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GRADE

5

MATHEMATICS

STAAR® Preparation and Practice

**Available in
Spanish!**



- Over 530 STAAR practice items
- 3-step approach for remediation
- Systematic Readiness TEKS instruction and practice

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STAAR GRADE 5 MATHEMATICS REFERENCE MATERIALS



LENGTH

Customary

1 mile (mi) = 1,760 yards (yd)

1 yard (yd) = 3 feet (ft)

1 foot (ft) = 12 inches (in.)

Metric

1 kilometer (km) = 1,000 meters (m)

1 meter (m) = 100 centimeters (cm)

1 centimeter (cm) = 10 millimeters (mm)

VOLUME AND CAPACITY

Customary

1 gallon (gal) = 4 quarts (qt)

1 quart (qt) = 2 pints (pt)

1 pint (pt) = 2 cups (c)

1 cup (c) = 8 fluid ounces (fl oz)

Metric

1 liter (L) = 1,000 milliliters (mL)

WEIGHT AND MASS

Customary

1 ton (T) = 2,000 pounds (lb)

1 pound (lb) = 16 ounces (oz)

Metric

1 kilogram (kg) = 1,000 grams (g)

1 gram (g) = 1,000 milligrams (mg)

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GRADE 5 MATHEMATICS

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TEKS Correlations—Where to Find Them

Readiness TEKS	Readiness Lesson
5.2B	Lesson 1 (p. 7)
5.3E	Lesson 3 (p. 39)
5.3G	Lesson 4 (p. 51)
5.3K	Lesson 2 (p. 20)
5.3L	Lesson 5 (p. 63)
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Sampler

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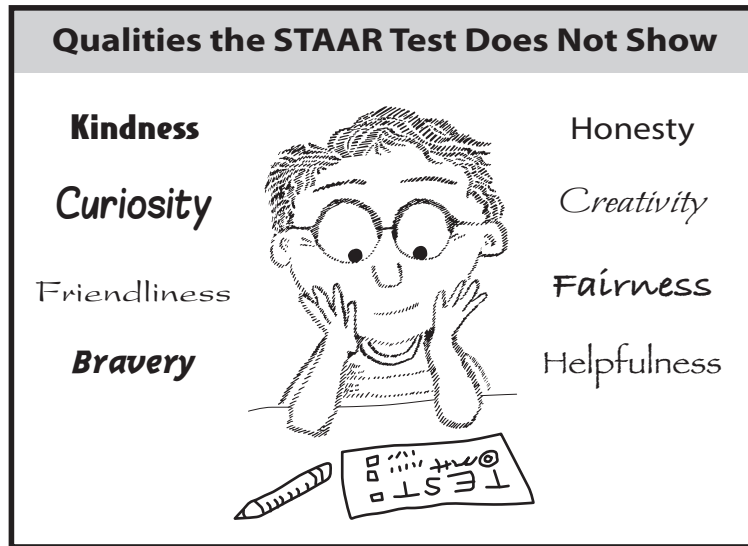
Reference Materials inside front & back cover

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Dear Student,

You are amazing in so many ways. There is no test that shows all the qualities that make you YOU.



You will take the STAAR Grade 5 Math test later this year. The test will ask questions about the math you learn over the whole year. The questions may look different from what you have seen before, but don't worry. This workbook will help you.

Practice Smart

You can do well on the STAAR Math test if you practice. But it's important to practice smart. Don't practice by solving any old math problems. Practice with problems like the ones on the test. You'll have a chance to practice smart by using this workbook.

When practicing, don't be afraid of making a mistake. Your mistakes give important feedback, telling you what you need to learn. So when you miss a question, spend extra time analyzing it. Why is another answer the correct answer? What did you do wrong to get the incorrect answer? This way, you won't make the same mistake on the actual STAAR test!

Remember you build your test-taking "muscles" one practice test question at a time. When you give a problem your full attention, you are building your test-taking muscles of focus.

Getting ready for the STAAR Math test can be fun! Read each lesson carefully, and practice, practice, practice. Keep trying and you will succeed!

Your STAAR success coaches,
The Sirius Education Team

How to Use This Book for STAAR Success

3-Step Approach to Differentiate Instruction

This workbook can be easily adapted for your unique needs. Use the optional **3-step approach** to **prioritize** and **individualize** your remediation when preparation time is limited.

