

7 Texas STAAR

Grade 6 MATH

PRACTICE TESTS

7
PRINTED
TESTS

+

2
ONLINE
TESTS

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

Standards-Aligned *Steady Southern*
Problem Solving for Comprehensive
Assessment Program



7 Full-Length
Printed Tests



Standards-Aligned
Math Practice



Detailed Answer Keys
and Explanations



Build Confidence.
Achieve Success.



You've
Got
This!



PREPARE
PRACTICE
SUCCEED



PRACTICE
WITH PURPOSE



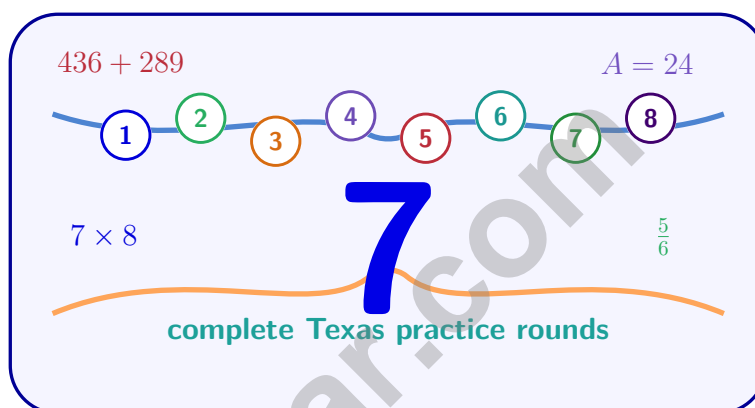
STRENGTHEN
MATH SKILLS



REVIEW, IMPROVE,
AND SUCCEED

7 Texas STAAR Grade 6 Math Practice Tests

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



Seven 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.

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Welcome, Texas Math Explorer!

Eight focused rounds using bold but careful reasoning

This book gives you seven 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 seven-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?

Eight STAAR tests, 320 questions, and a full review path

Part	What You Will Practice
Tests 1–3	Foundation rounds for ratios, rational numbers, operations, and careful reading.
Tests 4–6	Skill-building rounds with expressions, equations, geometry, data, and problem models.
Test 7	Final stamina round for mixed review, neat work, and flexible strategy choices.
Answer Pages	Compact keys and explanations that show why each answer works.

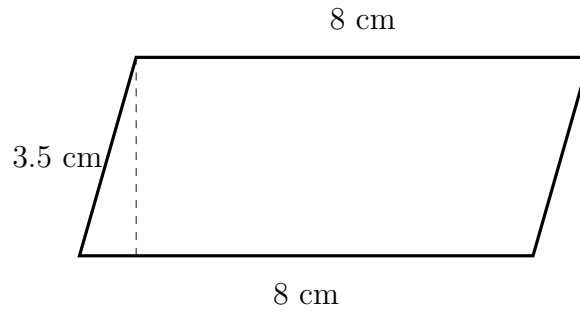
The tests are mixed on purpose. Bold but careful reasoning means recognizing the skill even when the next question changes topic, changes format, or asks for an explanation.



Scan me!
For more practice
& answers

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9)

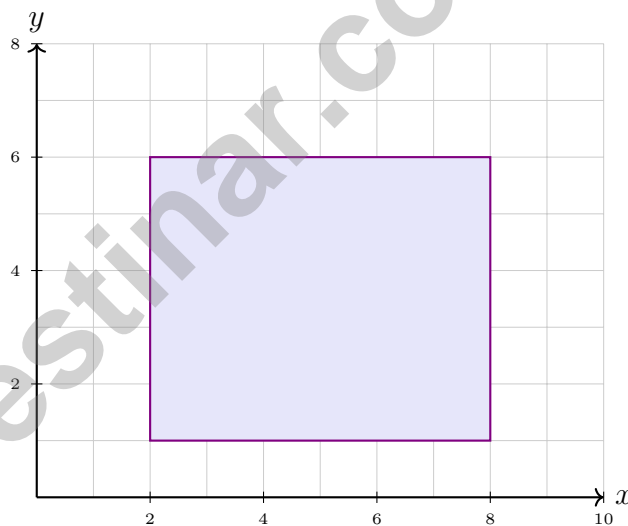
A parallelogram has a base of 8 cm and a height of 3.5 cm (shown by dashed lines). What is the area?

A. 11.5 cm^2

B. 19 cm^2

C. 28 cm^2

D. 56 cm^2



10)

What is the area of the rectangle with vertices at $(2, 1)$, $(8, 1)$, $(8, 6)$, and $(2, 6)$?

A. 24 square units

B. 30 square units

C. 36 square units

D. 40 square units



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- 1) At a party, the ratio of sodas to juices is 5 : 3. If there are 20 sodas, how many juices are there?

Sodas	Juices
5	3
10	6
20	?

