

10

Texas STAAR

GRADE
6
MATH

PRACTICE TESTS

Standards-Aligned Review
Mixed Practice & Answer Key



10 PRINTED TESTS

Realistic practice to build confidence and mastery



2 ONLINE TESTS

Extra practice for continued success



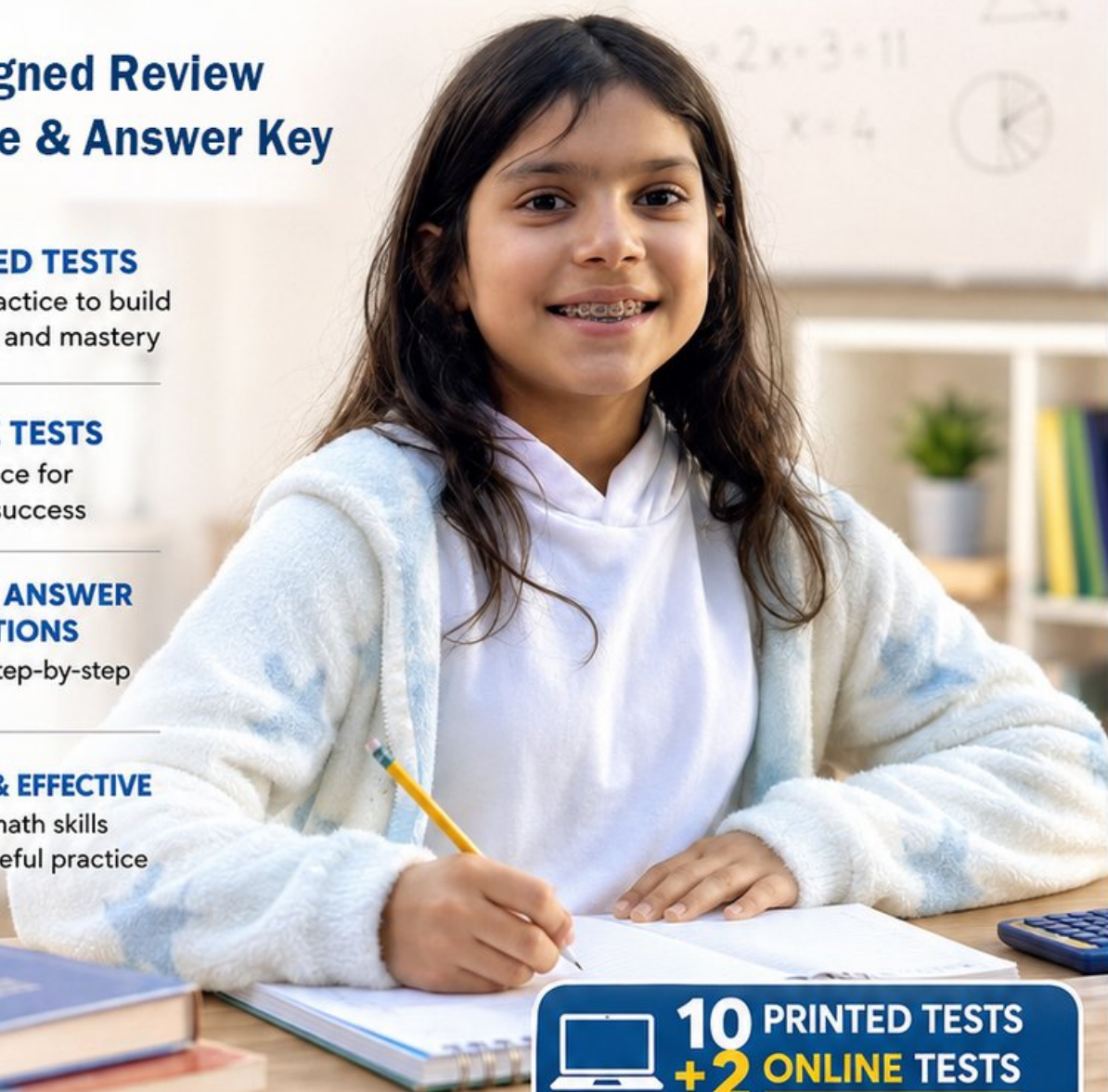
DETAILED ANSWER EXPLANATIONS

Learn with step-by-step solutions



FOCUSED & EFFECTIVE

Target key math skills with purposeful practice



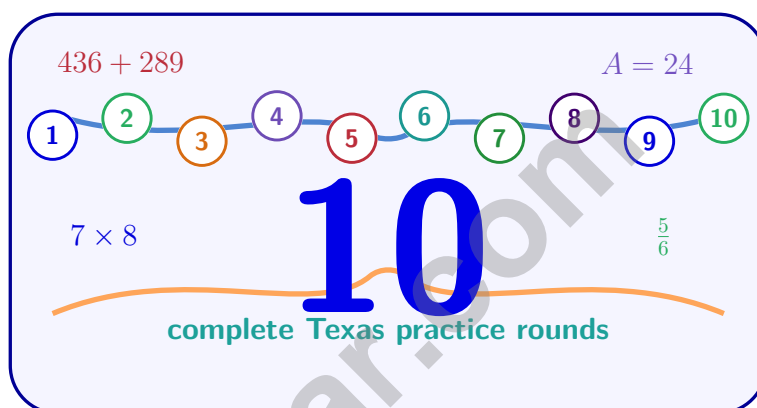
10 PRINTED TESTS
+ 2 ONLINE TESTS

Use these two additional online practice tests for extra review after the printed tests in this book.

PRACTICE • REVIEW • SUCCEED

10 Texas STAAR Grade 6 Math Practice Tests

Standards-Aligned Bold But Careful Reasoning for State of Texas Assessments of Academic Readiness



Ten complete 40-question Grade 6 practice rounds for STAAR, with ratios, rational numbers, expressions, equations, geometry, statistics, 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, Texas Math Explorer!

Ten steady rounds on a Lone Star review drive

This book gives you ten full Grade 6 practice tests for STAAR. Each round uses big skies, city grids, and confident problem-solving routes as a fresh mental backdrop while you read closely, choose a smart strategy, show your work, and check whether your answer makes sense.

Your Texas Practice Promise