STEP 1 Identify Your Needs—Diagnostic Test

Use the 12-item Diagnostic Test to identify what you know and what you need to review. Keep track of your results in the Student Progress Monitoring Chart.

Diagnostic Test

Read each question carefully. Determine the best answer to the question from the four answer choices provided.

1 Which list shows the numbers NOT in order from least to greatest?

A 10.12 < 10.123 < 10.213 < 11.302
 B 0.225 < 0.227 < 0.23 < 0.024
 C 3.03 < 3.131 < 3.233 < 3.238
 D 0.7 < 0.719 < 0.72 < 0.722

Each item correlates to a lesson.

2 Javier's lunch cost \$11.89 and the tax was \$0.98. Javier paid with a \$20.00 bill. How much change should he have received?

F \$8.11
 G \$19.02
 H \$9.09
 J \$7.13

Name _____ Class _____ Date _____

Student Progress Monitoring Chart

1 Diagnostic Mark a ✓ next to each test question that you answered correctly. Find the total.

2 Need Review? If you did *not* check a question in **1**, circle the lesson next to it. Study each circled lesson, and put a ✓ in the Practiced column when done.

3 Post Test Mark a ✓ next to each question that you answered correctly. Find the total. Repeat or review each lesson that is unchecked in column **1**.

Question	1 Diagnostic	2 Need Review?	Practiced	3 Post Test	TEKS	Lesson Title
1					5.2B	1 Comparing and Ordering Decimals
2					5.3K	2 Adding and Subtracting Rational Numbers
3	✓				5.3E	3 Multiplying Decimals
4	✓				5.3G	4 Dividing Decimals by Whole Numbers
5					5.3L	5 Dividing Fractions and Mixed Numbers
6					5.4F	6 Simplifying Numerical Expressions

Monitor your progress.

Focus on what you most need to practice.

STEP 2 Focus Your Remediation—Instruction and Practice

Use your Diagnostic Test results to focus instruction and STAAR practice on your unique needs.

Lesson 8 Classifying Two-Dimensional Figures

5.5A Classify two-dimensional figures in a hierarchy of sets and subsets using graphic organizers based on their attribute and properties.

Every dachshund is a dog. But is every dog a dachshund? The answer is no, of course. Some dogs are dachshunds, but most are not. Dachshunds are a part of the much larger group of all dogs.

This idea appears in math, too. For instance, every multiple of 10 is a number, but not every number is a multiple of 10. In this lesson you will see how to apply this idea to geometric figures.

An **angle** is a geometric figure formed by two rays. The rays meet at a common endpoint called the **vertex** of the angle.

Angles are named by their measures.

Angles	Example
A right angle measures 90°.	

8 STAAR Practice 5.5A

Odds	Evens
1 Lorena drew a two-dimensional shape with exactly one pair of parallel sides. Which could be the shape Lorena drew?	2 Mr. Williams drew a polygon on the board. The polygon had both acute and obtuse angles. Which polygon could Mr. Williams have drawn?
A	F
B	G
C	H
D	J

STEP 3 Monitor Your Progress—Post Test

Use the 12-item Post Test to monitor your progress and to identify additional lessons for review. The Post Test uses the same TEKS in the same order as the Diagnostic Test.

Post Test

Read each question carefully. Determine the best answer to the question from the four answer choices provided.

1 The table shows the masses of four insects.

Insert Masses

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12 Lessons with Both Instruction and Practice

Lesson Instruction—Engaging Interactive Learning

Take an active role in your learning with your **write-in** student workbook.

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LESSON 1 **Comparing and Ordering Decimals**

5.2B Compare and order two decimals to thousandths and represent comparisons using the symbols $>$, $<$, or $=$.

Jordan wants to buy a video game. He looks online and at two stores, and finds the prices shown.

\$34.88

\$34.72

\$34.85

Find the lowest price, Jordan will have to compare decimals.

A decimal is a number containing a decimal point. Just as in whole numbers, the value of a digit in a decimal is shown by its position, place.

Hundreds	Tens	Ones	Tenths	Hundredths	Thousandths
3	7	5	.	2	9

Adding zeroes to the end of a decimal does not change its value.

$375.291 = 375.2910 = 375.29100$

Give the place value of the digit in the number 215.783.

