

3

New Jersey

NJSLA

GRADE

7

MATH

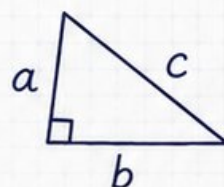
PRACTICE TESTS

✓ Standards Aligned
Problem Solving
For Comprehensive
Assessment Programs



$$y = mx + b$$

$$\frac{2}{3}x - \frac{4}{5} = \frac{1}{2}$$



$$3(x - 2) = 2x + 5$$



3 PRINTED TESTS



2 ONLINE TESTS



USE THESE TWO
ADDITIONAL ONLINE
PRACTICE TESTS
FOR EXTRA REVIEW AFTER
THE PRINTED TESTS
IN THIS BOOK.



Build
Confidence



Strengthen
Math Skills



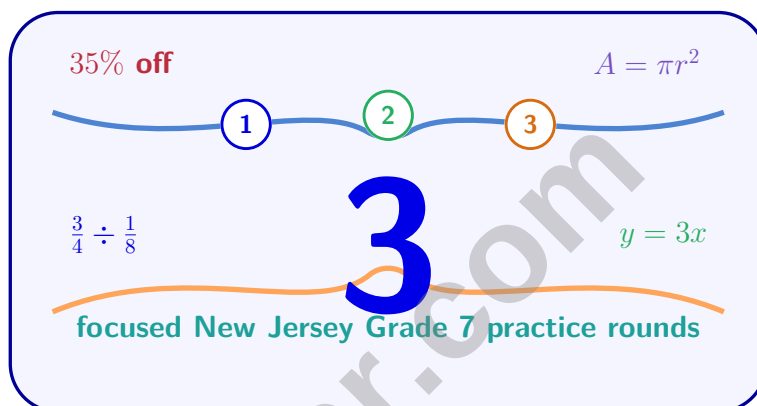
Detailed Answers
& Explanations



Improve Test
Performance

3 New Jersey NJSLA Grade 7 Math Practice Tests

NJSLA Practice Tests with Review Notes and Complete Keys



Three 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!

Three focused rounds for sharper NJSLA math thinking

This book gives you three 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 three-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?

Three NJSLA tests, 120 questions, and a focused review path

Part	What You Will Practice
Tests 1–2	Proportional relationships, unit rates, percents, rational-number operations, and careful reading.
Test 3	Expressions, equations, inequalities, scale drawings, geometry, data, probability, and multi-step problem solving.
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	_____	43
Practice Test Answer Keys	_____	58
Practice Test Answers and Explanations	_____	61

- 1) A diver descends 3.5 meters below sea level each minute. After 6 minutes, what is the diver's depth relative to sea level?

- ☐ A. -21 m ☐ C. 10.5 m
☐ B. -10.5 m ☐ D. 21 m

- 2) **Item Cost Estimates**

Item	Estimated Cost	Actual Cost
Shirt	\$22	\$20

What is the percent error for the shirt cost estimate?

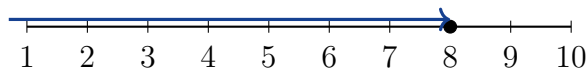
- ☐ A. 91% ☐ C. 11%
☐ B. 9.1% ☐ D. 10%

- 3) A mountain climber is at 200 meters above sea level. She descends 350 meters. At what elevation is she now? Write your answer as an integer.

- 4) Expand: $-2(3c + 7)$

- ☐ A. $-6c - 14$ ☐ C. $6c - 14$
☐ B. $-6c + 14$ ☐ D. $-6c + 7$

- 5) At which boundary is the circle placed, and is it open or closed for the inequality $v \leq 8$?



- ☐ A. Open circle at 8 ☐ C. Open circle at 7
☐ B. Closed circle at 8 ☐ D. Closed circle at 7



6) An item that originally costs \$200 is discounted by \$50. What is the percent discount?

