

9

New Jersey

NJSLA

GRADE 7

MATH

PRACTICE TESTS

Standards Aligned Problem Solving
For Comprehensive Assessment Programs

Program



9

**PRINTED
TESTS**

+



2

**ONLINE
TESTS**



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



BUILT FOR ACAP
Standards-Aligned



**STRENGTHEN
SKILLS**



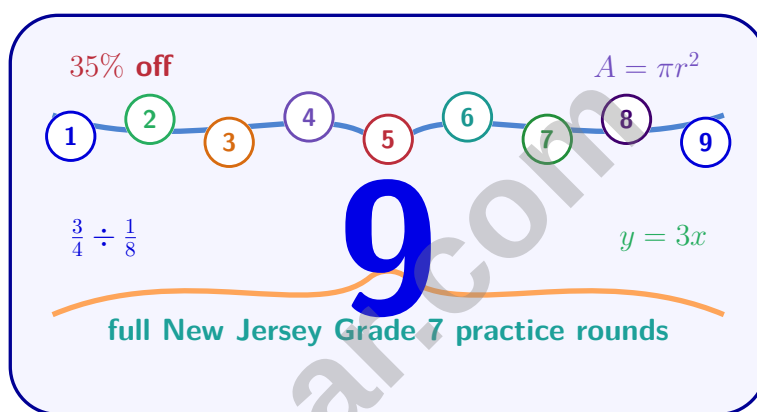
**SHARPEN
THINKING**



BE TEST-READY
Improve Performance

9 New Jersey NJSLA Grade 7 Math Practice Tests

Standards-Aligned New Jersey Practice for Proportional Reasoning, Expressions, Geometry, Statistics, and Probability



Nine complete 40-question Grade 7 NJSLA practice rounds with proportional relationships, percents, rational numbers, expressions, equations, geometry, statistics, probability, answer keys, and clear explanations for every item.

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, New Jersey Grade 7 Problem Solver!

Nine focused rounds for sharper NJSLA math thinking

This book gives you nine full Grade 7 NJSLA math practice tests. Each round is built to help you notice structure, compare quantities, use proportional reasoning, handle rational numbers, and explain your thinking with care.

Your New Jersey Practice Promise

I will read every question carefully, choose a strategy that fits, write enough work to prove my answer, and use corrections as training for the next test.

Read

Model

Verify

How to Use This Book

A nine-session plan for confident Grade 7 review

1. **Warm up with the review pages.** Notice the big ideas before starting the tests.
2. **Complete one test at a time.** Treat each 40-question round like a real practice session.
3. **Show your reasoning.** Jot a proportion, equation, diagram, number line, or quick estimate when it helps.
4. **Correct actively.** Rework missed items before reading the explanation.
5. **Choose the next target.** After each test, name one skill and one habit to improve.

New Jersey review rhythm: Work a test, score it, study your misses, then come back ready for the next round with one clear goal.



What Is Inside?

Nine NJSLA tests, 360 questions, and a complete review path

Part	What You Will Practice
Tests 1–3	Proportional relationships, unit rates, percents, rational-number operations, and careful reading.
Tests 4–6	Expressions, equations, inequalities, scale drawings, geometry, and multi-step problem solving.
Tests 7–9	Statistics, probability, mixed review, stamina, and choosing efficient strategies.
Answer Pages	Compact keys and explanations that show why each answer works.

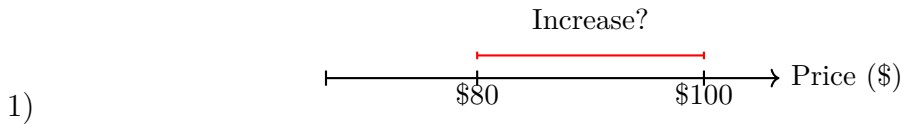
The tests are mixed on purpose. Grade 7 success means recognizing which idea is being tested even when the next question changes format.



Scan me!
For more practice
& answers

Table of Contents

★ Practice Test 1	_____	14
★ Practice Test 2	_____	27
★ Practice Test 3	_____	41
★ Practice Test 4	_____	55
★ Practice Test 5	_____	71
★ Practice Test 6	_____	85
★ Practice Test 7	_____	99
★ Practice Test 8	_____	114
★ Practice Test 9	_____	127
Practice Test Answer Keys	_____	142
Practice Test Answers and Explanations	_____	148



A double number line shows a price increase from \$80 to \$100. What is the percent increase?

