4 Pennsylvania PSSA

Grade 3

MATH

PRACTICE TESTS

Standards-Aligned Practice

STANDARDS-ALIGNED
Practice to build skills and boost confidence

4 FULL-LENGTH TESTS
Realistic questions to prepare for test day

ANSWER KEYS & EXPLANATIONS
Detailed solutions to learn and improve

4 Pennsylvania PSSA Grade 3 Math Practice Tests

Standards-Aligned Review with Mixed Practice and Answer Key

Four focused 30-question missions for Grade 3 math: number facts, fractions, measurement, data, area, shapes, answer keys, and clear explanations for every item.

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Welcome to the Pennsylvania Math Launch

Four missions, careful work, and a stronger Grade 3 thinker

Read the mission. Show the work. Check the answer. Launch again.

To the Grade 3 Mission Leader

This book is a four-mission practice launch for the Pennsylvania PSSA. Each test gives you a fresh chance to multiply, divide, read graphs, compare fractions, measure, find area, and explain math in a way someone else can follow.

Pennsylvania has valley roads, historic cities, and bridges that connect one idea to the next. Good math uses the same habit: pause, check the details, and move forward with a steady plan.

Notice

Find the numbers, units, and question before choosing a path.

Model

Draw an array, number line, table, or quick equation.

Verify

Ask whether your answer fits the story and the unit.

Launch promise: I will slow down at the important moments, show the work I can, and use every miss as a clue for the next mission.

How to Use This Book

A four-mission routine for steady Grade 3 growth

1. Warm Up the System

Read the review pages first. Remind your brain how equal groups, fractions, clocks, graphs, and area models work.

2. Fly One Mission

Take one complete 30-question test. Keep your work neat enough that you can check it later.

3. Review the Flight

Use the answer key, then pause. A wrong answer is useful when you can name what happened.

4. Repair and Relaunch

Rework a few missed questions before starting the next test. The repair step is where the score begins to move.

A Four-Session Plan

Session 1	Take Test 1 and mark the topics that need attention.
Session 2	Take Test 2 and focus on showing every step clearly.
Session 3	Take Test 3 and watch for units, labels, and two-step problems.
Session 4	Take Test 4 and finish with calm, careful checking.

Best mission habit: After checking answers, write one sentence: "Next time I will pay attention to _____."

Scan me!
For more practice & answers

Test Overview

What each Grade 3 math mission asks you to do

Each practice test has 30 questions. Across four tests, you will practice the kind of Grade 3 math thinking used on the Pennsylvania PSSA: reading carefully, choosing a strategy, doing accurate computation, and explaining enough work to make your answer clear.

Multiple Choice

Look for the best answer. Estimate first when you can, cross out choices that do not fit, and reread the question before you choose.

Open Response

Write the answer and show the reason. A good Grade 3 response may use a drawing, equation, table, number line, or a few clear words.

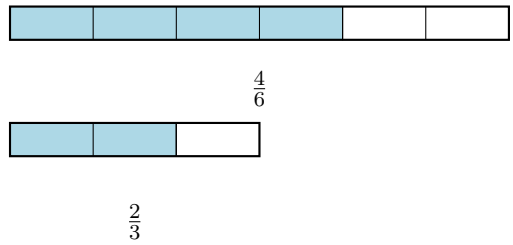
Math Ideas Inside the Four Tests

- multiplication, division, arrays, missing factors, and two-step word problems
- place value, rounding, addition, subtraction, and multiplying by tens
- unit fractions, number lines, equivalent fractions, and comparing fractions
- time, mass, liquid volume, picture graphs, bar graphs, and line plots
- area, perimeter, unit squares, rectangles, and shape categories

What strong PSSA work looks like: the answer matches the question, the units make sense, and the work is clear enough to check.

Table of Contents

1) Which fraction is equivalent to $\frac{4}{6}$?



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

2) A garden is 7 feet long and 5 feet wide. What is its area?

☐ A. 12 sq ft
☐ B. 35 sq ft
☐ C. 24 sq ft
☐ D. 70 sq ft

3) Look at the fact family:

$3 \times 8 = 24$	$8 \times 3 = 24$
$24 \div 3 = 8$	$24 \div 8 = 3$

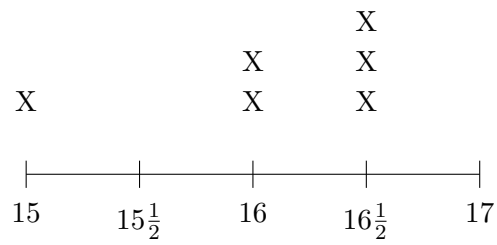
Which equation is part of this fact family?

