

# 4 Texas STAAR

GRADE  
**6**  
MATH

## PRACTICE TESTS

Standards Aligned Problem Solving  
For Comprehensive Assessment Programs

**4**

**PRINTED  
TESTS**



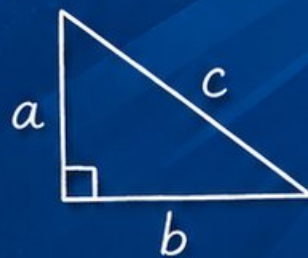
**2**

**ONLINE  
TESTS**



- ✓ Build Confidence
- ✓ Master Key Math Skills
- ✓ Answer Explanations for Every Question
- ✓ Test-Taking Strategies That Work

$$2x + 5 = 21$$
$$x = 8$$



$$\frac{3}{4} + \frac{1}{2} = \frac{5}{4}$$

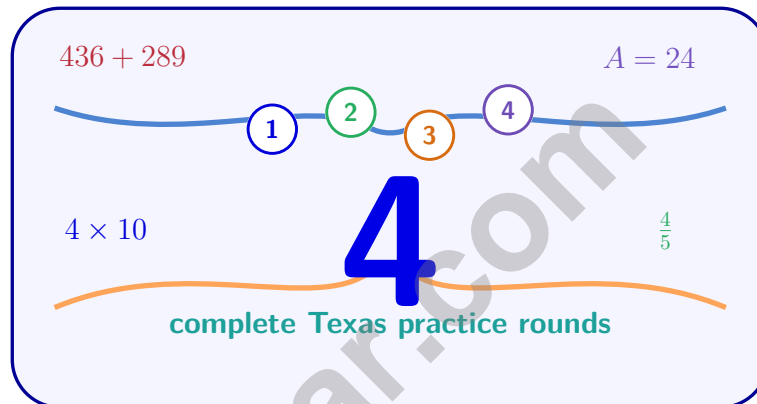


**USE THESE TWO  
ADDITIONAL ONLINE  
PRACTICE TESTS**

**FOR EXTRA REVIEW AFTER  
THE PRINTED TESTS  
IN THIS BOOK.**

# 4 Texas STAAR Grade 6 Math Practice Tests

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



Four complete 40-question Grade 6 practice rounds for STAAR, built for bold but careful reasoning with ratios, rational numbers, expressions, equations, geometry, statistics, answer keys, and clear explanations for every item.

**Jay Daie and Reza Nazari**



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# Welcome, Texas Math Explorer!

Four focused rounds using bold but careful reasoning

This book gives you four 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: mark clues, solve, and verify.

Read

Plan

Check

## How to Use This Book

A four-session routine for bold but careful reasoning

1. **Preview the skills.** Scan the quick review pages before beginning the first round.
2. **Work in order.** Take one 40-question test at a time in a quiet place.
3. **Mark confidence.** Put a small star beside problems where your plan felt strong.
4. **Correct actively.** Retry missed items before reading the full explanation.
5. **Plan the next round.** Use the growth log to choose one habit and one skill to practice.

**Texas review rhythm:** Work one round, study the hard spots, and return with a stronger plan for the next STAAR-style set.



## What Is Inside?

Four STAAR tests, 160 questions, and a full review path

Part	What You Will Practice
Tests 1–2	Foundation rounds for ratios, rational numbers, operations, and careful reading.
Tests 3–4	Skill-building and final stamina rounds with expressions, equations, geometry, data, and problem models.
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, changes format, or asks for an explanation.



Scan me!  
For more practice  
& answers

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1) Solve for  $x$ :  $x - 3 = 9$

A.  $x = 6$

C.  $x = 12$

B.  $x = 9$

D.  $x = 27$

2) Which expression is NOT equivalent to  $24 + 36$ ?

A.  $6(4 + 6)$

C.  $4(6 + 9)$

B.  $12(2 + 3)$

D.  $3(7 + 12)$

3) A stock price changes each day. On Monday the change is +6 points. On Tuesday the change is  $-3$  points. On Wednesday the change is  $-2$  points. What is the total change for the three days?

A. +1 point

C.  $-5$  points

B. +11 points

D. 11 points

4) Which pair shows numbers with equal absolute values?

A.  $-3$  and  $-5$

C. 4 and  $-5$

B. 2 and  $-2$

D.  $-6$  and  $-8$

5) On a number line, which comparison is true?

