

4

Rhode Island RICAS

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 Rhode Island RICAS 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.

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 to the Rhode Island 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 Rhode Island RICAS. 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.

Rhode Island has bay paths, harbor lights, and small spaces packed with smart details. 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 _____.”



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 Rhode Island RICAS: 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 RICAS work looks like: the answer matches the question, the units make sense, and the work is clear enough to check.



Scan me!
For more practice
& answers

Table of Contents

★ Practice Test 1	_____	15
★ Practice Test 2	_____	26
★ Practice Test 3	_____	38
★ Practice Test 4	_____	50
Practice Test Answer Keys	_____	61
Practice Test Answers and Explanations	_____	64

1) Ben bought 3 packs of erasers. Each pack has 8 erasers. How many erasers did Ben buy?

A. $8 \times 3 = 24$

C. $3 \times 3 = 9$

B. $3 + 8 = 11$

D. $8 + 8 = 16$

2) Lily colors $\frac{4}{6}$ of a poster red. Which fraction shows the SAME amount?

A. $\frac{4}{8}$

C. $\frac{2}{3}$

B. $\frac{3}{4}$

D. $\frac{1}{6}$

3) Which fraction is equivalent to $\frac{1}{3}$?

A. $\frac{2}{4}$

C. $\frac{2}{6}$

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

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

4) Complete the fact family. From the multiplication $7 \times 6 = 42$, which division is missing?

Multiplication	Division
$7 \times 6 = 42$	$42 \div 7 = 6$
$6 \times 7 = 42$	$42 \div 6 = \square$

A. 6

C. 42

B. 1

D. 7

5) Which shows why 4×20 equals 80?

A. $(4 + 2) \times 10 = 60$

C. $4 \times (2 + 10) = 48$

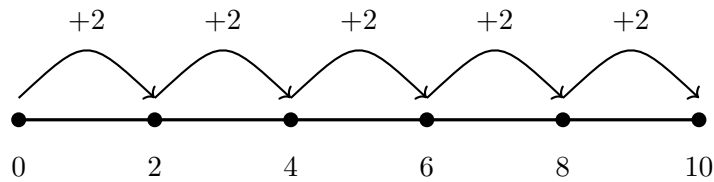
B. $4 + 2 + 10 = 16$

D. $(4 \times 2) \times 10 = 8 \times 10 = 80$



Scan me!
For more practice
& answers

6) Which division sentence is represented by the number line?



- A. $10 \div 5$
 C. 5×2
 B. $2 + 10$
 D. $10 \div 2$

7) A library has 80 books in a bin. They remove 20 damaged books. The rest are placed on 4 shelves equally. How many books are on each shelf?

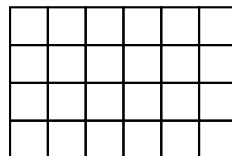
- A. 12
 C. 18
 B. 20
 D. 15

8) Which bar shows 3 wholes using the fraction $\frac{6}{2}$?



- A. Yes, it shows 3 wholes
 C. No, it shows 6 wholes
 B. No, it shows 2 wholes
 D. No, it shows 1 whole

9) Count the unit squares in this rectangle. Write how many unit squares cover the shape.





The bars show two fractions. Are they equal?

- A. Yes, they are equal
 B. No, $\frac{2}{2}$ is larger
 C. No, $\frac{3}{3}$ is larger
 D. Cannot tell

11) What is 145 rounded to the nearest 100?

- A. 100
 B. 140
 C. 150
 D. 200

12) A picture graph shows toy cars. Each car icon represents 4 cars. Diego has 12 cars. How many icons should be shown for Diego?

- A. 3 icons
 B. 4 icons
 C. 6 icons
 D. 12 icons

13) Which two of the following sums equal 500?

- A. $245 + 255$
 B. $312 + 178$
 C. $350 + 150$
 D. $200 + 290$
 E. $289 + 212$

14) 

Count the unit squares in this grid. How many unit squares cover this shape?

- A. 6 unit squares
 B. 8 unit squares
 C. 9 unit squares
 D. 12 unit squares



Scan me!
For more practice
& answers

1) Ava has 3 bags with 6 marbles in each bag. Which multiplication sentence matches?

A. $3 + 6 = 9$

C. $6 + 6 = 12$

B. $3 \times 3 = 9$

D. $3 \times 6 = 18$

2) Sam reads 24 pages of a book. He reads the same number of pages each day for 6 days. How many pages does he read each day?