- ☐ A. 100% ☐ C. 80%
- ☐ B. 20% ☐ D. 25%
- 2) A standard die is rolled twice. What is the probability of rolling a 4 on the first roll and a number less than 4 on the second roll?
- ☐ A. $\frac{3}{36}$ ☐ C. $\frac{4}{36}$
- ☐ B. $\frac{1}{18}$ ☐ D. $\frac{7}{36}$
- 3) A waiter receives a \$12 tip on a \$60 bill. What percentage tip did the customer leave?
- ☐ A. 15% ☐ C. 20%
- ☐ B. 18% ☐ D. 25%
- 4) If a dataset contains 20 values and you place them in a stem-and-leaf plot, what is the median position?
- ☐ A. Between 10th and 11th values ☐ C. The 11th value
- ☐ B. The 10th value ☐ D. Between 9th and 10th values
- 5) A quality control test found that out of 750 items produced, 12 were defective. What is the experimental probability that an item is defective?
- ☐ A. $\frac{12}{750}$ ☐ C. 0.12
- ☐ B. $\frac{3}{125}$ ☐ D. $\frac{1}{12}$



6) In a circle, how many different radii can you draw?

☐ A. 1

☐ B. 2

☐ C. Infinitely many

☐ D. 10

Simple Interest Balance Growth

Year 0	Year 1	Year 2	Year 3
\$1000	\$1050	\$1100	\$1150
P	+\$50	+\$50	+\$50

7)

Based on the table, what is the annual interest rate?

☐ A. 2.5%

☐ B. 10%

☐ C. 7.5%

☐ D. 5%

8) A gym membership costs \$75 per month. You pay for 12 months, which totals \$900. What is 20% of the total cost?

☐ A. \$300

☐ B. \$250

☐ C. \$280

☐ D. \$180

9) A restaurant bill is \$85 before tax. With a 9% sales tax, what is the total bill?

☐ A. \$94.85

☐ B. \$85.90

☐ C. \$77.65

☐ D. \$92.65


Scan me!
For more practice
& answers

10) Which expression equals -3 ?

☐ A. $5 - (-2)$

☐ B. $-6 - 3$

☐ C. $-1 - 4$

☐ D. $2 - 5$

11) If $\frac{7}{x} = \frac{35}{100}$, what is x ?

12) A window measures 3 feet wide and 4 feet tall. A scale drawing shows it as 1.5 inches wide. What is the height on the scale drawing?

☐ A. 1 inch

☐ B. 4 inches

☐ C. 3 inches

☐ D. 2 inches

13) A recipe uses $\frac{1}{4}$ cup sugar and $\frac{2}{3}$ cup flour. What is the ratio of sugar to flour? Simplify.

☐ A. 8 to 3

☐ B. $\frac{1}{4}$ to $\frac{2}{3}$

☐ C. 2 to 3

☐ D. 3 to 8

14) The equation $y = -2x$ describes a proportional relationship. Which point lies on the line?

☐ A. $(-1, -2)$

☐ B. $(2, 4)$

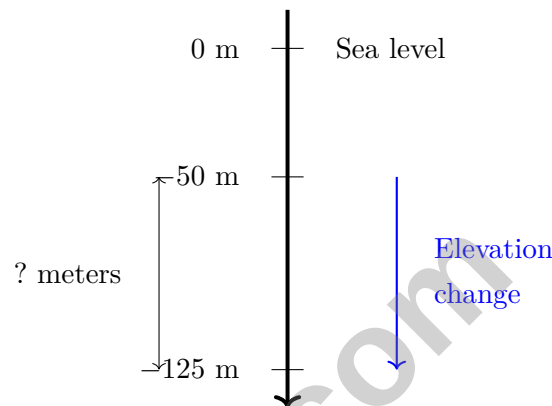
☐ C. $(0, 2)$

☐ D. $(1, -2)$



- 1) A shopkeeper estimated 240 customers would visit on a day, but only 200 actually came. What is the percent error?

- ☐ A. 40% ☐ C. 16.7%
☐ B. 83.3% ☐ D. 20%



2)

A scuba diver starts at -50 meters (below sea level). She descends to 125 meters below sea level. What is the net change in her elevation (in meters)?