☐ A. $24 \div 8 = 4$
☐ B. $24 \div 4 = 8$
☐ C. $20 \div 3 = 8$
☐ D. $24 \div 3 = 8$

4) Lily made 5 flower pots. She put 6 flowers in each pot. What is the total number of flowers?

☐ A. 11 flowers (adds $5 + 6$)
☐ B. 35 flowers (multiplies by wrong amount)
☐ C. 25 flowers (confuses: 5×5 instead of 5×6)
☐ D. 30 flowers

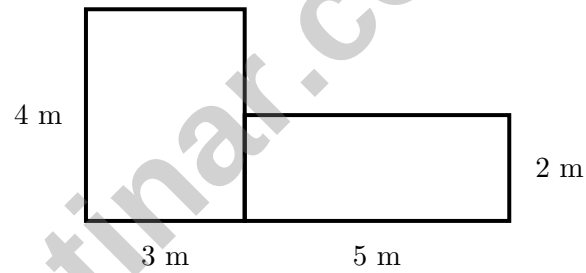
5) Noah recorded bird wing spans in inches with halves: $15, 15\frac{1}{2}, 16, 16\frac{1}{2}, 17$.



Which wing span is the mode?

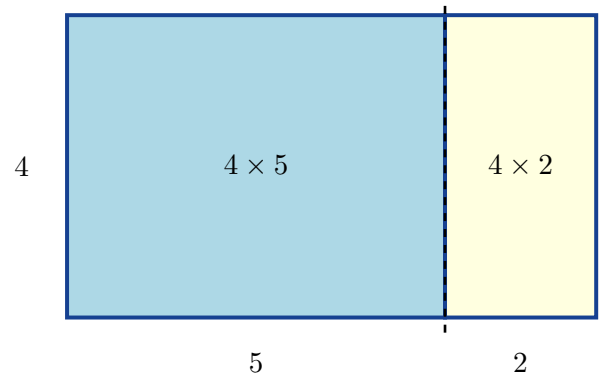
☐ A. 15 inches
☐ B. 16 inches
☐ C. $16\frac{1}{2}$ inches
☐ D. 17 inches

6) Sam's bedroom is shaped like an L. One part is 3 m long and 4 m wide. The other part is 5 m long and 2 m wide. What is the total area of his bedroom?



☐ A. 12 sq m
☐ B. 10 sq m
☐ C. 22 sq m
☐ D. 120 sq m

7) Sam draws an area model to find $4 \times 7 = 4 \times (5 + 2)$.



What is $4 \times 5 + 4 \times 2$?

☐ A. 20
☐ B. 22
☐ C. 30
☐ D. 28

8) 

This is a 6×1 grid. How many unit squares are shown?

☐ A. 5 unit squares
☐ B. 6 unit squares
☐ C. 7 unit squares
☐ D. 8 unit squares

9) What is $486 + 237$?

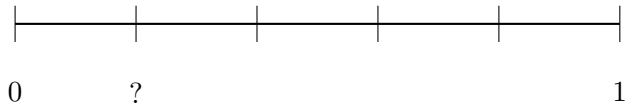
☐ A. 613
☐ B. 713
☐ C. 723
☐ D. 624

10) A room is 7 feet long and 4 feet wide. Explain how you would count the unit squares in this rectangle. Would you count by rows or by columns? Show your work.

1) Lily has 2 equal pieces of a sandwich. She eats 1 piece. What fraction did she eat?

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

2) A number line from 0 to 1 is divided into 5 equal parts. Which shows the unit fraction?



☐ A. $\frac{1}{5}$
☐ B. $\frac{1}{4}$
☐ C. $\frac{1}{6}$
☐ D. $\frac{2}{5}$

3) Which is NOT equal to a whole number?

☐ A. $\frac{20}{4}$
☐ B. $\frac{7}{1}$
☐ C. $\frac{3}{2}$
☐ D. $\frac{8}{8}$

4) Which statement is true about a unit square measured in centimeters?

☐ A. It has side length 2 cm and area 4 square cm
☐ B. It has side length 1 cm and area 1 square cm
☐ C. It has side length 1 cm and area 2 square cm
☐ D. It has side length 5 cm and area 5 square cm

5) A rectangle with dimensions 10×9 is split by a vertical line into two parts. If one part is 10×4, what is the correct distributive equation?

