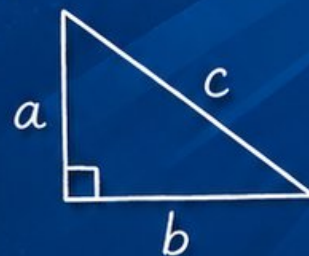
2

**ONLINE
TESTS**



- ✓ Build Confidence
- ✓ Master Key Math Skills
- ✓ Answer Explanations for Every Question
- ✓ Test-Taking Strategies That Work

$$2x + 5 = 21$$
$$x = 8$$



$$\frac{3}{4} + \frac{1}{2} = \frac{5}{4}$$



**USE THESE TWO
ADDITIONAL ONLINE
PRACTICE TESTS**

**FOR EXTRA REVIEW AFTER
THE PRINTED TESTS
IN THIS BOOK.**

4 Delaware DeSSA Grade 6 Math Practice Tests

Standards-Aligned Small-State Sharp Focus for Delaware System of Student Assessments



Four complete 40-question Grade 6 practice rounds for DeSSA, built for small-state sharp focus with ratios, rational numbers, expressions, equations, geometry, statistics, answer keys, and clear explanations for every item.

Jay Daie and Reza Nazari



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Welcome, Delaware Math Explorer!

Four focused rounds using small-state sharp focus

This book gives you four full Grade 6 practice tests for DeSSA. Each round uses bay paths, classroom routines, and tidy problem notes as a fresh mental backdrop while you read closely, choose a smart strategy, show your work, and check whether your answer makes sense.

Your Delaware Practice Promise

Keep the work compact and clear: underline the task, solve, then check the question again.

Read

Plan

Check

How to Use This Book

A four-session routine for small-state sharp focus

1. **Work in order.** Take one 40-question test at a time in a quiet place.
2. **Preview the skills.** Scan the quick review pages before beginning the first round.
3. **Correct actively.** Retry missed items before reading the full explanation.
4. **Mark confidence.** Put a small star beside problems where your plan felt strong.
5. **Plan the next round.** Use the growth log to choose one habit and one skill to practice.

Delaware review rhythm: Use one test at a time, then turn missed items into a short practice list.



What Is Inside?

Four DeSSA tests, 160 questions, and a full review path

Part	What You Will Practice
Tests 1–2	Foundation rounds for ratios, rational numbers, operations, and careful reading.
Tests 3–4	Skill-building and final stamina rounds with expressions, equations, geometry, data, and problem models.
Answer Pages	Compact keys and explanations that show why each answer works.

The tests are mixed on purpose. Small-state sharp focus means recognizing the skill even when the next question changes topic, changes format, or asks for an explanation.



Scan me!
For more practice
& answers

Table of Contents

★ Practice Test 1	_____	14
★ Practice Test 2	_____	31
★ Practice Test 3	_____	47
★ Practice Test 4	_____	64
Practice Test Answer Keys	_____	81
Practice Test Answers and Explanations	_____	84

1) Which expression is equivalent to $2(5x - 4)$?

A. $10x - 8$

C. $5x - 8$

B. $7x - 2$

D. $10x - 4$

2) Which pair of numbers are opposites?

A. -12 and 21

C. 6 and -6

B. -9 and -9

D. 0 and -0

3) The absolute value of a negative number is:

A. Always negative

D. Sometimes negative and sometimes positive

B. Always positive

C. Always zero

4) Which fraction is equivalent to -0.5 on a number line?