- ☐ A. 175 meters ☐ C. -75 meters
☐ B. 75 meters ☐ D. -175 meters

- 3) A recipe calls for $\frac{2\frac{3}{4}}{\frac{1}{2}}$ cups of sugar. Simplify.

- ☐ A. $\frac{1}{3}$ cup ☐ C. $\frac{1}{2}$ cup
☐ B. $\frac{3}{4}$ cup ☐ D. $\frac{4}{3}$ cups



Scan me!
For more practice
& answers

- 4) A table shows the relationship between time (minutes) and water drained from a tank. Check the y/x ratio for each row.

Time (min)	2	5	8
Water (gallons)	10	25	40
Ratio (gal/min)	5	5	5

- ☐ A. Cannot determine from this table ☐ C. Only proportional after 2 minutes
☐ B. Not proportional; ratios are different ☐ D. Proportional; constant ratio is 5
- 5) A distance-time table shows a runner's proportional pace.

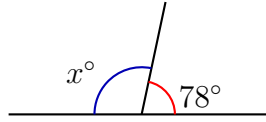
Time (min)	Distance (mi)
5	1
10	2
15	3
20	4

What is the constant of proportionality (miles per minute)?

- ☐ A. 0.1 mi/min ☐ C. 10 mi/min
☐ B. 5 mi/min ☐ D. 0.2 mi/min
- 6) Factor: $18ab + 27a$
- ☐ A. $9a(2b + 3)$ ☐ C. $a(18b + 27)$
☐ B. $18(ab + 1.5a)$ ☐ D. $3(6ab + 9a)$



1)



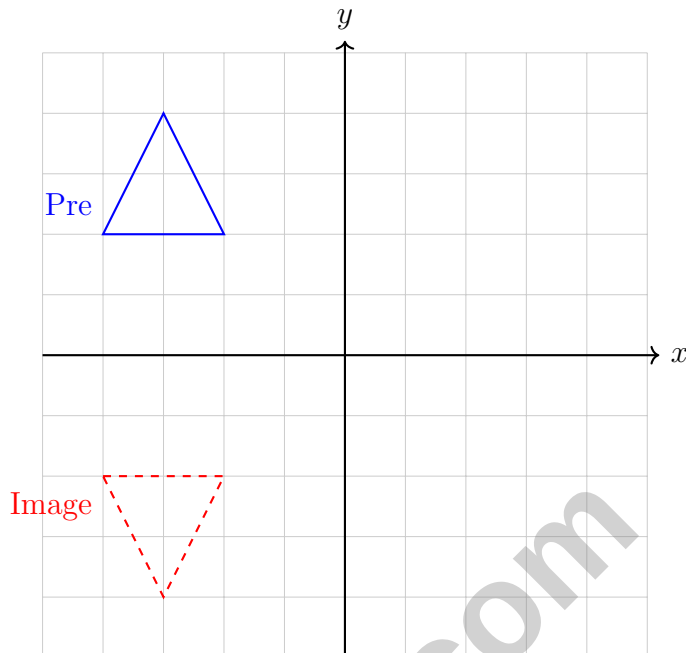
Two lines intersect. One angle measures 78° . The angle adjacent to this angle is x . What is x ?

☐ A. 12° ☐ C. 102° ☐ B. 78° ☐ D. 180°

2) A blueprint shows a room measuring 3 cm by 5 cm at a scale of 1 cm : 1 m. What are the actual room dimensions?

☐ A. 3 m by 5 m☐ C. 1 m by 1.67 m☐ B. 300 cm by 500 cm☐ D. 6 m by 10 m

Scan me!
For more practice
& answers



3)

The blue triangle (pre-image) is transformed to the red triangle (image). Which error was made if the student reflected over the y -axis instead of the x -axis?

- ☐ A. They negated the x -coordinate only ☐ C. They should negate the y -coordinate only
☐ B. They negated both coordinates ☐ D. They added instead of subtracting

4) If $\frac{x}{6} = \frac{12}{8}$, what is the value of x ?

