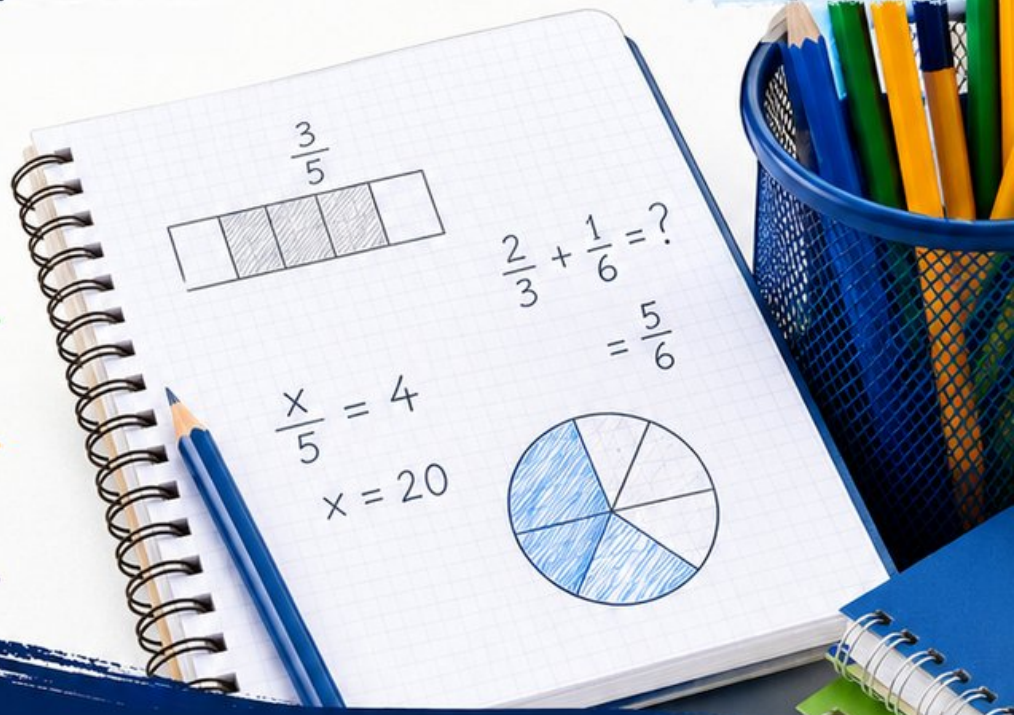
7 Pennsylvania PSSA Grade 6 MATH PRACTICE TESTS

7 PRINTED TESTS + 2 ONLINE TESTS

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

Standards-Aligned *Steady Southern* Problem Solving for Comprehensive Assessment Program

- 7 Full-Length Printed Tests
- Standards-Aligned Math Practice
- Detailed Answer Keys and Explanations
- Build Confidence. Achieve Success.

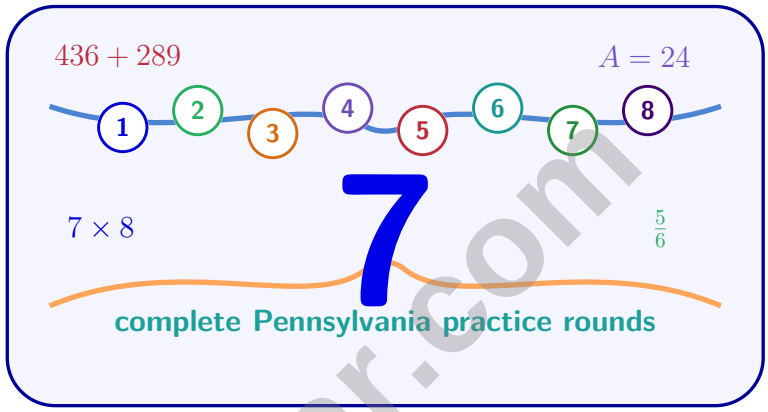


You've Got This!

PREPARE PRACTICE SUCCEED | PRACTICE WITH PURPOSE | STRENGTHEN MATH SKILLS | REVIEW, IMPROVE, AND SUCCEED

7 Pennsylvania PSSA Grade 6 Math Practice Tests

Standards-Aligned Keystone Practice Habits for Pennsylvania System of School Assessment



Seven complete 40-question Grade 6 practice rounds for PSSA, built for Keystone practice habits 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, Pennsylvania Math Explorer!

Eight focused rounds using Keystone practice habits

This book gives you seven full Grade 6 practice tests for PSSA. Each round uses ridge roads, town squares, and strong step-by-step work as a fresh mental backdrop while you read closely, choose a smart strategy, show your work, and check whether your answer makes sense.

