

7 Virginia SOL

Grade 3 MATH

PRACTICE TESTS

Standards-Aligned Practice with Review, Answer Keys, and Explanations



7 Full-Length Practice Tests



Standards-Aligned Math Practice

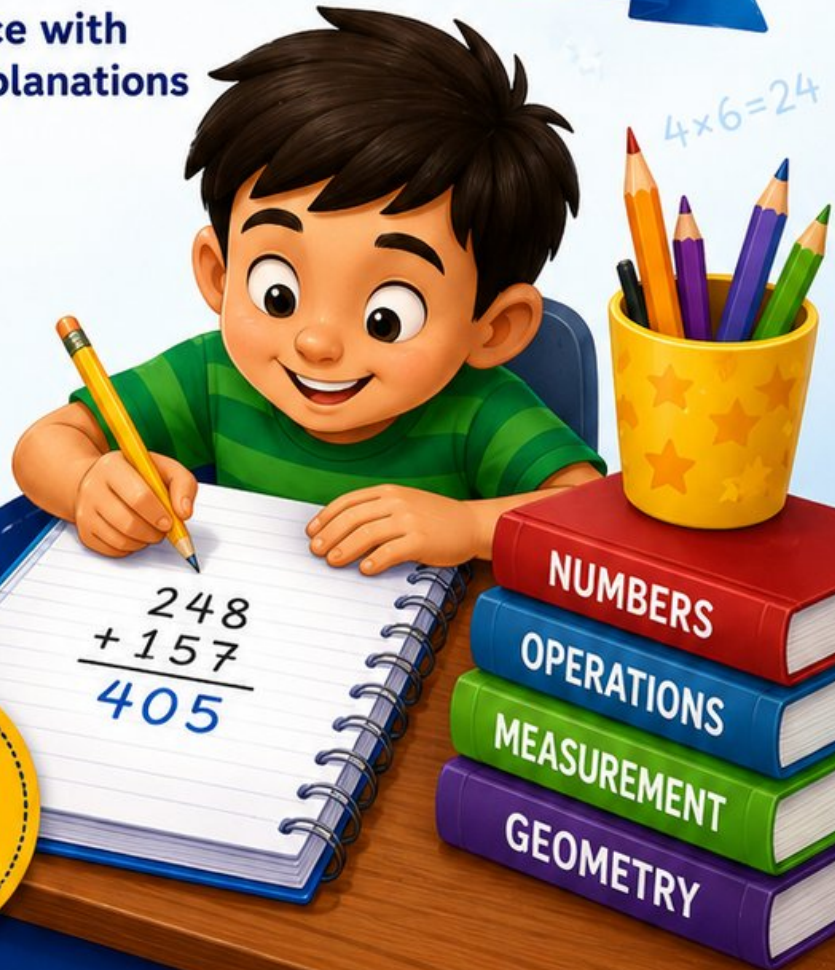


Detailed Answer Keys and Explanations



Build Confidence. Achieve Success.

PREPARE
PRACTICE
SUCCEED



7 Virginia SOL Grade 3 Math Practice Tests

Standards-Aligned Practice with Review, Answer Keys, and Explanations



Seven complete 30-question practice trails for Grade 3 math:
operations, fractions, measurement, data, area, shapes, answer keys,
and clear explanations for every item.

Jay Daie and Reza Nazari



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Welcome to the Seven Math Trails

Seven full tests, seven fresh chances, and one braver Grade 3 thinker



Read the trail. Mark the clues. Solve with care.

To the Grade 3 Math Trail Leader

This book gives you seven complete practice trails for the Virginia SOL. Each trail is a full 30-question test, so students can practice accuracy, stamina, and clear explanations over time.

Virginia has Blue Ridge views, coastal harbors, historic roads, school labs, and thoughtful questions, where careful steps matter. Strong math follows that same path: notice the question, choose a tool, show the work, and use evidence to support each answer.

Scout

Find what the problem is asking before you calculate.

Solve

Pick an equation, model, array, graph, or number line.

Prove

Check the answer and explain the thinking clearly.

Seven-trail promise: I will work with patience, use my scratch space wisely, and let every correction make my next test stronger.

