

3

Massachusetts

MCAS

GRADE 3

MATH

PRACTICE TESTS

+

%

=

Standards-Aligned
Practice for Stronger
Math Skills and
Test Readiness



Build Confidence
with Targeted Practice



Strengthen Skills
in Key Math Concepts



Improve Test Readiness
with Realistic Practice

Be Ready.
Do Your Best!



3 Massachusetts MCAS Grade 3 Math Practice Tests

Standards-Aligned Practice for Stronger Math Skills and Test Readiness



Three 30-question trail tests packed with Grade 3 review, Massachusetts MCAS strategy tips, answer keys, and step-by-step explanations that turn every miss into the next move.

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 Massachusetts Math Trail

Three tests, one trail, and a stronger Grade 3 thinker at the end



To the Grade 3 Trail Scout

This book is your practice trail for the Massachusetts MCAS. You will multiply and divide, read graphs, work with fractions, measure time, find area, and explain your thinking – one trail marker at a time.

Some problems will feel quick, like a clear stretch of wide open trail. Some will ask you to slow down, draw, count, or try again. That slow part is where strong math grows. Every page gives your brain another chance to spot, choose, and build.

Spot

Read carefully and find what the problem is really asking.

Sketch

Use numbers, arrays, number lines, or labels to make your thinking visible.

Signal

Check that your answer makes sense before you wave the next question on.

Trail promise: I will read like a tracker, sketch like a planner, and check like a careful scout. I do not have to be perfect to keep moving forward.

How to Use This Book

A four-step trail plan that turns practice into progress

Step 1: Pack Your Pack

Read the Quick Review first.
Wake up the Grade 3 ideas you will need before you set foot on the trail.

Step 2: Hit the Trail

Take one full test.
Thirty questions. Pencil sharp, work shown, calm pace – one marker at a time.

Step 3: Campfire Check

Check answers honestly.
Circle missed questions. Star any problem that felt confusing – those are tomorrow’s clues.

Step 4: Track Back

Fix a few mistakes.
Read the explanation, rework the problem, and carry that lesson up the next stretch of trail.

A Three-Week Trail Plan

Week 1	Hike Test 1. Map what feels strong and what needs a second look.
Week 2	Hike Test 2. Sharpen the habits: read slow, sketch the model, label every number.
Week 3	Hike Test 3. Bring everything – facts, models, checks, and calm focus.

Best trail habit: Do not only ask, “What did I score?” Ask, “What did I learn how to do better?”



Test Overview

What waits on the trail and what each practice test builds

Each practice test has 30 questions. Together they walk you through the kind of math thinking the Massachusetts MCAS asks Grade 3 students to use: read carefully, choose a strategy, show work, and check whether an answer makes sense.

Selected-Response Questions

Pick the best answer from the choices. Strong scouts estimate first, cross out answers that cannot be right, and reread the question before circling.

Open-Ended Questions

Write the answer and show the thinking. A clear response uses neat numbers, helpful labels, and a short model or explanation.

Grade 3 Ideas You Will Meet on the Trail

- multiplication, division, arrays, equal groups, and fact fluency
- rounding, adding, subtracting, and multiplying by multiples of 10
- 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 shapes
- two-step word problems and explaining a solution path

What strong MCAS work looks like: the scout reads the whole problem, picks a sensible strategy, writes numbers neatly, labels the answer, and checks that the answer truly fits the question.



Scan me!
For more practice
& answers

+ - 3 × ÷

Table of Contents

★ Practice Test 1	_____	17
★ Practice Test 2	_____	29
★ Practice Test 3	_____	41
Practice Test Answer Keys	_____	52
Practice Test Answers and Explanations	_____	55

1) Which fact family includes the division $56 \div 8 = 7$?

- A. $6 \times 8 = 48$, $48 \div 6 = 8$, $48 \div 8 = 6$ C. $8 \times 8 = 64$, $64 \div 8 = 8$
 B. $7 \times 7 = 49$, $49 \div 7 = 7$ D. $7 \times 8 = 56$, $56 \div 7 = 8$, $56 \div 8 = 7$

2) Eli eats breakfast at 7 : 33 AM. He eats lunch 3 hours and 17 minutes later. What time does Eli eat lunch?