Make the setup big and clear before doing the math. I will slow down for the question, circle what matters, solve one step at a time, and use mistakes as clues for getting stronger.

Read

Plan

Check

How to Use This Book

A ten-session routine for bold but careful reasoning

1. **Preview the skills.** Read the quick review pages before the first test.
2. **Take one test at a time.** Work in a quiet place and answer all 40 questions.
3. **Mark your confidence.** Put a small star beside problems you solved with a strong plan.
4. **Check, then retry.** For missed questions, try the problem again before reading the explanation.
5. **Track your next move.** Use the growth log to name one habit and one skill for the next test.

Texas review rhythm: Test one day, correct carefully the next day, then return for the next round when your corrections feel clear.



What Is Inside?

Ten STAAR tests, 400 questions, and a full review path

Part	What You Will Practice
Tests 1–3	Warm-up rounds for ratios, rational numbers, operations, and careful reading.
Tests 4–6	Skill-building rounds with expressions, equations, geometry, data, and problem models.
Tests 7–9	Stamina rounds for mixed review, neat work, and flexible strategy choices.
Test 10	Final Texas round to show growth across the whole book.
Answer Pages	Compact keys and explanations that show why each answer works.

The tests are mixed on purpose. Bold but careful reasoning means recognizing the skill even when the next question changes topic.