Your Pennsylvania Practice Promise

Use each clue as a keystone: connect facts, solve carefully, and verify the answer.

How to Use This Book

A seven-session routine for Keystone practice habits

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.

Pennsylvania review rhythm: After each round, choose one correction habit to hold the next test together.

What Is Inside?

Eight PSSA tests, 320 questions, and a full review path

Part	What You Will Practice
Tests 1–3	Foundation rounds for ratios, rational numbers, operations, and careful reading.
Tests 4–6	Skill-building rounds with expressions, equations, geometry, data, and problem models.
Test 7	Final stamina round for mixed review, neat work, and flexible strategy choices.
Answer Pages	Compact keys and explanations that show why each answer works.

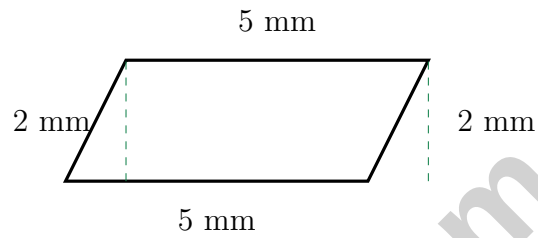
The tests are mixed on purpose. Keystone practice habits means recognizing the skill even when the next question changes topic, changes format, or asks for an explanation.

Table of Contents

1) A rectangular aquarium has volume 50 liters, width $\frac{5}{2}$ dm, and height 4 dm. Find the length.

☐ A. 2 dm
☐ B. 20 dm
☐ C. 10 dm
☐ D. 5 dm

2)



Find the area of the parallelogram shown above.

☐ A. 4 mm^2
☐ B. 7 mm^2
☐ C. 10 mm^2
☐ D. 14 mm^2

3) 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
☐ B. 4
☐ C. 5
☐ D. 6

4) A sports analyst compares two athletes' scoring consistency. Athlete A: 10 games with mean = 18 points, IQR = 4. Athlete B: 10 games with mean = 18 points, IQR = 8. If a coach needs a reliable scorer for an important game, whom should she choose?

☐ A. Athlete A, due to smaller IQR
☐ B. Athlete B, due to higher variability
☐ C. Both equally reliable
☐ D. Cannot decide without knowing all scores

5) Which statement about a misleading graph is TRUE?

☐ A. The data is always incorrect
☐ B. Misleading graphs always have negative intent
☐ C. All bar graphs are inherently misleading
☐ D. The visual display exaggerates or downplays differences

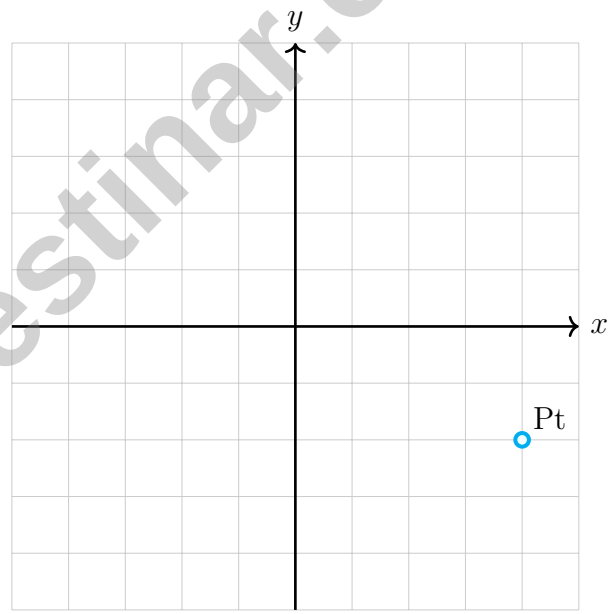
6)

Material	Sand	Gravel
Parts	4	6

A builder uses sand and gravel in a mixing ratio of $4 : 6$. Which of the following is NOT equivalent to this ratio?

☐ A. $2 : 3$
☐ B. $8 : 12$
☐ C. $12 : 18$
☐ D. $4 : 9$

7)



A point is at $(4, -2)$ and is reflected over the y-axis. Which point is its image?

☐ A. $(-4, -2)$
☐ B. $(4, 2)$
☐ C. $(4, -2)$
☐ D. $(-4, 2)$

8) Which statement BEST describes a statistical question?

☐ A. It has a single, definite answer.
☐ B. It involves a very large number of people.
☐ C. It is asked only once per year.
☐ D. It anticipates variability and is answered by collecting data.

