

# 4

# Texas STAAR

## 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 Texas STAAR 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](http://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 Texas 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 Texas STAAR. 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.

Texas has wide roads, bright cities, ranch trails, and big goals that need clear plans. 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

<b>Session 1</b>	Take Test 1 and mark the topics that need attention.
<b>Session 2</b>	Take Test 2 and focus on showing every step clearly.
<b>Session 3</b>	Take Test 3 and watch for units, labels, and two-step problems.
<b>Session 4</b>	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 Texas STAAR: 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 STAAR 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	_____	16
★ Practice Test 2	_____	29
★ Practice Test 3	_____	40
★ Practice Test 4	_____	52
Practice Test Answer Keys	_____	63
Practice Test Answers and Explanations	_____	66

1) What is  $367 + ? = 650$ ? Find the missing addend.

A. 283

C. 293

B. 273

D. 382

2) Sam draws a number line from 0 to 2 split into 8 equal parts. He marks  $\frac{4}{8}$  of the distance from 0 to 2. At what whole number is his mark?

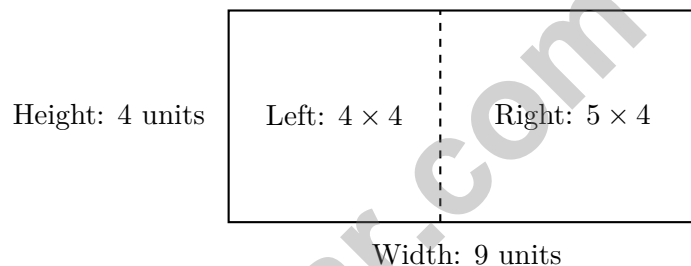
A. At 0

C. At 2

B. Between 1 and 2

D. At 1

3) This rectangle is split by a vertical line:



Which is the correct distributive property equation?

A.  $4 \times (4 + 5) = (4 \times 4) + (4 \times 5) = 16 + 20 = 36$

C.  $(4 \times 4) + (5 \times 4) = 16 + 20 = 36$

B.  $9 + 4 = 13$

D.  $(4 + 5) \times 4 = 36$

4) A teacher has 40 pencils. She gives them equally to 8 students. How many pencils does each student get?



5) 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

6) Ben draws a rectangle on a grid. It has 4 rows of unit squares and 5 columns. What is the area?

- A. 18 sq units  
 B. 24 sq units  
 C. 9 sq units  
 D. 20 sq units

7) A bar graph shows coins saved by students. Pilar has 6 units (scale: 5 coins per unit), Quinn has 4 units (scale: 5 coins per unit). How many more coins did Pilar save?

- A. 2 coins  
 B. 6 coins  
 C. 10 coins  
 D. 50 coins

8) Which is larger:  $\frac{2}{3}$  or  $\frac{2}{4}$ ?

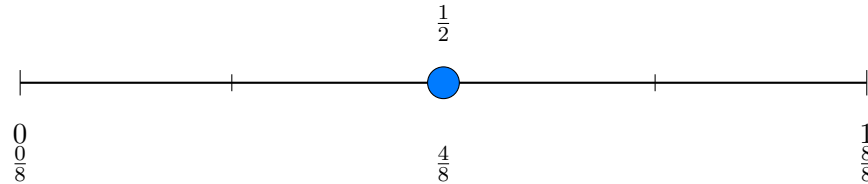


Scan me!  
For more practice  
& answers

9) Round 283 to the nearest 10.

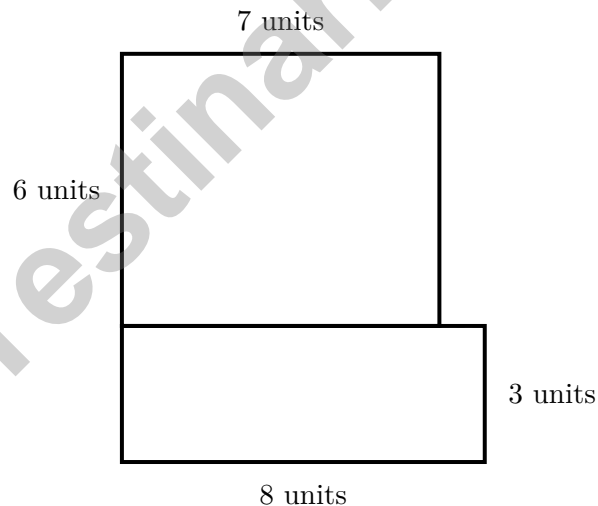
- A. 280                       C. 290  
 B. 283                       D. 300

10) Select the equivalent fraction to  $\frac{4}{8}$  shown on the number line.



- A.  $\frac{1}{3}$                        C.  $\frac{1}{2}$   
 B.  $\frac{2}{3}$                        D.  $\frac{3}{8}$

11) An L-shaped wall is divided by dashed lines. The vertical section is 7 units by 6 units. The horizontal section is 8 units by 3 units. What is the total area?