Scan me!
For more practice
& answers

Table of Contents

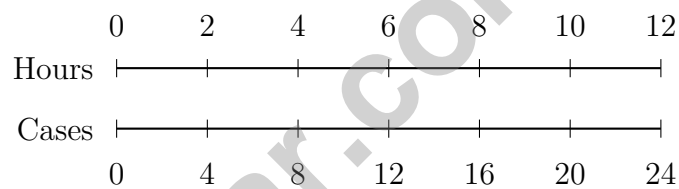
★ Practice Test 1	_____	15
★ Practice Test 2	_____	31
★ Practice Test 3	_____	47
★ Practice Test 4	_____	62
★ Practice Test 5	_____	77
★ Practice Test 6	_____	92
★ Practice Test 7	_____	108
★ Practice Test 8	_____	123
★ Practice Test 9	_____	137
★ Practice Test 10	_____	152
Practice Test Answer Keys	_____	167
Practice Test Answers and Explanations	_____	173

1) At a campfire, the ratio of hot dogs to hamburgers is $7 : 5$. Which of the following could be the total number of hot dogs and hamburgers combined at the campfire?

- A. 10 items C. 24 items
 B. 20 items D. 30 items

2) In a garden, the ratio of roses to tulips is $5 : 8$. If there are 40 roses, how many tulips are there?

- A. 45 C. 64
 B. 50 D. 72



Based on the double number line, what is the rate in cases per hour?

- A. 2 cases per hour C. 6 cases per hour
 B. 4 cases per hour D. 8 cases per hour
- 4) A 6-pack of soda costs \$3.60. What is the cost per can (unit rate)?
- A. \$0.50 C. \$0.70
 B. \$0.80 D. \$0.60



Scan me!
For more practice
& answers

1) Which number is closest to zero?

A. -4

B. 2

C. -0.3

D. 1.5

2) How many of the values $\{2, 4, 6, 8\}$ satisfy the inequality $x \leq 5$?

A. 1 value

B. 2 values

C. 3 values

D. 4 values

3) If the area of a triangle is 56 cm^2 and the height is 7 cm, what is the base?

A. 8 cm

B. 16 cm

C. 28 cm

D. 56 cm

4) Which question would produce the MOST variability in answers?

A. What time does lunch start at your school?

B. How many legs do dogs have?

C. What year was the Statue of Liberty built?

D. How many siblings do you have?

5) Evaluate $\frac{a+b+c}{3}$ when $a = 6$, $b = 9$, and $c = 12$.



Scan me!
For more practice
& answers

1) A recipe says: "For every 2 cups of flour there are 3 cups of sugar." Write this as a simplified numerical ratio of flour to sugar.

 A. 2 : 3 C. 2 : 5 B. 3 : 2 D. 5 : 1

2) Solve: $\frac{8}{12} = \frac{x}{30}$.

 A. 18 C. 22 B. 20 D. 25

3) A model airplane is 24 inches long. How many feet long is the model? (Use 1 foot = 12 inches.)

 A. 1 foot C. 2 feet B. 1.5 feet D. 3 feet

4) A cyclist travels at 15 miles per hour. Which equation represents the distance d (in miles) after t hours?

 A. $d = 15t$ C. $t = 15d$ B. $d = 15 + t$ D. $d = 15t + 1$

5) If a \$200 purchase has a \$30 discount applied, what is the percent discount?



6) A blueprint shows a wall that is 6 cm long. The scale is $1 \text{ cm} = 0.5 \text{ m}$. What is the actual length of the wall?

A. 2 m

C. 4 m

B. 6 m

D. 3 m

7) The place-value chart shows a decimal. What is the digit in the hundredths place?

Ones	Tenths	Hundredths	Thousandths
3	2	7	5

A. 3

C. 7

B. 2

D. 5

8) Which is a multiple of both 4 and 6?

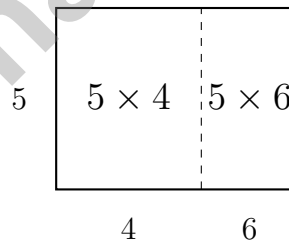
A. 8

C. 18

B. 12

D. 10

9) The area model below represents a factored sum. What is the factored form?