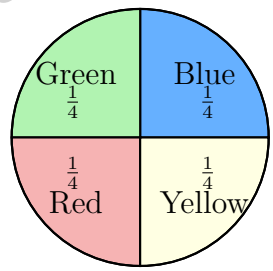
9) Data Set A: $5, 6, 7, 8, 9$ (Mean $= 7$, Median $= 7$) Data Set B: $1, 5, 7, 8, 24$ (Mean $= 9$, Median $= 7$) Which statement is true?

☐ A. Set A is more skewed
☐ B. Set B has a larger outlier
☐ C. The means are equal
☐ D. Set A has a larger outlier

10) A student reads a box plot and says: "The median is 22, so 22 is in the middle of the data." Which best describes the error?

☐ A. The median is not in the middle of the data.
☐ B. The median is a data value that separates the lower half from the upper half, not necessarily the center of the spread.
☐ C. The median is always the average of two numbers.
☐ D. The median cannot be determined from a box plot.

11)



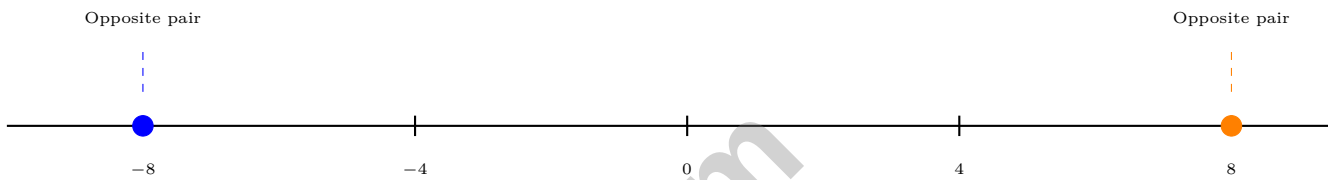
The spinner above is divided into sections with the labeled probabilities. What is the probability of spinning blue or red?

☐ A. $\frac{1}{4}$
☐ B. $\frac{3}{8}$
☐ C. $\frac{3}{4}$
☐ D. $\frac{1}{2}$

1) A student incorrectly solved $\frac{2}{3} \div \frac{1}{4}$ by writing $\frac{2}{3} \times \frac{1}{4} = \frac{2}{12} = \frac{1}{6}$. What was the error?

☐ A. Forgot to invert the divisor $\frac{1}{4}$
☐ B. Inverted the dividend instead of the divisor
☐ C. Subtracted instead of dividing
☐ D. Forgot to simplify

2)



Two numbers shown are opposites. What is $|-8| + |8|$?

☐ A. 0
☐ B. 8
☐ C. -16
☐ D. 16

3) A machine produces 420 items in 7 hours. At this rate, how many items will the machine produce in 12 hours?

4) Which statement is true?

☐ A. $(-2, 3)$ is in Quadrant III
☐ B. $(4, -1)$ is in Quadrant II
☐ C. $(-5, -6)$ is in Quadrant III
☐ D. $(3, 2)$ is in Quadrant IV

5) A book club reads pages at a constant rate. The table shows how many pages are read in different times:

Pages Read	Time (hours)
45	1.5
90	3
?	4.5

☐ A. 120
☐ B. 130
☐ C. 135
☐ D. 150

6) A store sells fabric by the yard. The price per yard is \$12. A customer buys 2.5 yards. If the store uses the proportional relationship $p = 12y$, what is the total price?

☐ A. \$14.50
☐ B. \$24
☐ C. \$29
☐ D. \$30

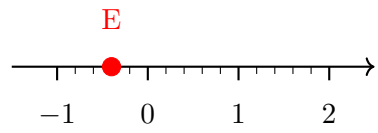
7) Divide 4,896 by 18.

☐ A. 272
☐ B. 280
☐ C. 276
☐ D. 284

8) What is the GCF of 10 and 15?

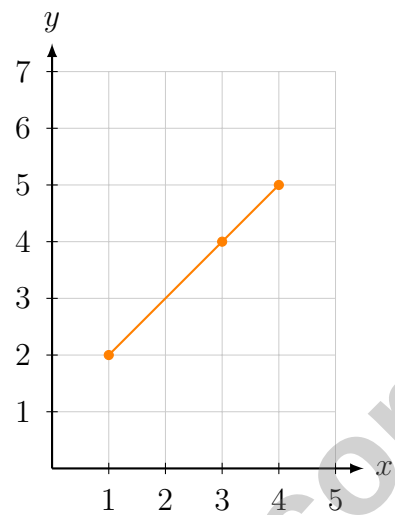
☐ A. 2
☐ B. 3
☐ C. 5
☐ D. 10

9) The number line below has tick marks at fifths. What is the coordinate of point E?