- ☐ A. 4 ☐ C. 9
☐ B. 8 ☐ D. 16



New Jersey NJSLA Grade 7 Practice Test Answer Keys**How to use this section with a Grade 7 student:**

1. check the answer first and circle any item that needs another look
2. retry the problem with fresh work before reading the explanation
3. write one short lesson learned from each missed or guessed item

A strong review routine turns every correction into a sharper plan for the next New Jersey NJSLA practice test.

Testinar.com



Practice Test Answers and Explanations

Practice Test 1 Answers and Explanations

- 1) **Choice D is correct.** (7.RP.3) Change = $\$100 - \$80 = \$20$. Percent increase = $\frac{20}{80} \times 100\% = 25\%$.
- 2) **Choice A is correct.** (7.SP.5-7.SP.8) $P(4 \text{ first}) = \frac{1}{6}$; numbers less than 4 are 1, 2, 3, so $P(\text{less than 4}) = \frac{3}{6} = \frac{1}{2}$. Product: $\frac{1}{6} \cdot \frac{1}{2} = \frac{1}{12} = \frac{3}{36}$.
- 3) **Choice C is correct.** (7.RP.3) Tip percentage = $\frac{12}{60} = 0.20 = 20\%$.
- 4) **Choice A is correct.** (7.SP.1-7.SP.4) For $n = 20$ (even), median is between positions $n/2 = 10$ and $n/2 + 1 = 11$.
- 5) **Choice A is correct.** (7.SP.6) Experimental probability of defect = $\frac{12}{750}$. This simplifies to $\frac{2}{125} = 0.016$. Option A is the most direct answer from the data.
- 6) **Choice C is correct.** (7.G.4-7.G.6) You can draw a radius from the center to any point on the circle, so there are infinitely many radii.
- 7) **Choice D is correct.** (7.RP.3) Each year adds \$50 interest on principal of \$1000; rate = $\frac{50}{1000} = 0.05 = 5\%$.
- 8) **Choice D is correct.** (7.RP.3) Total cost is $75 \times 12 = 900$ dollars. 20% of 900 is $0.20 \times 900 = 180$ dollars.
- 9) **Choice D is correct.** (7.RP.3) Tax = $0.09 \times 85 = \$7.65$. Total = $85 + 7.65 = \$92.65$.
- 10) **Choice D is correct.** (7.NS.1-7.NS.3) $2 - 5 = 2 + (-5) = -3$. Check: A = 7, B = -3, C = -5, D = -9.
- 11) **The correct answer is 20.** (7.RP.1-7.RP.3) Cross multiply: $7 \times 100 = 35 \times x$. So $700 = 35x$, giving $x = 20$.
- 12) **Choice D is correct.** (7.RP.1-7.RP.3) Scale factor: 3 ft/1.5 in = 2 ft per inch. Height: $4 \div 2 = 2$ inches.
- 13) **Choice D is correct.** (7.RP.1-7.RP.3) $\frac{1/4}{2/3} = \frac{1}{4} \times \frac{3}{2} = \frac{3}{8}$, so the ratio is 3 : 8.
- 14) **Choice D is correct.** (7.RP.1-7.RP.3) Substitute into $y = -2x$: when $x = 1$, $y = -2(1) = -2$. Point (1, -2) is on the line.
- 15) **Choice D is correct.** (7.RP.1-7.RP.3) The constant is $k = \frac{28}{4} = 7$ dollars per pound. For 10 pounds: cost = $7 \times 10 = 70$ dollars.
- 16) **Choice A is correct.** (7.NS.1-7.NS.3) Average = $\frac{9.2+8.8+9.5+9.1+8.9}{5} = \frac{45.5}{5} = 9.1$ seconds.
- 17) **Choice B is correct.** (7.EE.4a) Distribute: $6x + 3 = 21$. Subtract 3: $6x = 18$. Divide by 6: $x = 3$.
- 18) **Choice C is correct.** (7.G.1-7.G.5) Real length: $15 \text{ cm} \times 120 = 1800 \text{ cm} = 18 \text{ m}$.
- 19) **Choice C is correct.** (7.G.1-7.G.5) Area scale factor is $\left(\frac{5}{8}\right)^2 = \frac{25}{64}$. So $\frac{50}{\text{larger}} = \frac{25}{64}$, giving larger = $50 \times \frac{64}{25} = 128$ square inches.
- 20) **Choice C is correct.** (7.RP.3) Set up $\frac{18}{100} = \frac{36}{x}$. Cross-multiply: $18x = 3600$, so $x = 200$.
- 21) **Choice A is correct.** (7.NS.1-7.NS.3) Same denominator: $\frac{5}{8} - \frac{7}{8} = -\frac{2}{8} = -\frac{1}{4}$.
- 22) **The correct answer is A, D.** (7.G.4-7.G.6) A is correct because $V = Bh$, so $h = V/B$. D is correct because volume is measured in cubic units. B is false because $2 \times 3 \times 5 = 30 \text{ m}^3$, not 10 m^3 . C is false because the base shape affects the base area.
- 23) **Choice A is correct.** (7.EE.1-7.EE.2) The diagram shows a discount reduces price from p to $0.9p$. This means $0.9p = p - 0.1p$, factoring as $p(1 - 0.1)$.
- 24) **Choice C is correct.** (7.SP.1-7.SP.4) With 12 data points, the median is the average of the 6th and 7th values. Counting: positions 1–2 are 8, positions 3–6 are 10, position 7–9 are 12. The 6th and 7th values average to 11.
- 25) **Choice A is correct.** (7.SP.5-7.SP.8) $0.3 + 0.5 + 0.2 = 1$, so probabilities sum to 1 (valid). Outcomes have different probabilities (non-uniform). Also, $P(\text{not sunny}) = 0.3 + 0.5 = 0.8$.
- 26) **Choice C is correct.** (7.NS.2) Row C correctly demonstrates $(+) \times (-) = -12$: $6 \times (-2) = -12$ ✓. Row A error: $5 \times 3 = 15$ (not 8). Row B error: $(-4) \times (-2) = 8$ (positive, not -8). Row D error: $(-7) \times 3 = -21$ (negative, not 21).
- 27) **Choice C is correct.** (7.NS.1-7.NS.3) $15 \times 15 = 225$, so $\sqrt{225} = 15$.
- 28) **The correct answer is 1600.** (7.SP.1-7.SP.4) Set up the proportion: $\frac{80}{250} = \frac{x}{5000}$. Solve: $x = \frac{80 \times 5000}{250} = 1600$.
- 29) **Choice B is correct.** (7.G.4-7.G.6) Each trapezoid: $\frac{1}{2}(4 + 6) \times 3 = 15 \text{ m}^2$. Two trapezoids: $15 \times 2 = 30 \text{ m}^2$.
- 30) **The correct answer is 3.** (7.G.1-7.G.5) All three corresponding side lengths match, so the triangles are congruent by SSS.



