

7 Vermont VT CAP

Grade 3 MATH

PRACTICE TESTS

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



7 Full-Length
Practice Tests



Standards-Aligned
Math Practice

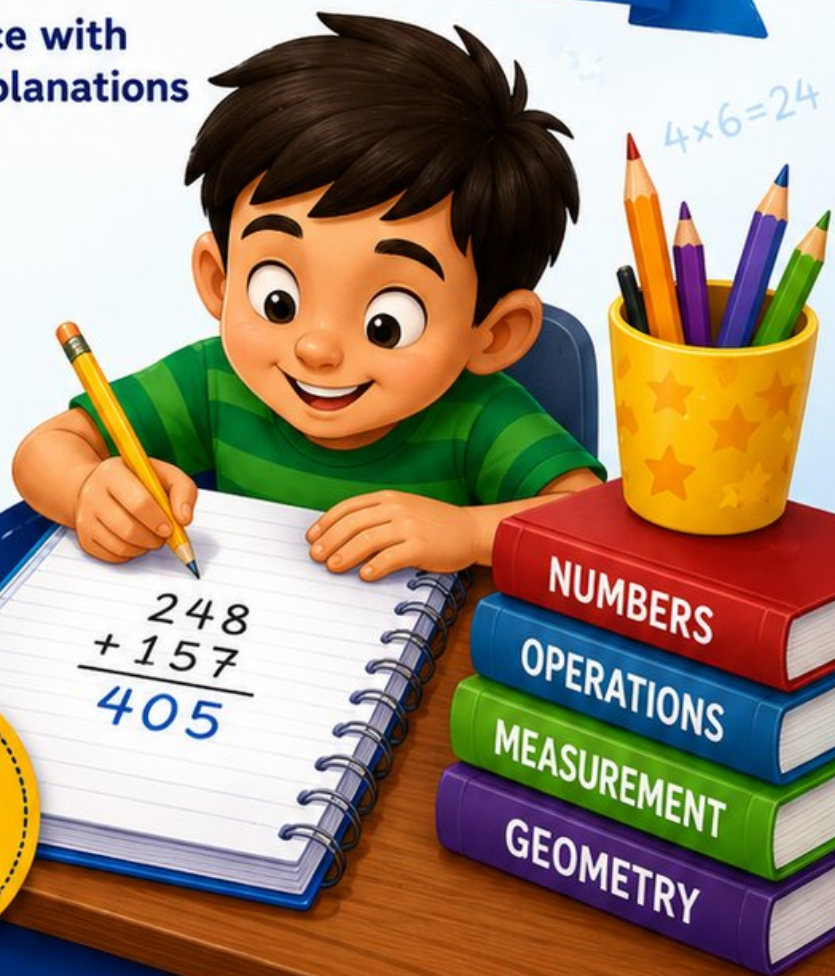


Detailed Answer Keys
and Explanations



Build Confidence.
Achieve Success.

PREPARE
PRACTICE
SUCCEED



7 Vermont VTCAP 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 Vermont VTCAP. Each trail is a full 30-question test, so students can practice accuracy, stamina, and clear explanations over time.

Vermont has maple woods, covered bridges, ski hills, green valleys, and careful school routines, where careful steps matter. Strong math follows that same path: notice the question, choose a tool, show the work, and check each step like a careful trail marker.

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 Vermont students, each trail moves through maple woods, covered bridges, ski hills, green valleys, and careful school routines: 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 Vermont 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 Vermont VTCAP path.



Scan me!
For more practice
& answers

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4) An apple orchard has trees arranged in an array. There are 6 rows of trees with 9 trees in each row. How many trees are in the orchard?