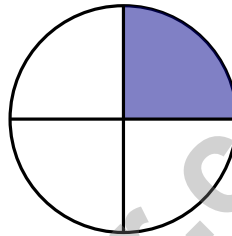
A. 3

C. 5

B. 30

D. 4

3) Look at the circle. It is divided into 4 equal parts. One part is shaded.



What fraction is shaded?

A. $\frac{1}{2}$

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

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

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

4) Mia colored $\frac{2}{3}$ of a circle. Write an equivalent fraction that uses 6 as the denominator.



5) What number makes the equation true?

$$\square \div 5 = 8$$

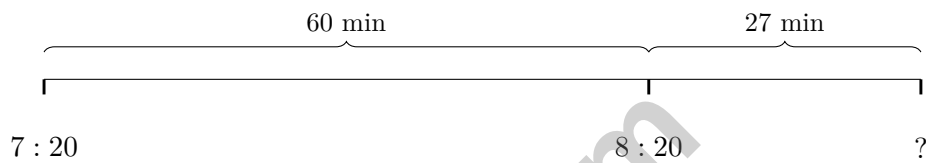
A. 50

C. 45

B. 35

D. 40

6) A movie starts at 7 : 20 PM. The actual movie is 87 minutes long. What time does the movie end?



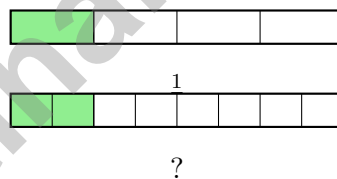
A. 8 : 37 PM

C. 8 : 53 PM

B. 8 : 47 PM

D. 9 : 00 PM

7) Look at the bars. Match the fractions.



A. $\frac{1}{2}$

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

B. $\frac{2}{4}$

D. $\frac{3}{6}$



Scan me!
For more practice
& answers

Width



Length

1)

If a rectangle has length 6 cm and width 4 cm, what is the length of the opposite long side?

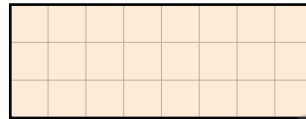
 A. 4 cm

 C. 10 cm

 B. 6 cm

 D. 24 cm

2) This grid shows a rectangle.



What is the area in square units?

 A. 11 sq units

 C. 20 sq units

 B. 24 sq units

 D. 16 sq units

3) A square garden has sides of 6 units each. Sam wants to tile it with unit square stepping stones. How many stones does he need to cover the entire garden?

 A. 12 stones

 C. 36 stones

 B. 24 stones

 D. 48 stones

4) A number line from 0 to 1 is divided into equal parts. Which first tick is closest to 0?

 A. $\frac{1}{2}$
 C. $\frac{1}{6}$
 B. $\frac{1}{4}$
 D. $\frac{1}{8}$


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.