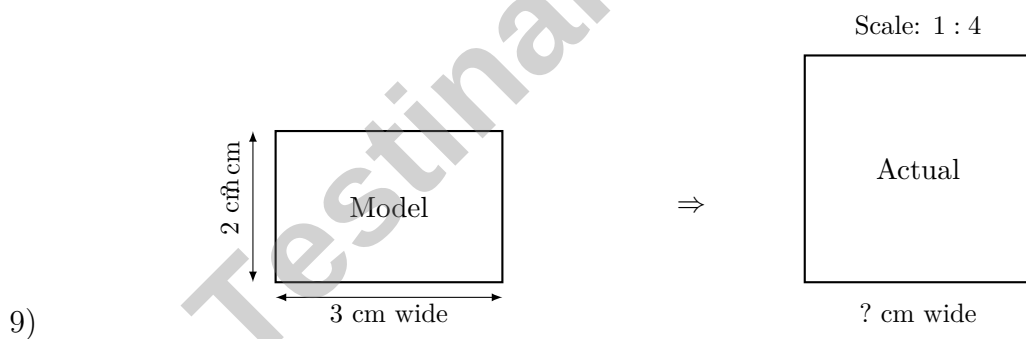
- ☐ A. 20% ☐ C. 40%
- ☐ B. 33% ☐ D. 25%

7) A credit union member deposits \$3500 in a savings account. After 4 years at 4.2% simple interest, what is the total amount in the account?

- ☐ A. \$3588 ☐ C. \$3988
- ☐ B. \$3647 ☐ D. \$4088

8) A bag contains 3 red marbles, 2 blue marbles, and 5 green marbles. To simulate drawing one marble, which probability does rolling a standard die best represent?

- ☐ A. Probability of drawing red ☐ D. Probability of drawing blue or green
- ☐ B. Probability of drawing blue
- ☐ C. Probability of drawing green



If the scale factor is 1 : 4, what are the actual dimensions?

- ☐ A. 12 cm $\times$ 10 cm ☐ C. 7 cm $\times$ 6 cm
- ☐ B. 0.75 cm $\times$ 0.5 cm ☐ D. 12 cm $\times$ 8 cm



Scan me!
For more practice
& answers

10) A concert ticket costs \$60. The price increased by 25%. What is the new price?

☐ A. \$70

☐ C. \$80

☐ B. \$85

☐ D. \$75

11) On a number line, you start at 4 and move 11 units left. Where do you land?

☐ A. -15

☐ C. 7

☐ B. 15

☐ D. -7

Combining Terms: $5a + 2b - 3a + 4b$

Like terms with a :

$$5a \text{ and } -3a \rightarrow (5 - 3)a = 2a$$

Like terms with b :

$$2b \text{ and } 4b \rightarrow (2 + 4)b = 6b$$

Answer: $2a + 6b$

12)

Using the strategy shown above, simplify $8x + 3y - 5x - 2y$.

☐ A. $13x + y$

☐ C. $3x + 5y$

☐ B. $3x + y$

☐ D. $11xy$

13) What is the GCF of $12xy$, $18y$, and 6?

☐ A. 6

☐ C. 12

☐ B. $6y$

☐ D. $18y$

14) A student calculates the surface area of a rectangular prism with dimensions 5 cm, 3 cm, and 4 cm. They compute $5 \times 3 + 5 \times 4 + 3 \times 4 = 47 \text{ cm}^2$ and forget to multiply by 2. What error did they make?

☐ A. They calculated only one pair of faces instead of all pairs.

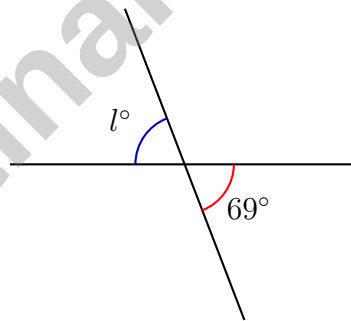
☐ C. They used subtraction instead of addition.

☐ B. They forgot to square each dimension.

☐ D. They included a face that doesn't exist.