- A. 10 C. 14
 B. 16 D. 12
- 2) Which statement correctly compares the two integers -6 and -3 ?
- A. $-6 > -3$ C. $-6 < -3$
 B. $-6 = -3$ D. -6 and -3 are opposites
- 3) In a student club, the ratio of 6th graders to 7th graders is 4 : 6. If there are 12 sixth graders, how many seventh graders are in the club?

4)

Yards	1	3
Feet	3	?

Complete the ratio table. How many feet are in 3 yards?

- A. 6 feet C. 12 feet
 B. 15 feet D. 9 feet



- 5) A machine produces 420 items in 7 hours. At this rate, how many items will the machine produce in 12 hours?

- 6) A store charges \$5 per notebook. An employee has a discount and gets the first notebook free, then pays \$5 for each additional one. For n notebooks, the total cost is $c = 5(n - 1)$. Is this a proportional relationship?

- A. Yes; the equation is linear
- B. Cannot determine without the graph
- C. Yes; the cost depends on notebooks
- D. No; the ratio of cost to notebooks is not constant

- 7) Expand $11(2 + 5)$.

- A. $22 + 55$
- B. $22 + 5$
- C. $11 + 7$
- D. 77

- 8) What is $|-5| + |-3| - |2|$?

- A. -6
- B. 0
- C. 6
- D. 10

- 9) Which number is located at the position labeled as -1.2 on a number line?

- A. $-\frac{6}{5}$
- B. $-\frac{5}{4}$
- C. -1
- D. $-\frac{1}{2}$



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1) A dot plot shows the number of pets owned by 10 families: 0, 1, 1, 2, 2, 2, 3, 3, 4, 5. Which measure of center is MOST resistant to the outlier value of 5 pets?

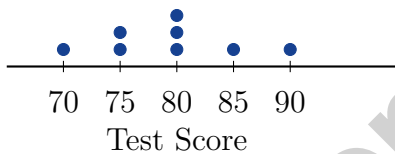
A. Mean

C. Mode

B. Median

D. Range

2) A dot plot displays the test scores: 70, 75, 75, 80, 80, 80, 85, 90. What is the median score?



A. 75

C. 85

B. 80

D. 77.5

3) A house is insured for \$300,000. The insurance company charges a 0.5% annual premium. What is the annual premium?

A. \$150

C. \$3,000

B. \$1,500

D. \$15,000

4) A field is 80 yards long. How many feet long is the field? (Use 1 yard = 3 feet.)

A. 160 feet

C. 240 feet

B. 200 feet

D. 320 feet



5) Expand $10(3 + 9)$.

A. $30 + 90$

B. $30 + 9$

C. $10 + 12$

D. 120

6) Which pair of integers are 5 units apart on a number line?

A. -8 and -3

B. 2 and 8

C. -4 and 2

D. 1 and 5

7) A store sells packs of pencils. Using the expression $4(5n + 2)$, where n is the number of packs, what is an equivalent expression?

A. $20n + 2$

B. $20n + 8$

C. $9n + 6$

D. $5n + 6$

8) A farmer has chickens and ducks in a part-to-part ratio of $6 : 4$. If the farmer has 18 chickens, how many ducks does he have?

A. 27 ducks

B. 24 ducks

C. 6 ducks

D. 12 ducks

9) Which pair of statements both describe the same ratio?

Statement X: The ratio of first part to second part is $6 : 4$.

Statement Y: For every 3 units of the first part there are 2 units of the second part.

A. Yes, they describe the same ratio.

B. No, they describe different ratios.

C. They cannot be compared.

D. Only Statement X is a valid ratio.



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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.