A. $5(4 + 6) = 50$

C. $(4 + 6)(5) = 50$

B. $4(5 + 6) = 44$

D. $5 \times 10 = 50$



Scan me!
For more practice
& answers

Texas STAAR Practice Test Answer Keys

How to use this section with a Grade 6 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

- Choice C is correct.** (6.11) The ratio 7 : 5 means the total is $7 + 5 = 12$ parts. A valid total must be divisible by 12. Only 24 is divisible by 12 (since $24 \div 12 = 2$). So the total could be 24 items: 14 hot dogs and 10 hamburgers.
- Choice C is correct.** (6.11) Roses are the 5-part amount. Since $40 \div 5 = 8$, each part is worth 8 flowers, and tulips are 8 parts: $8 \times 8 = 64$.
- Choice A is correct.** (6.13(A)) From the double number line, 4 cases correspond to 2 hours. The rate is $4 \div 2 = 2$ cases per hour.
- Choice D is correct.** (6.4(A)) Unit rate: $\frac{\$3.60}{6} = \0.60 per can.
- Choice B is correct.** (6.12(C)) Factors of 24: 1, 2, 3, 4, 6, 8, 12, 24. Factors of 60: 1, 2, 3, 4, 5, 6, 10, 12, 15, 20, 30, 60. Common factors: 1, 2, 3, 4, 6, 12. GCF is 12.
- Choice A is correct.** (6.5(C)) In a standard stem-and-leaf plot with single-digit leaves, stem 3 with leaves 1, 2, 4, 5 correctly represents 31, 32, 34, 35.
- Choice D is correct.** (6.6(A)) Pizza accounts for $\frac{120}{360} = \frac{1}{3}$ of students. The angle is $\frac{1}{3} \times 360^\circ = 120^\circ$.
- Choice B is correct.** (6.14(D)) If $\frac{3}{4}$ of the wall takes 6 hours, then the unit rate is $6 \div \frac{3}{4} = 6 \times \frac{4}{3} = 8$ hours for the whole wall.
- Choice D is correct.** (6.5(C)) The unit rate is 15 photos per day. For 5 days: $15 \times 5 = 75$ photos. Verify: $45 \div 3 = 15$ photos/day confirms the constant rate.
- Choice A is correct.** (6.2(C)) For a graph with cats on the x-axis and dogs on the y-axis, the constant of proportionality is $y \div x = \frac{5}{2}$. The student used $x \div y = \frac{2}{5}$, so the fraction was inverted.
- Choice D is correct.** (6.3(D)) $0.09 \times 100 = 9\%$.
- Choice C is correct.** (6.7(A)) 40% of $\$300 = 0.40 \times 300 = \120 . New price is $\$300 - \$120 = \$180$.
- The correct answer is 47.5.** (6.9(B)) Rectangle: base $9 - 1 = 8$, height $6 - 1 = 5$, area = 40 square units. Triangle: base $12 - 9 = 3$, height $6 - 1 = 5$, area = $\frac{1}{2} \times 3 \times 5 = 7.5$ square units. Total = $40 + 7.5 = 47.5$ square units.
- Choice B is correct.** (6.2(C)) Distance = Rate \times Time = $45 \times 3 = 135$ miles.
- The correct answer is 208.** (6.2(A)) Two triangular bases have area $2 \times 24 = 48 \text{ cm}^2$. The lateral surface area is perimeter times prism height: $20 \times 8 = 160 \text{ cm}^2$. Total surface area is $48 + 160 = 208 \text{ cm}^2$.
- Choice A is correct.** (6.7(C)) Divide: $2500 \div 1000 = 2.5 \text{ kg}$. The student's error of multiplying would give an absurdly large number.
- Choice C is correct.** (6.7(A)) For $c = 12j$, the line passes through (0, 0), (5, 60), (10, 120), and (15, 180). The constant rate is \$12 per jersey, so this represents a proportional relationship.
- Choice C is correct.** (6.2(B)) Convert to the same units: 1 inch = 3 feet = 36 inches. Scale factor is $36 : 1$.
- The correct answer is The area is $A = 10 \times 6 = 60 \text{ cm}^2$ using the formula $A = \text{base} \times \text{height}$.** (6.9(C)) Statements D and E are correct. Statement A is wrong ($10 \times 7 \neq 70$, and the slanted side should not be used). Statement B is wrong because the slanted side is not part of the area formula. Statement C is wrong because the height is perpendicular to the base, not the slanted side length.
- Choice B is correct.** (6.9(B)) You are counting how many $\frac{1}{4}$ -cup servings fit inside 2 cups—that's a division problem: $2 \div \frac{1}{4}$. Rewrite as 2×4 , which equals 8 servings.
- Choice A is correct.** (6.8(B)) $9,108 \div 52 = 175$ remainder 8. Check: $52 \times 175 = 9,100$, and $9,100 + 8 = 9,108$. So the whole-number quotient is 175.
- Choice A is correct.** (6.8(B)) Sharing 18.4 across four equal groups yields 4.6. Multiply back cheerfully: $4 \times 4.6 = 18.4$ feels just right.
- Choice D is correct.** (6.8(B)) Factors of 9: 1, 3, 9. Factors of 12: 1, 2, 3, 4, 6, 12. Common factors: 1, 3. GCF is 3.