- 1) A train travels at a constant speed of 60 miles per hour. If the train travels for 3.5 hours, how many miles does it cover?
- ☐ A. 180 miles ☐ C. 210 miles
☐ B. 200 miles ☐ D. 240 miles
- 2) A rectangular park boundary on a city map is 11 cm by 13 cm. The scale is 1 cm : 200 m. What is the perimeter of the actual park in meters?
- ☐ A. 4,800 m ☐ C. 2,400 m
☐ B. 9,600 m ☐ D. 4,400 m
- 3) What is the shape of the cross-section formed when a cube is sliced parallel to one of its faces?
- ☐ A. Rectangle (but not square) ☐ C. Square
☐ B. Rhombus ☐ D. Parallelogram (but not square)



- 4) Two intersecting lines form angles. One angle is 69° . The vertically opposite angle is l . What is the measure of l ?
- ☐ A. 21° ☐ C. 111°
☐ B. 69° ☐ D. 159°



Scan me!
For more practice
& answers

5) Which is true about a circle with radius r and diameter d ?

☐ A. $d = r$

☐ C. $r = 2d$

☐ B. $d = 2r$

☐ D. $d = \frac{r}{2}$

6) A student mistakenly used the formula $A = \pi d^2$ instead of $A = \pi r^2$ for a circle with diameter 8 inches. What answer did the student get? (Use $\pi \approx 3.14$.)

☐ A. 25.12 in^2

☐ C. 100.48 in^2

☐ B. 50.24 in^2

☐ D. 200.96 in^2

7) A cylinder has lateral surface area $= 2\pi rh = 100.48 \text{ m}^2$ and radius 4 m. What is the height? Use $\pi \approx 3.14$.

☐ A. 2 m

☐ C. 4.5 m

☐ B. 4 m

☐ D. 8 m

8) Two gyms track daily member visits. Gym X: visits = 45, 45, 46, 45, 44 (mean 45). Gym Y: visits = 30, 50, 40, 50, 35 (mean 41). Which gym has a lower MAD?

☐ A. Gym X (more consistent attendance)

☐ C. Both have equal MAD

☐ B. Gym Y (higher peak days)

☐ D. Cannot determine MAD from the means

9) A circle graph shows the budget allocation for a school: Athletics 20%, Academics 50%, Support Services 20%, Other 10%. If the total budget is \$500,000, how much is allocated to Academics?

☐ A. \$50,000

☐ C. \$200,000

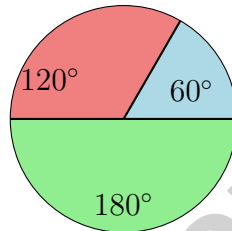
☐ B. \$100,000

☐ D. \$250,000



1) A principal wants to know the average number of hours students study per week at her school. Which is the BEST way to collect a representative sample?

- ☐ A. Survey only the students in her own homeroom
 ☐ C. Randomly select 30 students from each grade
- ☐ B. Survey the first 30 students who arrive Monday morning
 ☐ D. Survey only students on the honor roll



2)

This spinner has sectors of 60° , 120° , and 180° . Which probability is correct?

- ☐ A. $P(\text{red}) = \frac{1}{3}$
☐ C. $P(\text{blue}) = \frac{1}{3}$
- ☐ B. The spinner is uniform.
 ☐ D. $P(\text{green}) = \frac{1}{2}$

3)

Restaurant Bill	
Subtotal: \$50	Total: ?
Tip (18%): ?	

What is the tip amount if the customer leaves an 18% tip on a \$50 bill?

- ☐ A. \$7.00
 ☐ C. \$9.00
- ☐ B. \$8.50
 ☐ D. \$10.00



Scan me!
For more practice
& answers

- 4) A retirement account balance nearly triples in 12 years with annual compound interest. Which rate is most consistent with this growth?