☐ A. $10 \times 9 = 10 \times (4+5) = (10 \times 4) + (10 \times 5) = 40 + 50 = 90$
☐ B. $10 + 9 = 19$
☐ C. $4 + 5 = 9$
☐ D. $10 \times 4 = 40$ only

6) A line plot shows desk surface measurements in inches: $24, 24\frac{1}{2}, 25, 25\frac{1}{2}, 26$. The counts are: 0 at 24 inches, 2 at $24\frac{1}{2}$ inches, 5 at 25 inches, 1 at $25\frac{1}{2}$ inches, and 2 at 26 inches. Which measurement appears most often?

☐ A. $24\frac{1}{2}$ inches
☐ B. 25 inches
☐ C. $25\frac{1}{2}$ inches
☐ D. 26 inches

7) Find $6 \times 5 + 6 \times 3$.

8) Look at the rows in a multiplication table:

×	1	2	3	4
3	3	6	9	12
4	4	8	12	16

What increases by 3 in the row for 3?

☐ A. The multiplier on the top
☐ B. The table title
☐ C. The column number
☐ D. The product each time

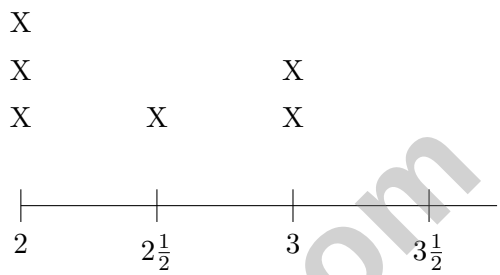
9) A rectangular field has length 9 meters and width 4 meters. What is the area?

☐ A. 13 sq m
☐ B. 36 sq m
☐ C. 26 sq m
☐ D. 45 sq m

1) Ava has 20 beads. She wants to make 5 equal bracelets. How many beads are on each bracelet?

☐ A. 3
☐ B. 25
☐ C. 15
☐ D. 4

2) Sam measured the heights of flower stems in inches. The line plot below shows halves: $2, 2\frac{1}{2}, 3, 3\frac{1}{2}$.



What is the most common stem height?

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

3) Write a fraction equivalent to $\frac{3}{6}$.

4) What is 513 rounded to the nearest 10?

☐ A. 500
☐ B. 520
☐ C. 513
☐ D. 510

5) On a number line from 0 to 1 with 3 equal parts, the second tick mark from 0 represents which fraction?

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

6)

1	2	3	4	?

Which number should replace the **?**

☐ A. 5
☐ B. 6
☐ C. 7
☐ D. 8

7) Ava earns $8 per hour. She works for some number of hours and earns $56. Which division equation helps find how many hours she worked?

☐ A. $56 \div 8 = \square$
☐ B. $8 \times \square = 56$
☐ C. $56 + 8 = \square$
☐ D. $56 - 8 = \square$

8)

Item	Mass
Watermelon	5 kg
Pineapple	2 kg

Eli carries a watermelon and a pineapple. What is the total mass?

☐ A. 3 kg
☐ B. 5 kg
☐ C. 7 kg
☐ D. 10 kg

Practice Test Answer Keys

How to use this section with a Grade 3 student:

1. check the answer first
2. mark questions to try again
3. rework the problem before reading the full explanation

A calm correction routine turns every missed item into useful practice.