Scan me!
For more practice
& answers

Hi, Math Champion!

◇ You trained hard! 10 full practice tests is real practice. Your math game is way better now than when you started. ◇

★ **Coach's truth:** kids who practice get better. You practiced. You got better. That's how it works!
★

Your Game Stats

- **Energy:** HIGH! You can finish a long test.
- **Smart Plays:** You know lots of strategies.
- **Calm Head:** You stay cool with hard problems.
- **Game-Day Ready:** You feel strong and prepared.

Coach's tip: the night before the test, get good sleep. Eat a good breakfast. Bring a sharp pencil. Trust your training!

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

Jay Daie

Your Math Coach

PRACTICE MORE. ACHIEVE MORE. SUCCEED!

This **Grade 6 Math Practice Tests** book is designed to help students build strong math skills, deepen their understanding of key concepts, and gain the confidence they need to succeed on any test.

With 10 full-length printed tests and 2 online tests, students get the review, practice, and realistic test experience they need to improve accuracy, strengthen problem-solving abilities, and reach their full potential.

Perfect for classroom use, homework, test preparation, and extra practice at home.

PERFECT FOR:

- ✓ Classroom Practice
- ✓ Homework & Review
- ✓ Independent Learning
- ✓ Test Preparation
- ✓ Skill Reinforcement
- ✓ Building Confidence



**CONFIDENCE TODAY.
SUCCESS TOMORROW!**

WHAT STUDENTS WILL GAIN



Stronger Math Skills

Build a solid foundation through targeted practice and review.



Better Problem Solving

Develop logical thinking and effective solution strategies.



Deepen Understanding

Reinforce key math concepts aligned with standards.



Test Confidence

Get familiar with test formats and improve accuracy.



Achieve Success

Build confidence and perform your best on test day.

TOPICS COVERED

- ✓ Ratios & Rates
- ✓ The Number System
- ✓ Expressions & Equations
- ✓ Geometry
- ✓ Fractions & Decimals
- ✓ Percents
- ✓ Statistics & Probability
- ✓ Data Analysis
- ✓ Measurement & Conversions
- ✓ And More!



2 ONLINE TESTS

Extra online practice to reinforce learning and build confidence.

MORE PRACTICE. GREATER RESULTS.

Give your child the tools needed to develop strong math skills, confidence, and a positive attitude toward learning.



10 PRINTED
PRACTICE TESTS



2 ONLINE
PRACTICE TESTS



DETAILED ANSWER
EXPLANATIONS