A.  $-0.9 > -0.1$

C.  $-0.5 > 0.5$

B.  $-0.1 > -0.9$

D.  $0.1 < -0.1$



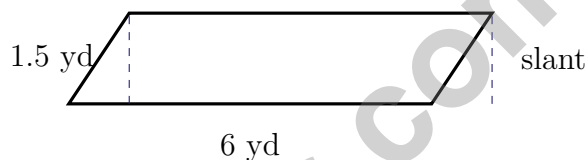
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6) Which statement correctly describes all points in Quadrant II?

- A. The  $x$ -coordinate is greater than the  $y$ -coordinate
- B. The  $x$ -coordinate is negative and the  $y$ -coordinate is positive
- C. Both coordinates are negative
- D. The point is below the  $x$ -axis

7) A printer produces pages at a rate of 20 pages per minute. How many pages are printed in 3.5 minutes?

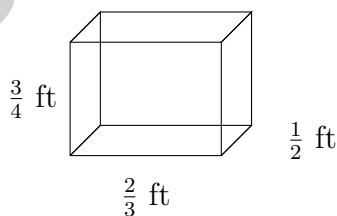
- A. 60 pages
- B. 65 pages
- C. 75 pages
- D. 70 pages



8)

A parallelogram has a base of 6 yd and height of 1.5 yd. What is its area?

- A.  $4.5 \text{ yd}^2$
- B.  $7.5 \text{ yd}^2$
- C.  $9 \text{ yd}^2$
- D.  $15 \text{ yd}^2$



9)

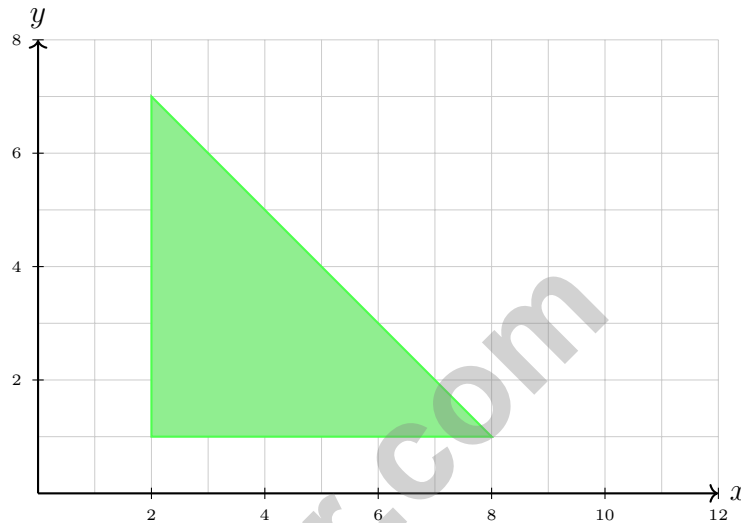
A rectangular prism has dimensions  $\frac{1}{2}$  ft,  $\frac{3}{4}$  ft, and  $\frac{2}{3}$  ft. What is its volume in cubic feet?

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



10) A quadrilateral has vertices at  $(0, 2)$ ,  $(4, 2)$ ,  $(4, 5)$ , and  $(0, 5)$ . What is its perimeter?

- A. 9 units                       C. 14 units  
 B. 12 units                      D. 18 units



11)

A right triangle has vertices at  $(2, 1)$ ,  $(8, 1)$ , and  $(2, 7)$ . What is its area?

- A. 15 square units                       C. 21 square units  
 B. 18 square units                      D. 24 square units

12) In the expression  $9c + 3d + 5e + 7$ , how many terms have variables?

- A. 3                                       C. 1  
 B. 2                                       D. 4

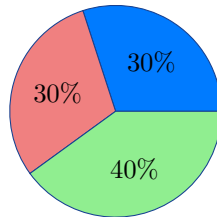


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For more practice  
& answers



5) If a stem-and-leaf plot has stems 0, 1, 2, 3, 4 and each stem has at least one leaf, what is the minimum number of data points?

- A. 1                                       C. 5  
 B. 4                                       D. 10



6)

A circle graph shows the favorite ice cream flavors of 200 people. If 30% prefer vanilla, how many people prefer vanilla?

- A. 60                                       C. 30  
 B. 50                                       D. 80

7) Which graph is MOST misleading if the vertical axis does not start at zero?

- A. Bar graph                               C. Circle graph  
 B. Line graph                               D. Dot plot

8)

Type	Count
Red marbles	12
Blue marbles	8

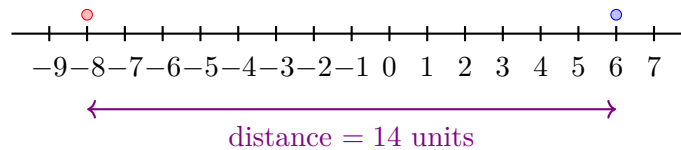
What is the ratio of blue marbles to red marbles in simplest form?