Practice Test Answers and Explanations

Practice Test 1 Answers and Explanations

1) **Choice B is correct.** 3.NF.A.3 $\frac{4}{6}$ and $\frac{2}{3}$ both equal two-thirds of a whole.
2) **Choice B is correct.** 3.MD.C.7b Area = length × width = $7 \times 5 = 35$ square feet. Choice A (12) is the sum $7 + 5$; Choice C (24) is common product error; Choice D (70) is double the area.
3) **Choice D is correct.** 3.OA.A.4 In this fact family, $24 \div 3 = 8$. This is the division equation that matches the multiplication $3 \times 8 = 24$.
4) **Choice D is correct.** 3.OA.A.1 5 pots with 6 flowers each means 5 groups of 6. So $5 \times 6 = 30$ flowers.
5) **Choice C is correct.** 3.MD.B.4 The mode is the value with the most X's. At $16\frac{1}{2}$, there are 3 X's, which is more than any other value.
6) **Choice C is correct.** 3.MD.C.7d Part 1: $3 \times 4 = 12$ sq m. Part 2: $5 \times 2 = 10$ sq m. Total: $12 + 10 = 22$ sq m.
7) **Choice D is correct.** 3.OA.B.5 $4 \times 5 = 20$ and $4 \times 2 = 8$, so $20 + 8 = 28$. Also $4 \times 7 = 28$.
8) **Choice B is correct.** 3.MD.C.5a A 6×1 grid contains exactly 6 unit squares arranged in a row.
9) **Choice C is correct.** 3.NBT.A.2 Add the ones ($6 + 7 = 13$, write 3, carry 1), tens ($8 + 3 + 1 = 12$, write 2, carry 1), hundreds ($4 + 2 + 1 = 7$). Answer: 723.
10) **The correct answer is 28 sq ft.** 3.MD.C.6 Students should use either row-counting or column-counting and show repeated addition or skip-counting.
11) **Choice B is correct.** 3.MD.B.3 Summer: $5 \times 8 = 40$. Winter: $3 \times 8 = 24$. Difference: $40 - 24 = 16$.
12) **Choice A is correct.** 3.OA.A.3 Multiply: 2 groups × 9 items per group = 18 total.
13) **Choice C is correct.** 3.MD.C.7a Square tiling: $5 \times 5 = 25$ square units.
14) **Choice A is correct.** 3.NF.A.2b Four hops of $\frac{1}{4}$ each $= 4 \times \frac{1}{4} = 1$. The frog lands at 1.
15) **Choice B is correct.** 3.NF.A.1 When a circle is divided into 6 equal parts, each part is $\frac{1}{6}$, not $\frac{1}{5}$. Ben miscounted the total number of parts.
16) **Choices B and E are correct.** 3.OA.D.9 Statement B is true because any even number contains a factor of 2, making the product even. Example: $4 \times 3 = 12$ (even). Statement E is true because the row for 5 shows 5, 10, 15, 20, . . . , increasing by 5 each time (5×1, 5×2, 5×3, etc.). Statement A is false (odd × odd is odd). Statement C is false (3, 6, 9, 12, . . . has odd and even). Statement D is false ($5 \times 6 = 30$ is even).
17) **The correct answer is about 5 cups.** 3.MD.A.2 Divide: $1000 \div 200 = 5$ cups. Estimation practice aligned to 3.MD.A.2.
18) **Choice D is correct.** 3.OA.B.6 $63 \div 9 = \square$ means $\square \times 9 = 63$. Since $7 \times 9 = 63$, the answer is 7.
19) **Choice A is correct.** 3.MD.C.7 Area $= 8 \times 1 = 8$ square yards.
20) **Choice C is correct.** 3.G.A.1 A trapezoid is defined as a quadrilateral with exactly one pair of parallel sides.
21) **Choice D is correct.** 3.OA.A.2 $24 \div 6 = 4$. Divide the total students by the number of teams.
22) **The correct answer is 24 square inches.** 3.MD.C.5 $8 \times 3 = 24$ square inches.
23) **Choice B is correct.** 3.OA.D.8 Step 1: Add: $12 + 8 = 20$ cookies. Step 2: Subtract: $20 - 6 = 14$ cookies. (Choice C is step 1 only; choice A ignores new cookies.)
24) **Choice B is correct.** 3.MD.A.1 From 8 : 30 AM to 3 : 30 PM is 7 hours. School ends 15 minutes earlier, so the day is 6 hours 45 minutes.
25) **Choice A is correct.** 3.NBT.A.1 The point is between 250 and 255, closer to 250. A number like 251–254 rounds to 250 (ones digit < 5).
26) **Choice A is correct.** 3.NF.A.3d $\frac{1}{2}$ and $\frac{2}{4}$ cover the same amount. They are equivalent fractions.
27) **Choice B is correct.** 3.NF.A.3b Multiply numerator and denominator by 2: $\frac{1 \times 2}{3 \times 2} = \frac{2}{6}$.
28) **Choice D is correct.** 3.MD.C.5b $7 \times 7 = 49$ unit square tiles.
29) **Choice C is correct.** 3.MD.C.7c $3 \times (5 + 4) = 3 \times 9 = 27$ or $(3 \times 5) + (3 \times 4) = 15 + 12 = 27$.
30) **Choice B is correct.** 3.NF.A.2a More parts means smaller pieces. When the same line is split into more parts, each part is smaller. $\frac{1}{4} < \frac{1}{3}$.

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

Build Skills. Achieve More.

This book gives **Grade 3** students the focused practice they need to master math concepts with confidence.

What's Inside?

Standards-Aligned Practice
Questions designed to match Grade 3 math standards.

Variety of Question Types
Build skills with multiple formats and challenges.

Real-World Applications
Engaging problems that connect math to life.

Step-by-Step Progress
Track improvement and see growth over time.

Build Skills & Boost Confidence
Strengthen understanding and perform better.

COVERS ALL ESSENTIAL TOPICS

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

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PRACTICE. PREPARE. SUCCEED.