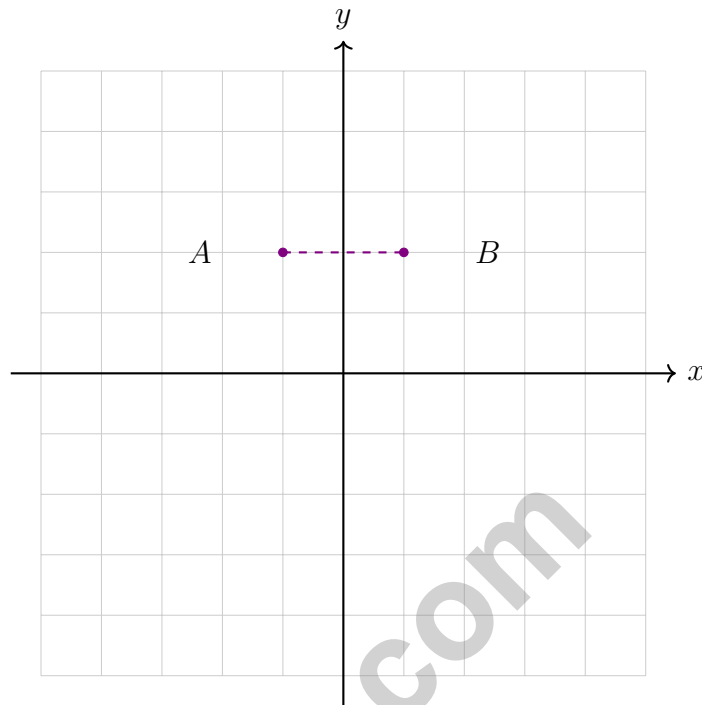
A. $-\frac{1}{4}$

C. $-\frac{2}{3}$

B. $-\frac{3}{4}$

D. $-\frac{1}{2}$





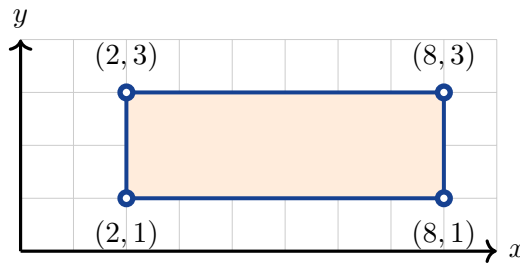
5)

Points A and B are shown. Which transformation was applied to point A to get point B ?

- A. Reflection across the x -axis
- B. Reflection across the y -axis
- C. A translation to the right
- D. A rotation of 90 degrees



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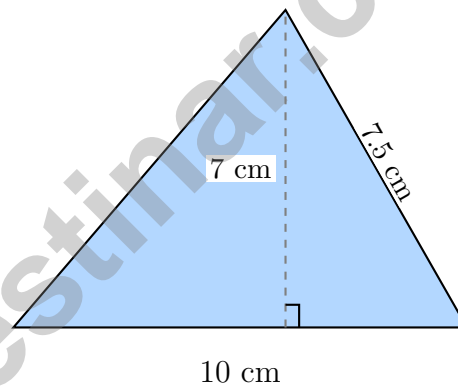


6)

What is the height (vertical length) of the rectangle with vertices at $(2, 1)$, $(8, 1)$, $(8, 3)$, and $(2, 3)$?

- | | |
|-------------------------------------|-------------------------------------|
| <input type="checkbox"/> A. 2 units | <input type="checkbox"/> C. 6 units |
| <input type="checkbox"/> B. 4 units | <input type="checkbox"/> D. 8 units |

7) Identify the height in the triangle shown. The height must be perpendicular to the base.



- | | |
|------------------------------------|------------------------------------|
| <input type="checkbox"/> A. 10 cm | <input type="checkbox"/> C. 7 cm |
| <input type="checkbox"/> B. 7.5 cm | <input type="checkbox"/> D. 3.5 cm |



1) Using the same dot plot from the previous question, what is the mean number of books read (rounded to the nearest whole number)?

A. 3

C. 5

B. 4

D. 6

2) Which pairs a question with the correct type?

A. “How many days are in February?” (Statistical)

C. “What are the weights of puppies in a litter?” (Statistical)

B. “What is the price of apples?” (Non-statistical)

D. “What colors are the backpacks in class?” (Non-statistical)

3) Find the mean of the data set: 7, 14, 21, 28.

4) A coin is flipped and a die is rolled. How many possible outcomes are in the sample space?

A. 8

C. 24

B. 12

D. 36



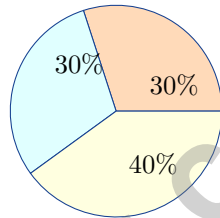
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5) A game records scores over 12 rounds:

Stem	Leaf
4	5, 7, 8
5	1, 2, 4, 6, 8, 9
6	2, 3

What is the difference between the maximum and minimum scores?

- A. 18 C. 16
 B. 17 D. 15



6)

In a circle graph with 280 total items, if one section is 30%, how many items does that section contain?

- A. 84 C. 70
 B. 80 D. 75

7) For 68, 70, 72, 75, 73, 71, 69, find the interquartile range.



- 1) A printer produces pages at a constant rate. The graph passes through (4, 240) and the origin. What is the value of pages when minutes = 1?
- A. 40 pages per minute C. 60 pages per minute
 B. 50 pages per minute D. 80 pages per minute
- 2) Divide $9,108 \div 52$ and identify the quotient (whole-number part). Round down if there is a remainder.
- A. 175 C. 183
 B. 180 D. 190
- 3) A painter charges \$40 per hour. If the painter works for 3.5 hours, what is the total charge? Show that the relationship between hours and cost is proportional by checking that the equation $c = 40h$ passes through the origin.