- A. 3 : 2                                       C. 12 : 8  
 B. 8 : 12                                       D. 2 : 3



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& answers

1) Which number line shows the distance between  $-8$  and  $6$ ?



- A. Distance is 2 units
- B. Distance is 8 units
- C. Distance is 14 units
- D. Distance is 22 units
- 2) A ribbon is  $\frac{5}{6}$  yard long. You need pieces that are  $\frac{1}{6}$  yard long. How many pieces can you cut?
- A. 1
- B. 4
- C. 5
- D. 6
- 3) What is  $5,832 \div 27$ ?
- A. 216
- B. 210
- C. 220
- D. 225
- 4) Compute:  $12.7 + 8.45$
- A. 20.112
- B. 4.25
- C. 21.52
- D. 21.15
- 5) Which pair of numbers has a GCF of 5?
- A. 15 and 25
- B. 10 and 20
- C. 12 and 20
- D. 14 and 35



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For more practice  
& answers

6) If  $|x| = 9$ , which value(s) could  $x$  be?

A. 9 only

C. Undefined

B.  $-9$  only

D. Both 9 and  $-9$

7) The number line below shows tick marks at each integer. Point M is marked on the line. What is the coordinate of point M?



A. 2.5

C. 2

B. 2.25

D. 3

8) Which ordered pair is in Quadrant I?

A.  $(-5, 7)$

C.  $(-2, -4)$

B.  $(1, -8)$

D.  $(8, 3)$



## Texas STAAR Practice Test Answer Keys

### How to use this Texas STAAR answer section with a Grade 6 student:

1. check the answer first, then write one quick reason the choice is correct
2. mark questions to try again, especially the skills that feel connected to bold but careful reasoning
3. rework the problem before reading the full explanation, using this reminder:  
Make the setup big and clear before doing the math: mark clues, solve, and verify.

**A calm Texas correction routine turns every missed item into useful practice. Work one round, study the hard spots, and return with a stronger plan for the next STAAR-style set.**



Scan me!  
For more practice  
& answers

## Texas Practice Test Answers and Explanations

Review the four printed STAAR tests with confident, careful, and ready for the next route habits.