☐ A. $-\frac{3}{5}$
☐ B. $\frac{1}{5}$
☐ C. $-\frac{1}{5}$
☐ D. $-\frac{2}{5}$

1) The graph shows a linear relationship between two quantities.



Which equation matches this graph?

☐ A. $y = x + 1$
☐ B. $y = 2x - 1$
☐ C. $y = \frac{4}{3}x + \frac{2}{3}$
☐ D. $y = x + 2$

2) A school held a basketball tournament. Team A scored 35 points and Team B scored 42 points. Which ratio correctly compares the teams' scores?

☐ A. 5 : 6
☐ B. 6 : 5
☐ C. 7 : 6
☐ D. 6 : 7

3) Two students see the same ratio table. Student 1 says the ratio is 2 : 3. Student 2 says the ratio is 4 : 6. Who is correct?

Cats	Dogs
4	6
8	12

☐ A. Student 1 only
☐ B. Student 2 only
☐ C. Both are correct
☐ D. Neither is correct

4) A science teacher is comparing two chemical solutions. Solution A has a mass of 50 grams and Solution B has a mass of 75 grams. The volumes are 10 mL and 15 mL respectively. Which solution shows a proportional mass-to-volume relationship?

Solution	Mass (g)	Volume (mL)
A	50	10
B	75	15

☐ A. Only Solution A has a ratio of 5 : 1
☐ B. Only Solution B has a ratio of 5 : 1
☐ C. Both have the same proportional ratio of 5 : 1
☐ D. Neither; the ratios are different

5) Two students are comparing their answers for $1\frac{1}{4} \div \frac{5}{6}$. Student A got $\frac{15}{20}$, and Student B got $\frac{3}{2}$. Which student is correct?

☐ A. Student A; $\frac{15}{20}$ equals $\frac{3}{2}$
☐ B. Student B; the correct answer is $\frac{3}{2}$
☐ C. Both are correct; they simplified differently
☐ D. Neither; the answer is $\frac{5}{8}$

Pennsylvania PSSA Practice Test Answer Keys

How to use this Pennsylvania PSSA 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 Keystone practice habits
3. rework the problem before reading the full explanation, using this reminder: Use each clue as a keystone: connect facts, solve carefully, and verify the answer.

A calm Pennsylvania correction routine turns every missed item into useful practice. After each round, choose one correction habit to hold the next test together.

Pennsylvania Practice Test Answers and Explanations

Review the seven printed PSSA tests with structured, confident, and ready for the next keystone habits.