How to Use This Book

A seven-trail routine for steady Grade 3 growth

Use one practice trail at a time. The goal is not to rush through more pages. The goal is to finish, check, repair, and bring a stronger habit to the next test. For Virginia students, each trail moves through Blue Ridge views, coastal harbors, historic roads, school labs, and thoughtful questions: steady, alert, and ready for the next clue.

1. **Preview the tools.** Skim the reference page before each test.
2. **Take one test.** Work steadily and mark problems that need another look.
3. **Check the key.** Use the compact answer boxes first.
4. **Study explanations.** Read missed items and lucky guesses.
5. **Redo three problems.** Rewrite the work cleanly without copying.
6. **Name one habit.** Choose a focus such as labels, facts, fractions, or checking.
7. **Start the next trail.** Bring that habit into the next full test.

Best review habit: A missed problem is a trail marker. It shows where to slow down, look again, and choose a better step.



What Is Inside?

Seven complete practice tests with review support

Part	What You Do	Why It Helps
Practice Tests 1–7	Solve seven different 30-question tests.	Build stamina and see Grade 3 skills mixed together.
Reference Materials	Review measurement and time facts before each test.	Keep common tools close without turning pages backward.
Answer Keys	Check each answer in compact boxes.	Find mistakes quickly without losing your place.
Explanations	Read why each answer works.	Turn missed items into a clear next step.
Standards Reference	See how Virginia Grade 3 standards connect to practice.	Understand the skills behind the questions.

Each test has 26 multiple-choice questions, 1 select-all question, and 3 open-ended questions. This gives students practice with quick decisions, careful reading, and short written math answers for the Virginia SOL path.



Scan me!
For more practice
& answers

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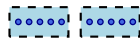
★ Practice Test 1	_____	14
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1) How does area differ from perimeter?

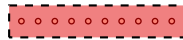
- A. Area is always larger than perimeter
 B. Perimeter measures inside; area measures distance around
 C. Area measures inside; perimeter measures distance around
 D. Both measure the same thing differently

2) Which picture shows 10 items divided equally into 5 groups?

- A. Two groups of five



- B. One group of ten



- C. Ten groups of one



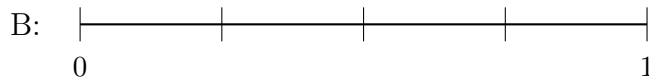
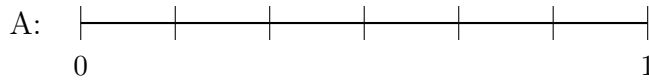
- D. Five groups of two



3) A shape has 4 sides and 4 right angles. Which of these could it be?

- A. Square or rectangle
 B. Rhombus or trapezoid
 C. Triangle or square
 D. Parallelogram only

8) Which number line correctly shows an interval from 0 to 1 divided into 6 equal parts?

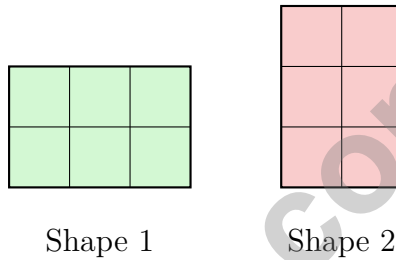


A. Option A

C. Neither is correct

B. Option B

D. Both are correct



9)

Shape 1 has an area of 6 square units. Shape 2 has an area of 6 square units. Which statement is correct?

A. Shape 1 is larger

C. Both shapes have the same area

B. Shape 2 is larger

D. Shape 1 has no area

10) For a number like _____, the rounding rule says “look at the tens digit.” What does the rounding rule mean by “look”?

A. Stare at the number with your eyes

C. Remember all the numbers you’ve rounded before

B. Write the tens digit on a separate page

D. Check whether it is 5 or greater to decide if we round up



1) Two identical number lines go from 0 to 1. Point A marks $\frac{2}{3}$. Point B marks $\frac{4}{6}$. Do they mark the same position?

- A. Cannot tell from the description. C. Yes, same position.
 B. No, B is further right. D. No, A is further right.

2) An L-shaped patio is divided by dashed lines. The upper part is 5 m by 4 m. The lower left part is 3 m by 2 m. Find the total area of the patio.