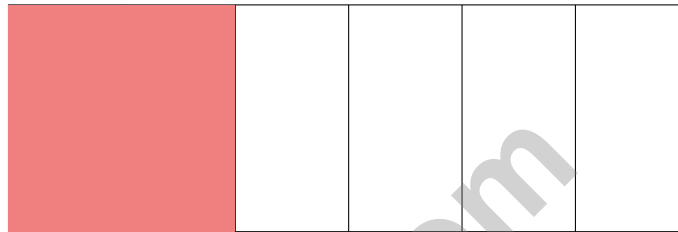
A. 15

C. 63

B. 3

D. 54

5) Look at the rectangle. It is divided into 6 equal parts, and 2 parts are shaded. Which other fraction is EQUAL to the shaded amount?



Shaded: $\frac{2}{6}$

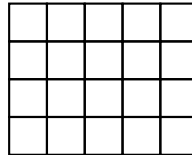
A. $\frac{3}{8}$

C. $\frac{2}{8}$

B. $\frac{1}{3}$

D. $\frac{1}{4}$

6) Here is a rectangle with 5 unit squares across and 4 unit squares down:



If you count all the unit squares, how many are there?

A. 9 unit squares

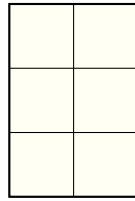
C. 20 unit squares

B. 18 unit squares

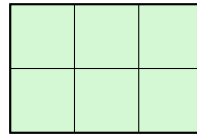
D. 20 square cm



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Y



Z

7)

Shapes Y and Z are both made of unit squares. Which is true?

- A. Y has area 6, Z has area 6
- B. Y has area 5, Z has area 5
- C. Y has area 4, Z has area 8
- D. Y has area 2, Z has area 3

8) Olivia buys 4 bags of candy with 8 pieces in each bag. She eats 12 pieces. How many pieces of candy does she have left?

- A. 20
- B. 25
- C. 32
- D. 35

9) Mia baked 30 cookies and put them into 5 bags. Each bag has the same number of cookies. How many cookies are in each bag?

- A. 5
- B. 8
- C. 7
- D. 6

10) What is 389 rounded to the nearest 10?



1) A picture graph shows insects in a garden. Ants: 7 icons (scale: 4 per icon). Bees: 3 icons (scale: 4 per icon). What is the total?

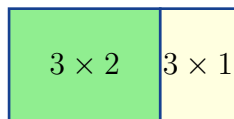
A. 28

C. 40

B. 32

D. 44

2) Look at this model showing $3 \times (2 + 1)$. What is the total?



$$\text{Total} = 2 + 1$$

A. 6

C. 12

B. 15

D. 9

3)

Equal



Equal

In this square, the green sides are equal and the blue sides are equal. Are all 4 sides equal?

A. Yes, all 4 sides are equal

C. No, only the blue sides are equal

B. No, only the green sides are equal

D. The sides have no equal length

4) A rectangular carpet is 10 centimeters long and 5 centimeters wide. What is its area?

A. 15 sq cm

C. 50 sq cm

B. 30 sq cm

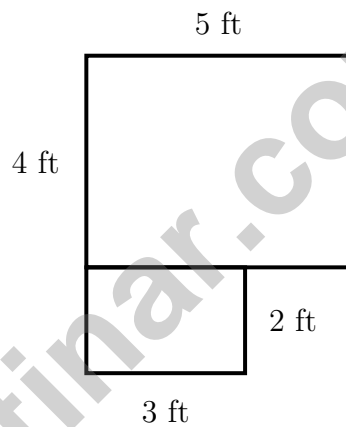
D. 55 sq cm



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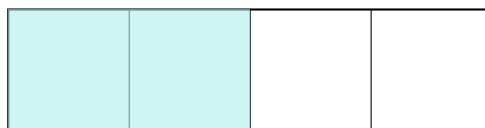
- 5) A rectangle uses 5 unit squares in each row. If there are 7 rows, how many unit squares are used in all?

- 6) An L-shaped patio is shown with dashed lines dividing it into two rectangles. The first rectangle is 5 ft by 4 ft. The second is 3 ft by 2 ft. What is the total area of the patio?



- A. 26 sq ft C. 14 sq ft
 B. 20 sq ft D. 40 sq ft

- 7) A rectangle is divided into equal parts. If $\frac{4}{4}$ is the whole rectangle, which fraction shows half of the rectangle?