- A. 42 sq units                       C. 66 sq units  
 B. 24 sq units                       D. 1008 sq units



1)

Hundreds	Tens	Ones	Total	?
----------	------	------	-------	---

Lily has 3 hundreds, 2 tens, and 6 ones. Her friend gives her 1 hundred, 4 tens, and 7 ones. What is the total?

- A. 473                                       C. 513  
 B. 503                                       D. 523

2) Diego found 6 anthills. Each anthill has 9 ants. How many ants did Diego find?

- A. 72 ants                                       C. 15 ants  
 B. 48 ants                                       D. 54 ants

3) What is  $3 \times 8$ ?

- A. 24     C. 30  
 B. 28     D. 32

4) A school has 72 students going on a field trip. They are divided equally into 8 buses. Then 6 more students join one bus. How many students are on that bus now?

- A. 9     C. 15  
 B. 10      D. 24

5) A square has perimeter 40 feet. What is the length of one side?

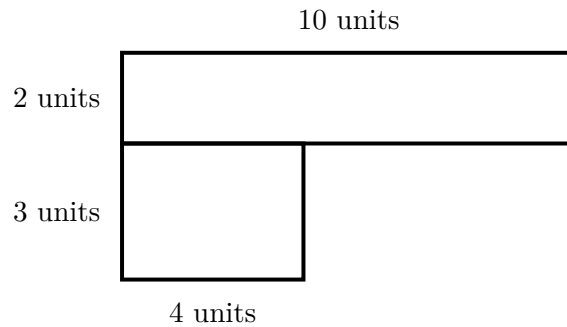
--



Scan me!  
For more practice  
& answers



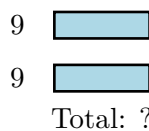
- 1) An L-shaped herb garden is marked with dashed lines. One part is 10 units by 2 units. The other is 4 units by 3 units. What is the total area?



- A. 20 sq units                       C. 32 sq units  
 B. 12 sq units                       D. 240 sq units
- 2) On a number line from 0 to 1 split into 6 equal parts, does the line show  $\frac{1}{3}$ ?



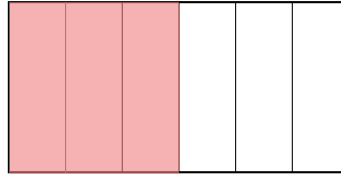
- A. Yes, it shows  $\frac{1}{3}$  at the first tick                       D. No, because  $\frac{1}{3}$  is always between 0 and 1  
 B. Yes, it shows  $\frac{1}{3}$  at the second tick  
 C. No, because sixths and thirds are different
- 3) Below is a bar model showing equal groups. There are 2 groups with 9 items in each group.



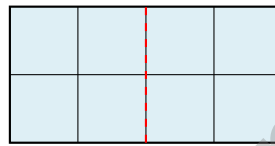
What is the total?

- A. 18                                       C. 11  
 B. 16                                       D. 27

- 4) A rectangle is split into 6 equal strips. What fraction of the rectangle is 3 strips?



- A.  $\frac{1}{6}$ 
 C.  $\frac{3}{6}$   
 B.  $\frac{1}{3}$ 
 D.  $\frac{4}{6}$



5)

A 4-by-2 rectangle is divided by a dashed line. How many unit squares are on each side of the line?

- A. 4 and 4
  C. 3 and 5  
 B. 2 and 6
  D. 1 and 7
- 6) Two identical sandwiches are served. Sandwich A is cut into 4 pieces with 1 eaten. Sandwich B is cut into 8 pieces with 2 eaten. How much is left uneaten?
- A. Same amount is left.
  C. Sandwich B has more left.  
 B. Sandwich A has more left.
  D. Cannot tell.
- 7) A rectangular game board is 5 inches long and 4 inches wide. What is the area of the game board?