3) Sam tiles a rectangle that is 4 tiles long and 3 tiles wide. How many tiles does he use in all?

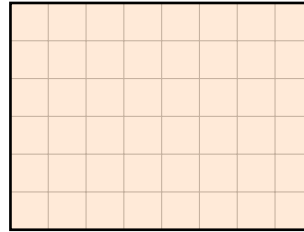
- A. 7 C. 14
 B. 12 D. 24

4) Eli has a rectangle divided into 4 equal parts. What is the denominator of the unit fraction for one part?

- A. 1 C. 4
 B. 3 D. 5

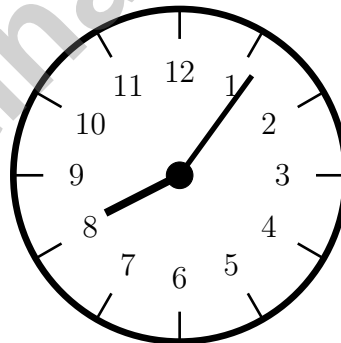


5) On a grid, a rectangle is 8 units long and 6 units wide.



How many unit squares fill it?

- A. 28 sq units C. 48 sq units
 B. 42 sq units D. 56 sq units
- 6) A rectangle's area can be written as $3 \times (5 + 4)$. What is the total area?
- A. 12 C. 27
 B. 15 D. 20
- 7) What time does the clock show?



- A. 8 : 06 C. 2 : 06
 B. 8 : 24 D. 2 : 40



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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.

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Practice Test Answers and Explanations