Testinar.com



Scan me!
For more practice
& answers

Practice Test Answers and Explanations

Practice Test 1 Answers and Explanations

- 1) **Choice A is correct.** **(3.OA.A.1)** Three packs with eight erasers each is 3 groups of 8, which equals $3 \times 8 = 24$ or $8 \times 3 = 24$. Option B is the addition misconception. Option C uses only one factor. Option D is incomplete (only two groups).
- 2) **Choice C is correct.** **(3.NF.A.3a)** $\frac{4}{6} = \frac{2}{3}$ because both represent two-thirds of the poster.
- 3) **Choice C is correct.** **(3.NF.A.3)** $\frac{1}{3}$ and $\frac{2}{6}$ both equal one-third of a whole.
- 4) **Choice D is correct.** **(3.OA.B.6)** Every multiplication fact has two related division facts. From $6 \times 7 = 42$, we get $42 \div 6 = 7$. The factors switch roles.
- 5) **Choice D is correct.** **(3.NBT.A.3)** $4 \times 20 = 4 \times (2 \times 10) = (4 \times 2) \times 10 = 8 \times 10 = 80$. This uses associative property: you break 20 into 2×10 , multiply the single digits first, then multiply by 10.
- 6) **Choice D is correct.** **(3.OA.A.2)** The number line shows jumps of 2 from 0 to 10. There are 5 jumps, so it represents $10 \div 2 = 5$.
- 7) **Choice D is correct.** **(3.OA.D.8)** Step 1: Remove damaged: $80 - 20 = 60$ books. Step 2: Divide by shelves: $60 \div 4 = 15$ books per shelf.
- 8) **Choice A is correct.** **(3.NF.A.3c)** $\frac{6}{2}$ means 6 halves. 2 halves make 1 whole, so $6 \div 2 = 3$ wholes. The bar is divided into 3 sections (thick lines).
- 9) **The correct answer is 24 unit squares.** **(3.MD.C.5b)** Count the rows: 4 rows. Count across: 6 unit squares per row. Total: $6 + 6 + 6 + 6 = 24$ unit squares cover the rectangle.
- 10) **Choice A is correct.** **(3.NF.A.3d)** Both fractions equal one whole. Two halves and three thirds both fill the entire bar.
- 11) **Choice A is correct.** **(3.NBT.A.1)** The tens digit is 4. Since $4 < 5$, round down: 145 rounds to 100.
- 12) **Choice A is correct.** **(3.MD.B.3)** Divide total by scale: $12 \div 4 = 3$ icons.
- 13) **Choices A and C are correct.** **(3.NBT.A.2)** Check each: A is $245 + 255 = 500$, B is $312 + 178 = 490$, C is $350 + 150 = 500$, D is $200 + 290 = 490$, and E is $289 + 212 = 501$. The two sums that equal 500 are A and C.
- 14) **Choice C is correct.** **(3.MD.C.5a)** A 3×3 square contains $3 \times 3 = 9$ unit squares.
- 15) **Choice C is correct.** **(3.NF.A.2b)** The point is at 3 on a distance from 0 to 4. Since 3 out of 4 equal units are covered, the point is $\frac{3}{4}$ of the way from 0 to 4.
- 16) **Choice B is correct.** **(3.MD.C.7d)** Top rectangle: $6 \times 4 = 24$ sq units. Bottom rectangle: $5 \times 3 = 15$ sq units. Total: $24 + 15 = 39$ sq units.
- 17) **The correct answer is $\frac{1}{6}$.** **(3.NF.A.1)** One of 6 equal parts is $\frac{1}{6}$.
- 18) **Choice B is correct.** **(3.MD.B.4)** Add known days: $2 + 3 + 2 + 1 = 8$. Subtract from total: $10 - 8 = 2$ days with 2 inches.
- 19) **Choice B is correct.** **(3.MD.C.7a)** $5 \times 3 = 15$ square units.
- 20) **Choice C is correct.** **(3.NF.A.2)** $\frac{6}{8}$ is 6 out of 8 equal parts, which is at the sixth tick mark from 0.
- 21) **The correct answer is 4 units.** **(3.MD.C.7)** Area = length \times width. Since $24 = 6 \times w$, the missing width is 4 units.
- 22) **Choice C is correct.** **(3.OA.B.5)** Option C shows the commutative property (switching order), not the associative property (changing groups).
- 23) **Choice A is correct.** **(3.MD.A.1)** At 9:33, the minute hand points to 33 minutes, just past the 6. The hour hand is between 9 and 10. Clock A shows this correctly.
- 24) **Choice C is correct.** **(3.OA.D.9)** $5 \times 5 = 25$. This is sometimes called a “perfect square”.
- 25) **Choice C is correct.** **(3.MD.A.2)** 5 L = 5000 mL. Divide: $5000 \div 200 = 25$ glasses. Tests estimation.
- 26) **Choice A is correct.** **(3.NF.A.2a)** The first tick of eight equal parts is at the unit fraction $\frac{1}{8}$.
- 27) **Choice C is correct.** **(3.MD.C.7c)** Adding the numbers instead of multiplying does not use the distributive property or find the area correctly.
- 28) **Choice B is correct.** **(3.MD.C.5)** Multiply length by width: $9 \times 2 = 18$ square feet.
- 29) **Choice B is correct.** **(3.G.A.1)** In a parallelogram, opposite sides are not only parallel, but they are also equal in length.



Inventor's Workshop Note

Hi, Math Inventor!

◇ 4 practice tests. 4 chances to invent new ways to think. You tried things. You changed them. You made your math brain stronger! ◇

★ **Inventors know:** the first try isn't always the best try. Sometimes you fix it. Sometimes you start over. You did all of that! ★

Inventor's Workshop

- **Sketch Pad:** Full of ideas!
- **Toolbox:** Lots of math strategies.
- **Workbench:** Neat and organized.
- **Brave Mind:** You try new things.

Inventor tip: on test day, if your first try doesn't work, switch tools. Inventors don't get stuck on one tool. Pick the right one for the job!

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

Jay Daie

Your Math Inventor

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!



More Grade 3 Math Resources
& Practice Materials

testinar.com/math3



PRACTICE. PREPARE. SUCCEED.