- A. 10 : 30 AM C. 11 : 00 AM
 B. 10 : 45 AM D. 10 : 50 AM



3)

Count the unit squares. What is the area of this rectangle?

- A. 13 sq units C. 25 sq units
 B. 30 sq units D. 40 sq units

4) Lily sees a number line divided into sixths. She marks $\frac{6}{6}$. Where is her mark?

- A. At 0 C. At 1
 B. Beyond 6 D. At 6

5) Look at these three rectangles. Which one is divided into equal parts?



Rectangle A: Unequal parts



Rectangle B: 3 equal parts



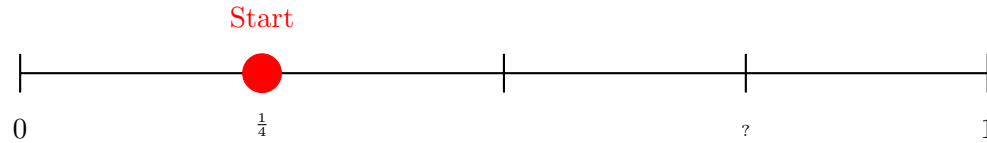
Rectangle C: Unequal parts

- A. Rectangle A C. Rectangle C
 B. Rectangle B D. None of them



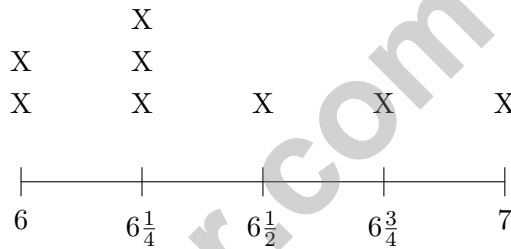
Scan me!
For more practice
& answers

- 10) Start at $\frac{1}{4}$ on a number line from 0 to 1 with 4 equal parts. Move 2 parts to the right. Where do you land?



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

- 11) A line plot shows jump rope lengths in feet: $6, 6\frac{1}{4}, 6\frac{1}{2}, 6\frac{3}{4}, 7$.



How many jump ropes are at least $6\frac{1}{4}$ feet long?

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

- 12) Ravi has 4 bags with 5 toys each and loses 8 toys. How many toys are left?



Scan me!
For more practice
& answers

1) $567 + 216 = ?$

A. 783

B. 792

C. 873

D. 793

- 2) A student starts eating lunch at 11 : 38 AM. Recess starts at 12 : 04 PM. How many minutes until recess?

- 3) 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

B. 1

C. 42

D. 7

- 4) Which fact family shows numbers that belong together?

A. 5, 8, 40 and $40 \div 5 = 7$

B. 4, 6, 24 and $24 \div 4 = 6$

C. 6, 7, 42 and $42 \div 7 = 5$

D. 3, 9, 27 and $27 \div 3 = 8$

- 5) A rectangle has length 7 units and width 3 units. What is its perimeter?

A. 10 units

B. 21 units

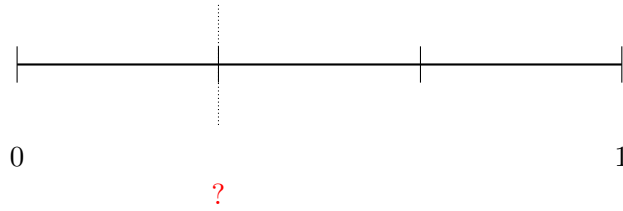
C. 28 units

D. 20 units

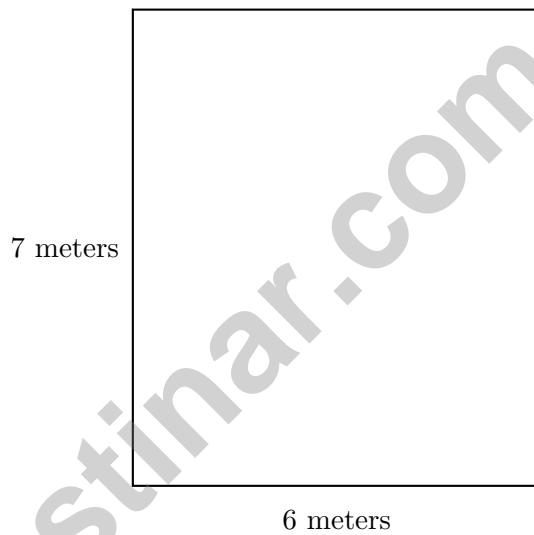


Scan me!
For more practice
& answers

6) A number line from 0 to 1 is divided into 3 equal parts. Where is $\frac{1}{3}$ located?