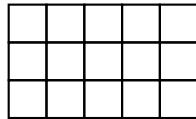


- A. $\frac{1}{4}$ C. $\frac{3}{4}$
 B. $\frac{2}{4}$ D. $\frac{4}{4}$

6) Which shape covers more space: a rectangle that is 3 units by 7 units, or a square that is 5 units by 5 units?

- A. The rectangle
- B. The square
- C. They cover the same space
- D. The rectangle is taller

7) Look at this rectangle made of unit squares:



How many unit squares are there?

- A. 8 unit squares
- B. 12 unit squares
- C. 15 unit squares
- D. 20 unit squares
- 8) Eli has two identical smoothie cups. Cup 1 is $\frac{3}{4}$ full. Cup 2 is $\frac{6}{8}$ full. Which has more smoothie?

- A. Cup 1 has more.
- B. Cup 2 has more.
- C. They have the same amount.
- D. Cannot tell.

9) A T-shaped sign is divided into three rectangles with areas 8 sq m, 5 sq m, and 5 sq m. What is the total area of the sign?

- A. 13 sq m
- B. 40 sq m
- C. 18 sq m
- D. 200 sq m



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 A is correct.** **(3.OA.D.9)** Row A shows 3, 6, 9, 12, which are multiples of 3. Row B shows multiples of 5.
- 2) **Choice A is correct.** **(3.MD.C.7b)** Area = length \times width = $6 \times 4 = 24$ square inches.
- 3) **Choice A is correct.** **(3.NF.A.3c)** 3 thirds make 1 whole. $9 \text{ thirds} = 9 \div 3 = 3$ wholes.
- 4) **Choice D is correct.** **(3.OA.A.3)** Multiply: 6 rows \times 9 trees per row = 54 trees.
- 5) **Choice B is correct.** **(3.NF.A.3a)** $\frac{2}{6} = \frac{1}{3}$ because both represent one-third of the rectangle.
- 6) **Choice C is correct.** **(3.MD.C.5b)** Count the rows: 4 rows with 5 unit squares in each row. Total: $5 + 5 + 5 + 5 = 20$ unit squares. Area is 20 square units.
- 7) **Choice A is correct.** **(3.MD.C.5a)** Y is $2 \times 3 = 6$ unit squares. Z is $3 \times 2 = 6$ unit squares. Both have the same area of 6 square units.
- 8) **Choice A is correct.** **(3.OA.D.8)** Step 1: Total candy: $4 \times 8 = 32$ pieces. Step 2: Subtract eaten: $32 - 12 = 20$ pieces left. (Choice C is step 1 only.)
- 9) **Choice D is correct.** **(3.OA.B.6)** $30 \div 5 = \square$ means $\square \times 5 = 30$. Since $6 \times 5 = 30$, there are 6 cookies in each bag.
- 10) **The correct answer is 390.** **(3.NBT.A.1)** The ones digit is 9. Since $9 \geq 5$, round up: 389 rounds to 390.
- 11) **Choice A is correct.** **(3.MD.C.7c)** $(2 \times 6) + (2 \times 3) = 12 + 6 = 18$ or $2 \times (6 + 3) = 2 \times 9 = 18$.
- 12) **Choice D is correct.** **(3.OA.A.2)** Measurement division: $40 \div 5 = 8$. There are 8 groups of 5 in 40.
- 13) **Choice C is correct.** **(3.MD.C.7d)** One part: $10 \times 2 = 20$ sq units. Other part: $4 \times 3 = 12$ sq units. Total: $20 + 12 = 32$ sq units.
- 14) **Choices A and B are correct.** **(3.NF.A.3d)** With the same numerator 1, smaller denominators give larger fractions. Thirds and fourths are smaller than halves. C equals one whole (larger), D equals $\frac{1}{2}$ (not less), and E is greater than $\frac{1}{2}$.
- 15) **Choice D is correct.** **(3.NF.A.2a)** Exactly 4 copies of $\frac{1}{4}$ fit in the interval from 0 to 1.
- 16) **Choice C is correct.** **(3.NBT.A.3)** The area model shows 4 groups of (6×10) . Adding: $60 + 60 + 60 + 60 = 240$. Or: $(4 \times 6) \times 10 = 24 \times 10 = 240$.