### Practice Test 1 Answers and Explanations

- 1) **Choice C is correct.** **6.10(B)** Add 3 to both sides:  $x = 9 + 3 = 12$ .
- 2) **Choice D is correct.** **6.5(A)**  $24 + 36 = 60$ . Choice A:  $6(4 + 6) = 60$  ✓. Choice B:  $12(2 + 3) = 60$  ✓. Choice C:  $4(6 + 9) = 60$  ✓. Choice D:  $3(7 + 12) = 57$  ✗. Only Choice D is not equivalent to 60.
- 3) **Choice A is correct.** **6.14(D)** Total change is  $(+6) + (-3) + (-2) = 6 - 3 - 2 = 1$  point, a positive change of 1 point.
- 4) **Choice B is correct.** **6.2(B)**  $|2| = 2$  and  $|-2| = 2$ . Numbers that are opposites have equal absolute values.
- 5) **Choice B is correct.** **6.2(C)** On the number line,  $-0.1$  is to the right of  $-0.9$ , making it greater.
- 6) **Choice B is correct.** **6.11** By definition, Quadrant II (upper left) has all points where  $x < 0$  and  $y > 0$ .
- 7) **Choice D is correct.** **6.6(A)** Pages printed = rate  $\times$  time =  $20 \text{ pages/min} \times 3.5 \text{ min} = 70$  pages.
- 8) **Choice C is correct.** **6.8(B)** Area =  $6 \times 1.5 = 9 \text{ yd}^2$ .
- 9) **Choice A is correct.** **6.8(D)**  $V = \frac{1}{2} \times \frac{3}{4} \times \frac{2}{3} = \frac{6}{24} = \frac{1}{4} \text{ ft}^3$ .
- 10) **Choice C is correct.** **6.11** Length = 4 units; width = 3 units. Perimeter =  $2(4 + 3) = 14$  units.
- 11) **Choice B is correct.** **6.8(B)** Base:  $8 - 2 = 6$  units. Height:  $7 - 1 = 6$  units. Area =  $\frac{1}{2} \times 6 \times 6 = 18$  square units.
- 12) **Choice A is correct.** **6.3(B)** The terms with variables are  $9c$ ,  $3d$ , and  $5e$ . The term 7 is a constant with no variable.
- 13) **Choice A is correct.** **6.7(A)** Substitute  $t = 10$ :  $100 - 6(10) = 100 - 60 = 40$ .
- 14) **Choice B is correct.** **6.8(B)** For a right triangle,  $A = \frac{1}{2} \times 5 \times 12 = 30 \text{ m}^2$ .
- 15) **Choice C is correct.** **6.12(B)** Range = Max - Min. So  $45 = \text{Max} - 30$ , which gives Max = 75.
- 16) **Choice D is correct.** **6.4(A)**  $Q_1$  is the left edge of the box.
- 17) **The correct answer is 67%.** **6.4(E)** Multiply the decimal by 100:  $0.67 \times 100 = 67\%$ .
- 18) **The correct answer is The unit rate is 25 items per hour, and the y-value when x = 1 is 25.** **6.5(A)** A is correct because  $50 \div 2 = 25$  items per hour. D is correct because when  $x = 1$ ,  $y = 25$ . Choice B is false for a proportional relationship, Choice C should be  $y = 25x$ , and Choice E is false.
- 19) **Choice C is correct.** **6.6(C)** The ratio of flour to sugar is  $f/s = 2/3$ ,  $4/6 = 2/3$ ,  $6/9 = 2/3$ ,  $8/12 = 2/3$ . The ratio remains constant, so the relationship is proportional.
- 20) **Choice C is correct.** **6.10(A)** Sum all expenses:  $800 + 150 + 400 + 250 = \$1600$ .
- 21) **Choice A is correct.** **6.4(B)** Distance: 4 inches  $\times$  20 mi/inch = 80 miles. Time:  $80 \div 50 = 1.6$  hours.
- 22) **Choice B is correct.** **6.14(D)**  $5 \div \frac{5}{6} = 5 \times \frac{6}{5} = \frac{30}{5} = 6$ .
- 23) **Choice A is correct.** **6.3(E)**  $6,435 \div 33 = 195$ . Check:  $33 \times 195 = 6,435$ .
- 24) **The correct answer is 9.** **6.4(F)** Ratio 5 : 3 with 15 red marbles: each part is  $15 \div 5 = 3$  marbles. Blue marbles:  $3 \times 3 = 9$ .
- 25) **Choice B is correct.** **6.3(D)** Add:  $12.4 + 11.8 + 13.2 = 37.4$  s.
- 26) **The correct answer is 12.** **6.4(H)** Divide:  $96 \text{ fl oz} \div 8 \text{ fl oz/cup} = 12$  cups.
- 27) **Choice D is correct.** **6.7(A)** Factors of 16: 1, 2, 4, 8, 16. Factors of 40: 1, 2, 4, 5, 8, 10, 20, 40. The greatest common factor is 8.
- 28) **Choice A is correct.** **6.2(C)** Greatest to least: positives first ( $1 > 0.5$ ), then negatives ( $-0.75 > -2$ ).
- 29) **Choice B is correct.** **6.11** Same  $x$ -coordinate (3):  $|0 - (-1)| = |0 + 1| = 1$  unit.



## Hi, Brave Trail-Walker!

◇ You walked all 4 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](mailto:jay@testinar.com).

**Jay Daie**

Your Math Trail Guide

# PRACTICE TODAY. SUCCEED TOMORROW!

This book includes 4 full-length Math practice tests and 2 online tests to help Grade 6 students build confidence, strengthen skills, and excel on standardized assessments.

Each practice test is carefully crafted to reflect the latest standards and includes a variety of question types, realistic test conditions, and detailed answer explanations.

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

## THIS BOOK INCLUDES:

**4** Full-Length  
Printed Tests

**2** Online Practice  
Tests

 Detailed Answer  
Explanations

 **MORE PRACTICE.  
GREATER RESULTS.**

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

## WHAT YOU'LL GAIN



### Stronger Math Skills

Build a solid foundation through targeted practice and review.



### Better Problem Solving

Develop logical thinking and effective solution strategies.



### Deeper Understanding

Reinforce key concepts with clear explanations and meaningful practice.



### Test Confidence

Familiarize with test formats and improve accuracy and speed.



### Achieve Success

Build confidence and perform your best on test day.

## TOPICS COVERED

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



## 2 ONLINE TESTS

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



**VISIT [TESTINAR.COM/MATH6](https://www.testinar.com/math6)**  
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AND LEARNING RESOURCES



PRACTICE  
REGULARLY



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