Practice Test 1 Answers and Explanations

1) **Choice D is correct.** CC.2.1.6.E.2 $50 = L \times 2.5 \times 4 = L \times 10$, so $L = 5$ dm.
2) **Choice C is correct.** CC.2.3.6.A.1 Area = base × height $= 5 \times 2 = 10$ mm^2.
3) **Choice B is correct.** CC.2.1.6.D.1 Sum $= 2+2+3+3+3+4+4+5+6+6 = 38$. Mean $= 38 \div 10 = 3.8$, which rounds to 4.
4) **Choice A is correct.** CC.2.1.6.E.2 Both have the same mean (18 points), but Athlete A's smaller IQR (4 vs 8) means the middle 50% of scores cluster more tightly. This indicates more consistent, predictable scoring—exactly what a coach needs for a crucial game.
5) **Choice D is correct.** CC.2.1.6.E.2 Misleading graphs use visual techniques (truncated axes, 3D effects, non-uniform scales) to distort perception. The data itself may be correct, but the visual misrepresents it.
6) **Choice D is correct.** CC.2.1.6.D.1 The ratio 4 : 6 simplifies to 2 : 3. Choices A, B, and C all match that same relationship, but 4 : 9 does not simplify to 2 : 3.
7) **Choice A is correct.** CC.2.1.6.D.1 Reflection over the y-axis negates the x-coordinate: $(4, -2) \to (-4, -2)$.
8) **Choice D is correct.** CC.2.4.6.B.1 By definition, a statistical question expects different answers from different sources and requires collecting and analyzing data. The size of the number or frequency of asking does not define a statistical question.
9) **Choice B is correct.** CC.2.2.6.B.2 Set B has the outlier 24, making it more skewed. The means are not equal, and Set A does not have a larger outlier.
10) **Choice B is correct.** CC.2.2.6.B.3 The median divides data into two equal groups by count (50% below, 50% above), but may not be the center of the spread on the number line. For asymmetric distributions, the median can be off-center.
11) **Choice D is correct.** CC.2.1.6.E.1 $P(\text{blue or red}) = \frac{1}{4} + \frac{1}{4} = \frac{2}{4} = \frac{1}{2}$.
12) **Choice B is correct.** CC.2.1.6.E.4 Numbers in the 10s: $12, 18, 15, 12, 20, 15, 14, 19$. Those with stem 1: $12, 18, 15, 12, 15, 14$ (6 values).
13) **Choice A is correct.** CC.2.1.6.E.1 A circle has 100%. Divide by 5: $100 \div 5 = 20\%$ per section.
14) **The correct answer is** 0.8. CC.2.1.6.E.3 The distance from zero is smallest for 0.8.
15) **Choice B is correct.** CC.2.2.6.B.2 When a variable appears with no visible number, the coefficient is 1. So $m = 1m$.
16) **Choice D is correct.** CC.2.1.6.E.2 Substitute $x = -2$: $(-2)^2 - 3(-2) = 4 + 6 = 10$.
17) **Choice B is correct.** CC.2.2.6.B.2 "4 meters less" means subtract 4 from the length.
18) **Choice D is correct.** CC.2.1.6.E.3 A filled circle at -1 with an arrow pointing left indicates x equals -1 or is less than -1.
19) **The correct answer is y-coordinate changes sign, x-coordinate stays the same.** CC.2.1.6.D.1 When reflecting across the x-axis, the y-coordinate changes to $-q$ (B is correct) and the x-coordinate remains p (D is correct). This means the reflected point is $(p, -q)$. Statement A is false—only the y-coordinate changes sign. Statement C is false because the reflection is vertical. Statement E describes the result but is not separately identifying a true property about the transformation.
20) **Choice C is correct.** CC.2.2.6.B.3 The graph shows points $(2.5, 5)$ and $(5, 10)$. The slope is $\frac{10-5}{5-2.5} = \frac{5}{2.5} = 2$, so apples cost \$2 per pound.
21) **Choice D is correct.** CC.2.1.6.D.1 The student's answer is too specific. A ratio of 5 : 3 means for every 5 girls there are 3 boys, but scaled amounts like 10 : 6 or 15 : 9 also fit.
22) **Choice D is correct.** CC.2.1.6.D.1 The ratio is 4 : 5. When roses are 16 (multiply by 4), tulips are $5 \times 4 = 20$.
23) **The correct answer is** 300. CC.2.2.6.B.2 Distance on map: $|9 - 3| = 6$ units. Actual distance: $6 \times 50 = 300$ meters.
24) **The correct answer is** 35. CC.2.3.6.A.1 Balance after two withdrawals: $150 - 75 - 40 = 35$ dollars.

Hi, Brave Explorer!

◇ What a trip! You explored 7 full tests. You went to many math places: multiplication, fractions, area, time, and more. ◇

⋆ **Smart explorers know:** every trip teaches something. Through 7 tests, you learned a lot. You are a stronger math explorer now. ⋆

Your Explorer Tools

- **Map Reading:** You read problems carefully.
- **Trail Skills:** You take steps in the right order.
- **Backpack:** You have many math tools.
- **Brave Heart:** You explore even hard problems.

Explorer tip: on test day, use the tools you packed. You have the skills. You are ready!

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

Jay Daie

Your Math Trail Guide

MASTER TODAY.
SUCCEED TOMORROW.

This Grade 6 Math Practice Tests book is designed to help students strengthen their math skills, master important concepts, and build the confidence they need to excel on comprehensive assessments.

With 7 full-length printed tests and 2 online tests, students get the review, practice, and realistic test experience they need to improve accuracy, develop problem-solving abilities, and reach their full potential.

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

7 PRINTED TESTS

+

2 ONLINE TESTS

PERFECT FOR:

- Classroom Practice
- Homework & Review
- Independent Learning
- Test Preparation
- Skill Reinforcement
- Building Confidence

PRACTICE TODAY. SUCCEED TOMORROW.

WHAT STUDENTS WILL 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 aligned with standards through meaningful practice.

Test Confidence
Become familiar with test formats and improve accuracy and speed.

Achieve Success
Build confidence and perform your best on test day.

TOPICS COVERED

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

2 ONLINE TESTS

Extra online practice to reinforce learning and build confidence.

MORE PRACTICE. GREATER RESULTS.

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

7 FULL-LENGTH PRINTED TESTS

STANDARDS-ALIGNED PRACTICE

DETAILED ANSWER KEYS & EXPLANATIONS