- 17) **Choice B is correct.** **(3.G.A.2)** If one part is $\frac{1}{2}$, the rectangle is divided into 2 equal parts.
- 18) **Choice A is correct.** **(3.NBT.A.2)** Ones: $8 + 5 = 13$ (write 3, carry 1). Tens: $1 + 7 + 1 = 9$. Hundreds: $2 + 1 = 3$. Answer: 393.
- 19) **Choice B is correct.** **(3.NF.A.1)** Two unit fractions of $\frac{1}{6}$ are being added: $\frac{1}{6} + \frac{1}{6} = \frac{2}{6}$. So there are 2 unit fractions.
- 20) **Choice B is correct.** **(3.G.A.1)** A rectangle has 4 vertices where the sides meet at corners. A circle has no vertices because it has no straight sides or corners.
- 21) **Choice D is correct.** **(3.OA.A.4)** Multiply: $7 \times 3 = 21$. Check: $21 \div 3 = 7$.
- 22) **The correct answer is $\frac{3}{4}$.** **(3.NF.A.2)** The third tick out of 4 equal parts is $\frac{3}{4}$.
- 23) **Choice C is correct.** **(3.NF.A.3b)** The denominator was multiplied by 2 (from 4 to 8). Multiply the numerator by 2: $3 \times 2 = 6$. So $\frac{3}{4} = \frac{6}{8}$.
- 24) **Choice C is correct.** **(3.MD.A.2)** Estimate: $150 + 80 + 20 \approx 250$ g. This tests Grade 3 estimation skill.
- 25) **Choice A is correct.** **(3.MD.C.6)** $5 \times 7 = 35$ sq cm. The other choices do not equal 35.
- 26) **Choice D is correct.** **(3.OA.A.1)** 4 rows with 7 flowers each means 4 groups of 7. So $4 \times 7 = 28$ flowers.
- 27) **The correct answer is $\frac{1}{2}$.** **(3.NF.A.3)** $\frac{2}{4} = \frac{1}{2}$.
- 28) **Choice C is correct.** **(3.OA.C.7)** There are 5 rows with 6 objects in each row. $5 \times 6 = 30$ objects in total.
- 29) **Choice A is correct.** **(3.MD.C.5)** $8 \times 3 = 24$ square units, same as Rectangle A.
- 30) **Choice B is correct.** **(3.MD.B.4)** At least $6\frac{1}{4}$ means $6\frac{1}{4}$ and longer: $3 + 1 + 1 + 1 = 6$ ropes.

Practice Test 2 Answers and Explanations



Trail Guide's Final Note

Hi, Brave Trail-Walker!

◇ You walked all 7 miles of the practice trail. Smooth paths, steep climbs, narrow passes. Every step taught you something. ◇

★ **Trail guides know:** the most important thing is to keep moving. Slow steps still get you there. You have a steady stride now. ★

Trail Survey

- **Route Knowledge:** You know lots of problem types.
- **Steady Pace:** You don't rush. You don't stop.
- **Pack Loaded:** You have all the math tools you need.
- **Confidence:** You trust your training.

Guide's tip: on test day, stay on the trail you've walked before. Use the strategies you've practiced. Trust the route. The summit is one steady walk away!

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

Jay Daie

Your Math Trail Guide

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:



Standards-
Aligned
Questions



Variety of
Question
Types



Real-World
Math
Applications



Step-by-Step
Progress
Tracking



Build Skills
and Boost
Confidence

COVERS ALL ESSENTIAL TOPICS

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- ✓ Fractions & Decimals
- ✓ Algebraic Thinking
- ✓ Geometry
- ✓ Measurement & Data
- ✓ Number Patterns
- ✓ Word Problems
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