Practice Test 1 Answers and Explanations

- 1) **Choice C is correct.** **(3.MG.2)** Area is the space inside (square units). Perimeter is the distance around the edge (linear units). They measure different attributes.
- 2) **Choice D is correct.** **(3.NS.1)** $10 \div 5 = 2$. The picture shows 5 equal groups, each with 2 items.
- 3) **Choice A is correct.** **(3.CE.1)** Shapes with 4 sides and 4 right angles are rectangles. A square is a special rectangle with all equal sides. Rhombuses and trapezoids do not require right angles.
- 4) **Choice C is correct.** **(3.NS.3)** Pie 1 shows $\frac{1}{4}$ and Pie 2 shows $\frac{2}{8}$. Both show one-quarter shaded. They are equivalent: $\frac{1 \times 2}{4 \times 2} = \frac{2}{8}$.
- 5) **Choice D is correct.** **(3.NS.1)** The addition $9 + 9 + 9 + 9$ has four 9's, so it equals $4 \times 9 = 36$.
- 6) **Choice A is correct.** **(3.NS.1)** Both smaller rectangles need the same 6-unit side. Then the other sides, 4 and 3, join to make the full rectangle.
- 7) **Choice C is correct.** **(3.NS.1)** $\frac{3}{1} = 3$ (three wholes). $\frac{6}{2} = 6 \div 2 = 3$ wholes. $\frac{9}{3} = 9 \div 3 = 3$ wholes. All three equal 3.
- 8) **Choice A is correct.** **(3.NS.1)** Option A has 6 equal parts (7 ticks including 0 and 1). Option B has only 4 parts.
- 9) **Choice C is correct.** **(3.MG.1)** Both shapes are made of 6 unit squares, so both have area 6 square units, even though they have different dimensions.
- 10) **Choice D is correct.** **(3.NS.1)** In rounding, "look at the digit" means check its value to apply the rule: if it's 5 or more, round up; if less than 5, round down.
- 11) **Choice B is correct.** **(3.NS.3)** $\frac{2}{4}$ and $\frac{3}{6}$ both equal half of a whole.
- 12) **Choice A is correct.** **(3.CE.2)** To solve $42 \div 7 = \square$ using the unknown-factor strategy, we ask: $\square \times 7 = 42$. Since $6 \times 7 = 42$, the missing factor is 6. Options B, C, D produce different products, not 42.
- 13) **Choices A and B are correct.** **(3.MG.1)** Choices A and B are both true. Choice C is false: 2500 g is greater than 2000 g. Choice D requires unit conversion (not Grade 3). Choice E is false: 750 mL is less than 1000 mL.
- 14) **Choice C is correct.** **(3.PS.1)** Red: $2 \times 3 = 6$. Yellow: $4 \times 3 = 12$. Total: $6 + 12 = 18$.
- 15) **Choice C is correct.** **(3.PFA.1)** $5 \times 5 = 25$. This is sometimes called a "perfect square".
- 16) **Choice C is correct.** **(3.NS.1)** (i) shows $\frac{1}{2}$ and (iii) shows $\frac{2}{4}$, which are equivalent fractions.
- 17) **Choice A is correct.** **(3.NS.2)** The denominator (bottom number) tells us how many equal parts the whole is divided into. For example, in $\frac{1}{4}$, the 4 means the whole is divided into 4 equal parts.
- 18) **Choice D is correct.** **(3.CE.2)** Multiply: 2 cars \times \$8 per car = \$16.
- 19) **Choice A is correct.** **(3.PFA.1)** Ones: $5 - 1 = 4$. Tens: $3 - 4$ requires regrouping, so $13 - 4 = 9$. Hundreds: $5 - 2 = 3$. Answer: 394.
- 20) **Choice A is correct.** **(3.NS.1)** $5 \times 30 = 150$ because $5 \times 3 = 15$, then add a zero. $6 \times 20 = 120$ because $6 \times 2 = 12$, then add a zero. Since $150 > 120$, 5×30 is greater.
- 21) **The correct answer is 4 : 13.** **(3.MG.3)** $4 : 52 - 39$ minutes is $4 : 13$.
- 22) **Choice D is correct.** **(3.PS.1)** Step 1: Find cars per section: $8 \times 3 = 24$ cars. Step 2: Find total: $4 \times 24 = 96$ cars.
- 23) **Choice D is correct.** **(3.CE.2)** Multiply: $8 \times 4 = 32$ chairs.
- 24) **The correct answer is $\frac{2}{3}$.** **(3.PS.1)** With the same numerator, thirds are larger pieces than sixths. So $\frac{2}{3}$ is greater.
- 25) **Choice B is correct.** **(3.MG.2)** $7 \times 2 = 14$ square units.
- 26) **Choice D is correct.** **(3.NS.1)** Area = length \times width = $8 \times 7 = 56$ square inches.
- 27) **Choice B is correct.** **(3.NS.1)** The fact family for 3, 6, and 18 includes: $3 \times 6 = 18$, $6 \times 3 = 18$, $18 \div 3 = 6$, and $18 \div 6 = 3$. Choice B shows one multiplication fact and its related division fact.
- 28) **The correct answer is 18 sq cm.** **(3.MG.2)** Area = $9 \times 2 = 18$ square centimeters. You can multiply the side lengths or imagine 9 rows of 2 unit squares.
- 29) **Choice B is correct.** **(3.NS.1)** Reading left to right on the number line: first tick ($\frac{1}{6}$), third tick ($\frac{3}{6}$), fifth tick ($\frac{5}{6}$). Least to greatest.
- 30) **Choice C is correct.** **(3.MG.1)** Add all X's: $1 + 3 + 2 + 4 = 10$ stems total.



Hi, Math Pilot!

◇ 7 flights done in your math airplane. You have flown through smooth skies and bumpy clouds. You are a real pilot now. ◇

★ **Pilots know:** a good check before takeoff makes a smooth flight. Before each problem, do your check: read, plan, solve, verify. ★

Pilot Skills

- **Pre-Flight:** You read the question carefully.
- **Steering:** You pick the right strategy.
- **Smooth Flight:** You stay calm in long tests.
- **Landing:** You always check your final answer.

Pilot tip: on test day, take off one problem at a time. Trust your training. You earned your wings!

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

Jay Daie

Your Math Pilot

Testinar.com

PRACTICE TODAY. MASTER TOMORROW.

This book is designed to help **Grade 3** students strengthen their math skills through focused practice and real progress.

- ✓ 7 full-length practice tests
- ✓ Aligned to Grade 3 standards
- ✓ Build confidence and achieve success
- ✓ Review, answer keys, and explanations



EACH PRACTICE TEST INCLUDES:



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Aligned
Questions



Variety of
Question
Types



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Math
Applications



Step-by-Step
Progress
Tracking



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