Rate	At 6 yrs	At 12 yrs	Multiplier	Triples?
2%	\$1,126	\$1,268	1.27x	No
6%	\$1,419	\$2,013	2.01x	No
9.5%	\$1,629	\$2,652	2.65x	Close!
15%	\$2,313	\$5,350	5.35x	No

- ☐ A. 2% ☐ C. 9.5%
☐ B. 6% ☐ D. 15%
- 5) A young adult earns \$32 000 annually. After taxes and deductions, their net annual income is \$25 600. What percent of the gross income is lost to taxes and deductions?
- ☐ A. 15% ☐ C. 20%
☐ B. 16% ☐ D. 25%
- 6) The value of a car decreased from \$24 000 to \$18 000. What is the percent decrease?
- ☐ A. 33% ☐ C. 16.7%
☐ B. 20% ☐ D. 25%
- 7) To estimate the probability of a biased coin landing on heads, which number of trials would give the most reliable estimate?
- ☐ A. 10 trials ☐ C. 500 trials
☐ B. 50 trials ☐ D. 1000 trials



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 A is correct.** (7.NS.1-7.NS.3) Each descent of 3.5 m is negative: $-3.5 \times 6 = -21$ m.
- 2) **Choice D is correct.** (7.RP.3) Percent error = $\frac{|22-20|}{20} \times 100\% = \frac{2}{20} \times 100\% = 10\%$.
- 3) **The correct answer is -150.** (7.NS.1-7.NS.3) The elevation change is $200 - 350 = -150$. She is now 150 meters below sea level.
- 4) **Choice A is correct.** (7.EE.1-7.EE.2) Distribute -2: $-2(3c) - 2(7) = -6c - 14$.
- 5) **Choice B is correct.** (7.EE.4b) The symbol $\leq$ (less than or equal to) requires a closed circle at the boundary value, which is 8.
- 6) **Choice D is correct.** (7.RP.3) Percent discount = $\frac{50}{200} \times 100 = 25\%$.
- 7) **Choice D is correct.** (7.RP.3) $I = 3500 \times 0.042 \times 4 = \588 . $A = 3500 + 588 = \$4088$.
- 8) **Choice C is correct.** (7.SP.5-7.SP.8) There are 5 green marbles out of 10 total, giving probability $\frac{5}{10} = \frac{1}{2}$. Rolling 1-3 on a die simulates this (or rolling odd/even).
- 9) **Choice D is correct.** (7.RP.1-7.RP.3) Multiply each model dimension by scale factor 4: $3 \times 4 = 12$ cm; $2 \times 4 = 8$ cm.
- 10) **Choice D is correct.** (7.RP.3) The increase is 25% of \$60 = \$15. New price: $60 + 15 = 75$ dollars.
- 11) **Choice D is correct.** (7.NS.1b) Moving left on a number line means adding a negative: $4 + (-11) = -7$. You land at -7.
- 12) **Choice B is correct.** (7.EE.1) Like terms with x : $8x$ and $-5x$ give $(8-5)x = 3x$. Like terms with y : $3y$ and $-2y$ give $(3-2)y = y$. Answer: $3x + y$.
- 13) **Choice A is correct.** (7.EE.1-7.EE.2) GCF of 12, 18, 6 is 6. Not all terms share a common variable factor.
- 14) **Choice A is correct.** (7.G.4-7.G.6) The formula $SA = 2(lw + lh + wh)$ requires multiplying by 2 because each rectangle pair appears twice. The student calculated only one of each pair, missing half the surface area.
- 15) **Choice D is correct.** (7.RP.1-7.RP.3) The rate is $\frac{120 \text{ pages}}{2 \text{ minutes}} = 60$ pages per minute, so $k = 60$.
- 16) **Choice A is correct.** (7.RP.3) Growth = $(\$2,100 - \$2,000) \div \$2,000 = \$100 \div \$2,000 = 0.05 = 5\%$.
- 17) **Choice D is correct.** (7.EE.1-7.EE.2) By distributive property: $2(x+3) = 2x + 2(3) = 2x + 6$.
- 18) **The correct answer is C,D.** (7.SP.1-7.SP.4) The total amounts are not given, so A and B cannot be determined from the percentages alone. Region Y has 50% indoor and 50% outdoor use, so C is correct. Region Y's outdoor percentage (50%) is higher than Region X's outdoor percentage (40%), so D is correct.
- 19) **The correct answer is $\frac{4}{3}$.** (7.RP.1-7.RP.3) If $\frac{1}{2}$ job takes $\frac{2}{3}$ hour, then 1 full job takes $\frac{2}{3} \times 2 = \frac{4}{3}$ hours.
- 20) **Choice A is correct.** (7.EE.1-7.EE.2) Combine: $(-6j + 4j) + (12 - 8) = -2j + 4$.
- 21) **Choice B is correct.** (7.EE.4b) Distribute: $2x - 6 \leq 10$. Add 6: $2x \leq 16$. Divide by 2: $x \leq 8$.
- 22) **Choice A is correct.** (7.G.1-7.G.5) Set up: $\frac{3 \text{ cm}}{10 \text{ km}} = \frac{x}{75 \text{ km}}$. Cross-multiply: $10x = 225$, so $x = 22.5$ cm.
- 23) **Choice A is correct.** (7.G.1-7.G.5) The translation is: $(3, 2) + (-3, -2) = (0, 0)$.
- 24) **The correct answer is 60.** (7.RP.1-7.RP.3) The unit rate is $300 \div 5 = 60$ miles per hour.
- 25) **Choice A is correct.** (7.G.1-7.G.5) Area ratio 16 : 81 gives linear scale factor $\sqrt{16} : \sqrt{81} = 4 : 9$. Perimeter is linear, so 4 : 9.
- 26) **Choice B is correct.** (7.SP.1-7.SP.4) By surveying only lunch-buyers that day, she misses students who bring lunch from home. This creates a non-response bias and an unrepresentative sample.
- 27) **The correct answer is 3.** (7.RP.1-7.RP.3) $k = y/x = 18/6 = 3$.
- 28) **Choice C is correct.** (7.SP.5-7.SP.8) Not A: sections B, C, D, E (4 out of 5). $P(\text{not A}) = \frac{4}{5}$.
- 29) **Choice D is correct.** (7.RP.1-7.RP.3) The unit rate is 0.9 (from the point (1, 0.9)). When $x = 5$, $y = 5 \times 0.9 = 4.5$.
- 30) **Choice D is correct.** (7.RP.3) The model shows part = 36 and whole = 60. Using part/whole = percent/100: $\frac{36}{60} = \frac{p}{100}$, cross-multiply to get $p = 60\%$.
- 31) **Choice A is correct.** (7.NS.1-7.NS.3) Common denominator 4: $-\frac{6}{4} - \frac{9}{4} + \frac{19}{4} = \frac{-6-9+19}{4} = \frac{4}{4} = 1$.