- 4) Which shows the correct placement of the decimal point?
 $32 \times 15 = 480$ with decimals: $3.2 \times 1.5 = ?$
- A. 48.0 C. 480
 B. 0.480 D. 4.80



5) Which prime factorization equals 48?

A. $2^4 \times 3$

B. $2^3 \times 6$

C. 2×24

D. $2^2 \times 12$

6) What is the GCF of 32 and 48?

A. 8

B. 12

C. 16

D. 32

7) A number line shows tick marks at tenths from -2 to 1 . Point G is marked at -1.4 . What is the distance from point G to 0 ?

A. 0.6

B. 2.4

C. 1.6

D. 1.4



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For more practice
& answers

Delaware DeSSA Practice Test Answer Keys

How to use this Delaware DeSSA answer section with a Grade 6 student:

1. check the answer first, then write one quick reason the choice is correct
2. mark questions to try again, especially the skills that feel connected to small-state sharp focus
3. rework the problem before reading the full explanation, using this reminder:
Keep the work compact and clear: underline the task, solve, then check the question again.

A calm Delaware correction routine turns every missed item into useful practice. Use one test at a time, then turn missed items into a short practice list.



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Delaware Practice Test Answers and Explanations

Review the four printed DeSSA tests with focused, neat, and ready for the next round habits.

Practice Test 1 Answers and Explanations

- 1) **Choice A is correct.** **(6.EE.A.3)** Distribute: $2(5x - 4) = 2 \cdot 5x - 2 \cdot 4 = 10x - 8$.
- 2) **Choice C is correct.** **(6.NS.C.5)** Opposites are numbers that are the same distance from zero but on opposite sides. 6 is 6 units right of zero, and -6 is 6 units left of zero, making them opposites.
- 3) **Choice B is correct.** **(6.NS.C.7c)** Absolute value is defined as the distance from zero, which is always non-negative (positive or zero).
- 4) **Choice D is correct.** **(6.NS.C.6c)** The decimal -0.5 equals one-half of -1 , which is $-\frac{1}{2}$.
- 5) **Choice B is correct.** **(6.NS.C.8)** Point A is at $(-1, 2)$ and point B is at $(1, 2)$. The y -coordinate stays the same while the x -coordinate changes sign, which is a reflection across the y -axis.
- 6) **Choice A is correct.** **(6.NS.C.8)** Height is the vertical distance: $|3 - 1| = 2$ units.
- 7) **Choice C is correct.** **(6.G.A.1)** The height is the perpendicular distance from the base to the opposite vertex, shown by the dashed line as 7 cm.
- 8) **Choice C is correct.** **(6.G.A.1)** Area = $8 \times 3 = 24 \text{ km}^2$.
- 9) **Choice B is correct.** **(6.G.A.2)** $V = 5 \times 3 \times 0.5 = 15 \times 0.5 = 7.5 \text{ in}^3$.
- 10) **Choice B is correct.** **(6.G.A.1)** Width: $8 - 3 = 5$ units. Height: $8 - 3 = 5$ units. Area = $5 \times 5 = 25$ square units.
- 11) **Choice D is correct.** **(6.G.A.4)** A straight line of 6 unit squares cannot fold into a cube without overlap or gaps. Valid cube nets require a more compact 2D arrangement (like a cross or T-shape) such that the net folds into 3D with no overlaps.
- 12) **Choice C is correct.** **(6.NS.C.7d)** Negatives come before positives. $-\frac{3}{4} = -0.75 < -\frac{1}{4} = -0.25 < \frac{1}{4} = 0.25 < \frac{3}{4} = 0.75$.
- 13) **Choice A is correct.** **(6.EE.A.2a)** “The product of 3 and 4” is $3 \cdot 4 = 12$. “The sum of r and” that product is $r + 3 \cdot 4$.
- 14) **Choice A is correct.** **(6.G.A.3)** The vertices $(2, 2)$, $(5, 2)$, $(5, 5)$, and $(3, 5)$ do not form a rectangle. The bottom side goes from $x = 2$ to $x = 5$ (length 3), but the top side goes from $x = 3$ to $x = 5$ (length 2). The sides are not parallel, so it is not a rectangle.
- 15) **Choice B is correct.** **(6.SP.B.5)** Sum = $2 + 3 + 4 + 4 + 5 + 5 + 5 + 6 + 7 + 8 = 49$. Mean = $49/10 = 4.9$.
- 16) **Choice D is correct.** **(6.NS.C.7d)** Although linear, this is not proportional because when $m = 0$, $c = 50 \neq 0$. Proportional relationships have no constant term and pass through the origin.
- 17) **The correct answer is 30%.** **(6.RP.A.3c)** $\frac{15}{50} = \frac{30}{100} = 30\%$ (multiply numerator and denominator by 2).
- 18) **Choice B is correct.** **(6.EE.C.9)** The ratio is $\frac{15}{100} = 0.15 = 15\%$.
- 19) **Choice B is correct.** **(6.RP.A.3)** Divide: $16 \text{ m} \div 8 \text{ cm} = 2 \text{ m per cm}$. Scale is $1 \text{ cm} = 2 \text{ m}$.
- 20) **Choice C is correct.** **(6.NS.A.1)** Rewrite the division as multiplication by flipping $\frac{1}{3} : \frac{5}{6} \times \frac{3}{1} = \frac{15}{6}$. Simplify $\frac{15}{6}$ to $\frac{5}{2}$ (or mixed form $2\frac{1}{2}$).
- 21) **Choice A is correct.** **(6.NS.B.2)** Verification: $28 \times 156 = 4,368$. Marcus’s answer is exactly correct—no remainder.
- 22) **The correct answer is The unit rate is 25 items per hour, and the y-value when $x = 1$ is 25.** **(6.RP.A.3a)** A is correct because $50 \div 2 = 25$ items per hour. D is correct because when $x = 1$, $y = 25$. Choice B is false for a proportional relationship, Choice C should be $y = 25x$, and Choice E is false.
- 23) **Choice B is correct.** **(6.NS.B.3)** $4.2 \times 0.5 = 2.1 = 2.10$. They have the same value; trailing zeros do not change the decimal’s worth.
- 24) **Choice B is correct.** **(6.NS.B.4)** $56 = 8 \times 7 = (2 \times 2 \times 2) \times 7 = 2^3 \times 7$. Options A, C, and D contain composite factors.
- 25) **The correct answer is 90.** **(6.RP.A.3c)** 60% of $150 = 0.60 \times 150 = 90$ students.