- A. At the first tick C. At zero
 B. At the second tick D. At one



7)

A rectangular wall is 6 meters wide and 7 meters tall. What is the area?

- A. 26 sq m C. 13 sq m
 B. 42 sq m D. 84 sq m

8) If $\frac{3}{4} = \frac{?}{8}$, what is the missing numerator?

9) Which fraction is equivalent to $\frac{3}{4}$?

- A. $\frac{3}{8}$
 B. $\frac{3}{6}$

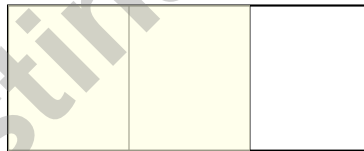
- C. $\frac{6}{8}$
 D. $\frac{2}{4}$

10) A bar graph shows items in a store. Pencils bar is 6 units (scale: 2 pencils per unit). Erasers bar is 4 units (scale: 2 erasers per unit). How many pencils and erasers are there in total?

- A. 20
 B. 10

- C. 12
 D. 16

11) A rectangle is divided with 2 vertical lines making 3 equal columns. What fraction of the rectangle is 2 columns?



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

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



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 builds stronger math habits.

Testinar.com



Practice Test Answers and Explanations

Practice Test 1 Answers and Explanations

- 1) **Choice D is correct.** **(3.OA.B.6)** The fact family for $7 \times 8 = 56$ includes both $56 \div 7 = 8$ and $56 \div 8 = 7$.
- 2) **Choice D is correct.** **(3.MD.A.1)** $7 : 33 + 3$ hours = $10 : 33$. Then $10 : 33 + 17$ min = $10 : 50$ AM.
- 3) **Choice B is correct.** **(3.MD.C.7)** The grid has 10 columns and 3 rows. Area = $10 \times 3 = 30$ square units. You can also add: $10 + 10 + 10 = 30$ (three rows of ten).
- 4) **Choice C is correct.** **(3.NF.A.2)** $\frac{6}{6}$ means six sixths, which make one whole. The point is at 1.
- 5) **Choice B is correct.** **(3.G.A.2)** Rectangle B has 2 lines that divide it into 3 equal parts. Rectangles A and C have unequal spacing.
- 6) **Choice A is correct.** **(3.OA.A.2)** If $24 \div ? = 4$, then $? = 24 \div 4 = 6$. Check: $24 \div 6 = 4$ is correct.
- 7) **Choice D is correct.** **(3.OA.A.1)** The rectangle has 3 columns and 2 rows of equal parts. So $3 \times 2 = 6$ parts in total.
- 8) **Choice C is correct.** **(3.MD.A.2)** Multiply: $5 \times 1 = 5$ L.
- 9) **Choice A is correct.** **(3.OA.A.3)** Multiply rows by plants per row: $4 \times 8 = 32$ plants.
- 10) **Choice B is correct.** **(3.NF.A.2)** Count: Start at tick 1 ($\frac{1}{4}$), move 2 ticks right ($1+2=3$). Land at tick 3, which is $\frac{3}{4}$.
- 11) **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.
- 12) **The correct answer is 12.** **(3.OA.D.8)** $4 \times 5 = 20$, and $20 - 8 = 12$.
- 13) **Choice B is correct.** **(3.NF.A.1)** The rectangle is divided into 2 equal parts with 1 shaded, so the fraction is $\frac{1}{2}$ (one-half).
- 14) **The correct answer is 24.** **(3.OA.B.5)** $(2 \times 3) \times 4 = 6 \times 4 = 24$.
- 15) **Choice A is correct.** **(3.MD.D.8)** Area = length \times width = $8 \times 6 = 48$ square feet.
- 16) **Choices A and C are correct.** **(3.MD.C.7)** A and C are both correct: they show the total area of 36 using the distributive property. B is false because $3 \times 8 = 24$, not 25. D is false because the rectangles share the dimension 3. E is false because $3 \times 13 = 39$.
- 17) **Choice B is correct.** **(3.NF.A.3)** The denominator was multiplied by 2 (from 3 to 6). Multiply the numerator by 2: $2 \times 2 = 4$. So $\frac{2}{3} = \frac{4}{6}$.