Scan me!  
For more practice  
& answers

## 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.NBT.A.2)** Subtract to find the missing addend:  $650 - 367 = 283$ . Check:  $367 + 283 = 650$ .
- 2) **Choice D is correct.** **(3.NF.A.2b)**  $\frac{4}{8} = \frac{1}{2}$ . On a 0-to-2 line,  $\frac{1}{2}$  of the distance is at 1.
- 3) **Choice A is correct.** **(3.MD.C.7c)** Height is 4, widths are 4 and 5, totaling 9. Distributive property:  $4 \times (4 + 5) = 4 \times 9 = 36$ .
- 4) **The correct answer is 5.** **(3.OA.A.4)** Divide:  $40 \div 8 = 5$  pencils per student.
- 5) **Choice D is correct.** **(3.OA.D.9)** In the row for 3, the products are 3, 6, 9, 12, going up by 3 each time.
- 6) **Choice D is correct.** **(3.MD.C.7)** Area = rows  $\times$  columns =  $4 \times 5 = 20$  square units.
- 7) **Choice C is correct.** **(3.MD.B.3)** Pilar:  $6 \times 5 = 30$  coins. Quinn:  $4 \times 5 = 20$  coins. Difference:  $30 - 20 = 10$  coins.
- 8) **The correct answer is  $\frac{2}{3}$ .** **(3.NF.A.3d)** Thirds are larger pieces than fourths.
- 9) **Choice A is correct.** **(3.NBT.A.1)** The ones digit is 3. Since  $3 < 5$ , round down: 283 rounds to 280.
- 10) **Choice C is correct.** **(3.NF.A.3)**  $\frac{4}{8}$  and  $\frac{1}{2}$  mark the same location on the number line.
- 11) **Choice C is correct.** **(3.MD.C.7d)** Vertical:  $7 \times 6 = 42$  sq units. Horizontal:  $8 \times 3 = 24$  sq units. Total:  $42 + 24 = 66$  sq units.
- 12) **Choice A is correct.** **(3.OA.B.5)**  $(2 \times 5) \times 3$  makes 10 first because  $2 \times 5 = 10$ . Then  $10 \times 3 = 30$ .
- 13) **Choice D is correct.** **(3.NF.A.3a)** Both circles show the same shaded area.  $\frac{1}{2}$  of one circle equals  $\frac{2}{4}$  of another equal-sized circle. They are equivalent.
- 14) **Choice C is correct.** **(3.MD.C.7a)**  $7 \times 5 = 35$  square units.
- 15) **Choice D is correct.** **(3.MD.C.5)** For a square:  $8 \times 8 = 64$  square inches.
- 16) **Choices A and C are correct.** **(3.MD.C.5a)** Choice A is correct: all sides of a unit square equal 1 unit. Choice C is correct: unit squares are arranged (tiled) to find areas of larger shapes. Choice B is wrong (1 meter  $\neq$  1 yard). Choice D is wrong (unit squares can be 1 cm, 1 m, 1 ft, etc., not always 1 inch). Choice E is wrong (area is always 1 square unit).
- 17) **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  $10 \div 2 = 5$ .
- 18) **Choice D is correct.** **(3.MD.A.2)** Multiply:  $3 \times 400 = 1200$  mL.
- 19) **Choice B is correct.** **(3.NF.A.3c)** Any whole number can be written as that number over 1. So  $3 = \frac{3}{1}$ . (D) equals 1, not 3.
- 20) **Choice B is correct.** **(3.NF.A.3b)** Multiply numerator and denominator by 3:  $\frac{1 \times 3}{2 \times 3} = \frac{3}{6}$ .
- 21) **Choice B is correct.** **(3.NF.A.2)** Each tick is  $\frac{1}{4}$  of the distance from 0 to 1. The second tick is 2 copies of  $\frac{1}{4} = \frac{2}{4}$ .
- 22) **Choice A is correct.** **(3.OA.B.6)** From the fact-family triangle with factors 4 and 9 and product 36, we write two divisions:  $36 \div 4 = 9$  and  $36 \div 9 = 4$ . The factors become quotients.
- 23) **The correct answer is 6.** **(3.OA.A.3)**  $30 \div 5 = 6$ .
- 24) **Choice D is correct.** **(3.MD.C.7b)** Area = length  $\times$  width =  $7 \times 4 = 28$  square feet.
- 25) **Choice B is correct.** **(3.G.A.2)** When divided into 8 equal parts, each part is  $\frac{1}{8}$  of the whole square.
- 26) **Choice A is correct.** **(3.G.A.1)** In a square, all 4 sides are the same length. So the green sides and blue sides are all equal to each other.
- 27) **Choice D is correct.** **(3.OA.A.1)** 7 tables with 8 books each means 7 groups of 8. So  $7 \times 8 = 56$  books.
- 28) **Choice A is correct.** **(3.MD.A.1)** At 10 : 51, the minute hand points to 51 minutes, just past the 10. The hour hand is between 10 and 11, close to 11. Option 1 shows this accurately.
- 29) **Choice B is correct.** **(3.MD.C.5b)** The vertical part has 3 unit squares. The horizontal part has 2 more unit squares. Total:  $3 + 2 = 5$  unit squares cover this L-shaped figure.
- 30) **Choice A is correct.** **(3.MD.B.4)** The value with the most X's is the mode. At 2 inches, there are 3 X's. This is more than any other value.



## Hi, Math Champion!

◇ Look what you did! 4 full practice tests. That's hundreds of math problems. You started as a learner. You are now a math athlete. ◇

★ **Champions know:** hard work pays off. You did the hard work. Your math skills are strong because you practiced. ★

### Champion's Stats

- **Focus:** HIGH! You stay on task.
- **Speed:** STRONG! You move at the right pace.
- **Accuracy:** SHARP! You catch your own mistakes.
- **Mindset:** CHAMPION! You believe in yourself.

**Champion tip:** on test day, walk in proud. You trained for this. You are ready!

If you want to share something or ask a question, please email me at [jay@testinar.com](mailto:jay@testinar.com).

**Jay Daie**

Your Math Coach

Testinar.com

# 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](https://testinar.com/math3)



**PRACTICE. PREPARE. SUCCEED.**