Hi, Math Athlete!

◇ 4 practice tests done! That's serious training. Your math muscles are strong. You are in great shape for the big test. ◇

★ **Trainers know:** muscle memory is real. The more you practice, the more your brain knows what to do without thinking. You built that muscle memory! ★

Athlete Performance

- **Endurance:** TOP! You can finish a long test.
- **Strength:** STRONG! You handle hard problems.
- **Speed:** JUST RIGHT! You don't rush.
- **Recovery:** GOOD! You bounce back from tough questions.

Trainer tip: on test day, drink water, breathe deeply, and warm up with the easier questions first. Your training will carry you the rest of the way!

If you want to share something or ask a question, please email me at jay@testinar.com.

Jay Daie

Your Math Trainer

PRACTICE TODAY. SUCCEED TOMORROW!

This book includes 4 full-length Math practice tests and 2 online tests to help Grade 6 students build confidence, strengthen skills, and excel on standardized assessments.

Each practice test is carefully crafted to reflect the latest standards and includes a variety of question types, realistic test conditions, and detailed answer explanations.

Perfect for classroom use, homework, test preparation, and extra practice at home.

THIS BOOK INCLUDES:

4 Full-Length
Printed Tests

2 Online Practice
Tests

 Detailed Answer
Explanations

 **MORE PRACTICE.
GREATER RESULTS.**

Give your child the tools to build strong math skills, confidence, and a positive attitude toward learning.

WHAT YOU'LL GAIN



Stronger Math Skills

Build a solid foundation through targeted practice and review.



Better Problem Solving

Develop logical thinking and effective solution strategies.



Deeper Understanding

Reinforce key concepts with clear explanations and meaningful practice.



Test Confidence

Familiarize with test formats and improve accuracy and speed.



Achieve Success

Build confidence and perform your best on test day.

TOPICS COVERED

- ✓ Ratios & Rates
- ✓ Percents
- ✓ The Number System
- ✓ Statistics & Probability
- ✓ Expressions & Equations
- ✓ Data Analysis
- ✓ Geometry
- ✓ Measurement & Conversions
- ✓ Fractions & Decimals
- ✓ And More!



2 ONLINE TESTS

Use these two additional online practice tests for extra review after the printed tests in this book.



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AND LEARNING RESOURCES



PRACTICE
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