Scan me!
For more practice
& answers

A Note for a Careful Thinker

Hi, Careful Thinker!

◇ This short, concentrated book gave you three focused Grade 7 practice tests, so you had repeated chances to build accuracy, pacing, and confidence. This book gave you room to practice the kind of thinking seventh graders need: comparing quantities, analyzing patterns, and organizing information. ◇

★ **Remember this:** The goal was never just to finish pages. The goal was to become the kind of student who knows how to begin, how to adjust, and how to check. ★

Your Careful-Thinking Toolkit

- **Read Twice:** First for the story, second for the math.
- **Label Values:** Give each number a job.
- **Check Signs:** Negatives and inequalities deserve attention.
- **Use Evidence:** Let the work prove the answer.

Grade 7 test-day tip: On test day, underline the question before solving. It keeps your answer aimed at the right target.

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

Jay Daie

Your Math Practice Coach

PRACTICE TODAY. SUCCEED TOMORROW!

This book includes **3** 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:

3 Full-Length Printed Tests

2 Online Practice Tests

 Detailed Answers & 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



Build Confidence

Practice regularly to feel prepared and test-ready.



Strengthen Math Skills

Develop key math concepts and problem solving abilities.



Detailed Answers & Explanations

Learn from clear explanations and step-by-step solutions.



Improve Test Performance

Apply your knowledge and achieve your best score!

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**
FOR MORE PRACTICE TESTS
AND LEARNING RESOURCES.



PRACTICE
REGULARLY



STAY
FOCUSED



SOLVE
CONFIDENTLY



SUCCEED
BRIGHTLY