Hi, Confident Learner!

◇ This high-stamina book gave you nine substantial Grade 7 practice tests, so you had repeated chances to build accuracy, pacing, and confidence. Grade 7 math can feel big because it brings together rational numbers, expressions, equations, geometry, probability, and data. ◇

★ **Remember this:** But big topics become manageable when you practice one skill at a time. That is what you have been doing with every test in this book. ★

Confidence Builders

- **Know the Goal:** Identify what the question asks.
- **Use Vocabulary:** Math words point to math actions.
- **Show Work:** Give yourself something to check.
- **Celebrate Effort:** Practice is proof that you are moving.

Grade 7 test-day tip: When reviewing, do not only mark wrong answers. Write one sentence about what you learned from each one.

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

Jay Daie

Your Confidence Coach

PRACTICE TODAY. SUCCEED TOMORROW!

This book includes **9** full-length Math practice tests and **2** online tests to help Grade 7 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:

9 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 & Proportions
- ✓ The Number System
- ✓ Expressions & Equations
- ✓ Geometry
- ✓ Percents & Decimals
- ✓ Statistics & Probability
- ✓ Data Analysis
- ✓ Measurement & Conversions
- ✓ Algebraic Thinking
- ✓ And More!



2 ONLINE TESTS

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



2 EXTRA ONLINE TEST ACCESS CODE IS INSIDE THE BOOK!

Don't lose it—your extra practice and success start here!



VISIT [TESTINAR.COM/MATH7](https://www.testinar.com/math7)

FOR MORE PRACTICE TESTS AND LEARNING RESOURCES.



PRACTICE
REGULARLY



STAY
FOCUSED



SOLVE
CONFIDENTLY



SUCCEED
BRIGHTLY