- 18) **Choice A is correct.** **(3.OA.A.4)** Multiply: $4 \times 7 = 28$ stickers. The unknown is 28.
- 19) **Choice C is correct.** **(3.OA.D.9)** Each number increases by 3. Add 3 to 12 to get 15.
- 20) **The correct answer is $\frac{1}{2}$.** **(3.NF.A.3)** $\frac{2}{4} = \frac{1}{2}$.
- 21) **Choice B is correct.** **(3.MD.B.3)** Class A: $5 \times 10 = 50$. Class B: $3 \times 10 = 30$. Difference: $50 - 30 = 20$.
- 22) **Choice C is correct.** **(3.NBT.A.3)** 5 sets of 20 cards = $5 \times 20 = 100$ cards. Multiply $5 \times 2 = 10$, then add one zero.
- 23) **Choice A is correct.** **(3.NF.A.1)** Six equal parts means the first tick is at unit fraction $\frac{1}{6}$.
- 24) **Choice C is correct.** **(3.G.A.1)** A square, rhombus, and rectangle are all parallelograms (opposite sides parallel and equal). A trapezoid has only one pair of parallel sides, so it is not a parallelogram.
- 25) **Choice A is correct.** **(3.NF.A.2)** Both fractions equal one-half and represent the same point on a number line.
- 26) **Choice D is correct.** **(3.OA.C.7)** $7 \times 5 = 35$. You can use the related division: $35 \div 5 = 7$.
- 27) **Choice D is correct.** **(3.MD.D.8)** $3 \times 7 = 21$ square units. C is sum error.
- 28) **Choice C is correct.** **(3.MD.C.5)** When a composite shape is divided into non-overlapping rectangles, the total area equals the sum of the individual rectangle areas. Here: $12 + 15 = 27$ square units.
- 29) **Choice C is correct.** **(3.MD.C.6)** $8 \times 6 = 48$ unit squares.
- 30) **Choice C is correct.** **(3.MD.C.5)** Rectangle: $9 \times 1 = 9$ square inches. Square: $3 \times 3 = 9$ square inches. Shape doesn't matter; area is what counts.

Practice Test 2 Answers and Explanations



Scan me!
For more practice
& answers

Hi, Math Detective!

◇ You did such a great job! You finished 3 tests like a real detective. You found the clues, used your tools, and solved the math. ◇

★ **Detectives know:** good work takes time. You took your time. You looked carefully. You found the answers! ★

Your Detective Skills

- **Sharp Eyes:** You notice the small details.
- **Smart Plans:** You pick the right way to solve.
- **Brave Heart:** You try even when it's tricky.
- **Steady Work:** You finish what you start.

Detective tip: on test day, look carefully at each problem. Underline important words. Then solve like the detective you are!

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

Jay Daie

Your Math Detective Helper

Testinar.com

3 GRADE 3 MATH PRACTICE TESTS

Practice Today. Succeed Tomorrow!



Give your child the tools to build strong math skills and test confidence!

This book includes 3 full-length Grade 3 Math practice tests that mirror real test formats and cover all key math standards. With a wide range of question types and real-world problems, students will gain the practice and confidence they need to do their best!

What's Inside?



Standards-Aligned Practice

Questions designed to cover essential Grade 3 math standards.



Variety of Question Types

Multiple-choice, short answer, and more to build well-rounded skills.



Real-World Applications

Engaging problems that connect math to everyday life.



Step-by-Step Progress

Track improvement and build confidence with every test.



Build Skills & Boost Confidence

Strengthen understanding and feel prepared for test day.

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.