Texas Practice Test Answers and Explanations

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

Practice Test 1 Answers and Explanations

- 1) **Choice D is correct.** **6.2(C)** Distance = $1.5 - (-3.5) = 1.5 + 3.5 = 5$.
- 2) **Choice A is correct.** **6.5(C)** Coin flip: 2 outcomes (H or T). Die roll: 6 outcomes. Total = $2 \times 6 = 12$ outcomes.
- 3) **Choice B is correct.** **6.13(A)** In a standard stem-and-leaf plot, the stem is the tens digit and the leaf is the ones digit.
- 4) **Choice A is correct.** **6.5(C)** 35% of 360° is $0.35 \times 360^\circ = 126^\circ$.
- 5) **Choice D is correct.** **6.6(A)** The data is: 21, 23, 25, 28, 30, 34, 37, 42, 46. Each value appears exactly once, so there is no mode (no repeated value).
- 6) **Choice D is correct.** **6.4(D)** Simplify 6 : 10 by dividing both parts by 2, giving 3 : 5. That means $\frac{3}{5}$ and 12 : 20 are equivalent forms, but 5 : 6 is not.
- 7) **Choice B is correct.** **6.4(F)** The ratio is 2 : 5 (A to B). For B = 10, we have $5 \times 2 = 10$, so $A = 2 \times 2 = 4$.
- 8) **Choice B is correct.** **6.8(B)** $36 = \frac{1}{2} \times b \times 9 \Rightarrow b = 8$ in.
- 9) **Choice C is correct.** **6.8(B)** Area = $8 \times 3.5 = 28$ cm².
- 10) **Choice B is correct.** **6.8(B)** Width: $8 - 2 = 6$ units. Height: $6 - 1 = 5$ units. Area = $6 \times 5 = 30$ square units.
- 11) **Choice A is correct.** **6.8(B)** Radius $r = \frac{10}{2} = 5$ ft. Area = $\pi r^2 \approx 3.14 \times 5^2 = 3.14 \times 25 = 78.5$ ft².
- 12) **Choice B is correct.** **6.12(B)** Sum = $2 + 2 + 3 + 3 + 3 + 4 + 4 + 5 + 6 + 6 = 38$. Mean = $38 \div 10 = 3.8$, which rounds to 4.
- 13) **The correct answer is -4.** **6.11** Reflection across the y -axis changes the sign of the x -coordinate.
- 14) **Choice C is correct.** **6.4(A)** Q_1 , Q_2 (median), and Q_3 are the three quartiles shown in a box plot. They divide the dataset into four equal parts of 25% each.
- 15) **Choice A is correct.** **6.7(C)** "Twice a number d " is $2d$. "8 less than $2d$ " means subtract 8 from $2d$: $2d - 8$.
- 16) **Choice B is correct.** **6.9(C)** Miles walked = $4 \times$ number of days. Pattern: 5 days \rightarrow 20 miles (4×5), 10 days \rightarrow 40 miles (4×10). So miles = $4d$.
- 17) **Choice B is correct.** **6.9(B)** "Must not exceed" means at most 50: $w \leq 50$.
- 18) **Choice D is correct.** **6.9(B)** A closed circle at 6 (includes 6) with arrow pointing left (toward smaller values) represents $x \leq 6$.
- 19) **Choice A is correct.** **6.13(A)** Count the dots stacked above each value. The tallest stack is at 6 hours with 5 dots, which is more than at any other value, so 6 hours is the mode.
- 20) **The correct answer is Zero serves as a reference point by marking the origin. Negative numbers are to the left (A is correct). Opposites are equidistant from zero (C is correct). Distance from zero determines position relative to the reference point (E is correct).** **6.14(D)** Choice A correctly identifies the spatial arrangement with zero as origin. Choice C correctly describes opposites as equidistant from zero (the reference). Choice E correctly explains how distances from zero locate a number. Choice B is about comparison, not zero's role as reference. Choice D is about direction but doesn't specifically explain zero's reference-point function.
- 21) **Choice C is correct.** **6.4(B)** 48-oz: $\$8.00 \div 48 \approx \$0.167/\text{oz}$. 64-oz: $\$9.60 \div 64 = \$0.15/\text{oz}$. The 64-oz bottle has the better (lower) unit price.
- 22) **Choice D is correct.** **6.5(A)** The ratio is apples to oranges at 2:5. For every 2 apples, there are 5 oranges. When apples = 8, the multiplier is $8 \div 2 = 4$. So oranges = $5 \times 4 = 20$.
- 23) **Choice D is correct.** **6.5(B)** Increase is $\$44,000 - \$40,000 = \$4,000$. Percent increase is $\frac{4000}{40000} = 0.10 = 10\%$.
- 24) **Choice B is correct.** **6.5(A)** Each rectangle has height 5. The widths are 3 and 6. Total area = $5 \times 3 + 5 \times 6 = 5(3 + 6) = 45$.



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Notes From Your Math Builder

Hi, Math Builder!

◇ Through 7 practice tests, you built your math house brick by brick. The walls are strong. The roof is on. You are ready for anything test day brings. ◇

★ **Builders know:** good plans make strong houses. You learned to plan, then build. That helps with any problem. ★

Builder's Tools

- **Foundation:** ROCK SOLID. Math facts are in place.
- **Frame:** STRONG. You can break problems into parts.
- **Walls:** TIDY. Your work is neat and clear.
- **Roof:** DONE. You always answer the question.

Builder tip: on test day, build each answer like a tiny house. Read first. Plan next. Do the math. Then check!

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

Jay Daie

Your Math Builder

MASTER TODAY. SUCCEED TOMORROW.

This Grade 6 Math Practice Tests book is designed to help students strengthen their math skills, master important concepts, and build the confidence they need to excel on comprehensive assessments.

With 7 full-length printed tests and 2 online tests, students get the review, practice, and realistic test experience they need to improve accuracy, develop 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

★ PRACTICE TODAY.
SUCCEED 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.



Deeper Understanding

Reinforce key concepts aligned with standards through meaningful practice.



Test Confidence

Become familiar with test formats and improve accuracy and speed.



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.



7 FULL-LENGTH
PRINTED TESTS



STANDARDS-
ALIGNED PRACTICE



DETAILED ANSWER
KEYS & EXPLANATIONS