1. 1 _____ 2. 8 _____ 3. 3 _____

The symbols $<$, $>$, and $=$ are used to compare numbers.

Symbol	Meaning	Example
$<$	is less than	$25 < 37$
$>$	is greater than	$18 > 5$
$=$	is equal to	$10 = 10$

Use $<$, $>$, or $=$ to compare the numbers in each pair.

5. $251 \bigcirc 228$ 6. $3,050 \bigcirc 10,500$

Lesson 1 Comparing and Ordering Decimals 7

Engaging instruction

Full TEKS

Interactive questions provide a quick check of understanding.

You can use place value to compare decimals.

Example 1 **Compare Decimals**

Use $<$, $>$, or $=$ to compare the decimals.

a. $2.736 \bigcirc 2.763$ b. $19.45 \bigcirc 19.450$

a. $2.736 \bigcirc 2.763$
Write the numbers so that the decimal points line up.

2	.	7	3	6	Start at the left.
2	.	7	6	3	Compare the digits in each place value.
↓		↓	↓	↓	Stop when you find different digits.
2 = 2		7 = 7	3 < 6		Once you find two different digits, you do not have to compare any more.

$3 < 6$, so $2.736 < 2.763$.

b. $19.45 \bigcirc 19.450$
Write the numbers so that the decimal points line up. Add zeroes until the numbers have the same number of decimal places.

1	9	.	4	5	0	Remember, you can add zeroes at the end of a decimal without changing the value.
1	9	.	4	5	0	

Compare the digits in each place value.
The digits in each place value are the same, so $19.45 = 19.450$.

Your Turn 1

Use $<$, $>$, or $=$ to compare the decimals.

a. $0.85 \bigcirc 0.843$ b. $2.218 \bigcirc 2.281$

a. $0.85 \bigcirc 0.843$
Write the numbers so that the decimal points line up. Add zeroes until the numbers have the same number of decimal places.

0	.	8	5	_____	Start at the left.
0	.	8	4	3	Compare the digits in each place value.
0	.	8	5	_____	Stop when you find different digits.

$5 > 3$, so $0.85 > 0.843$.

8 Grade 5 Mathematics STAAR Preparation and Practice

Examples with full solutions

Your Turn to apply what you learned in the Example.

Lesson Practice—Abundant and Systematic Practice

Use the **Skills & Concepts Practice** to find out if you understand the concepts. Then apply your skills to solve authentic STAAR test items in **STAAR Practice**.

1 Skills & Concepts Practice 5.2B

1. Three friends each wrote a number.

- Zeke's number is less than Jane's number.
- Jane's number is equal to Deshon's number.

Deshon's number is less than | equal to | greater than Zeke's number.

2. Write a number greater than 193.681 by changing only the hundredths digit: _____

3. Write = if the numbers are equal. If not, write < or >. The first one is done for you.

4. $3.503 \bigcirc 3.5023$ 5. $74.51 \bigcirc 74.5100$

6. $9027 \bigcirc 7,20338$ 7. $20.338 \bigcirc 2.338$ 8. $0.1234 \bigcirc 0.2340$

9. Write the numbers that are NOT greater than 0.07.
0.070 0.0711 1.006 0.07 0.06789 0.105

10. $203 < 2.23 < 2.023$ shows the numbers in order from least to greatest. Jay says to write the numbers from greatest to least in reverse order with the symbol $<$ between each pair of numbers. Is Jay correct? Tell why or why not.

11. Write the numbers in order from least to greatest and from greatest to least.
92,701, 91,149, 97,031, 98,824, 97,13

Least to greatest: _____
Greatest to least: _____

12. **Writing** Your friend has a list of decimals. All of the decimals have digits to the thousandths place and are less than 1. Explain to your friend how to write the decimals in order from least to greatest.

12 Grade 5 Mathematics STAAR Preparation and Practice

Check your understanding before solving STAAR test problems.

1 STAAR Practice 5.2B

Odds	Evens
------	-------

1. Which symbol makes this comparison true?
 $6.68 \bigcirc 6.86$

A $>$
B $<$
C $=$
D $+$

Compare the digits in each place value.

2. The statement below compares two numbers.
 $27.5 \bigcirc 27.05$

Which symbol makes the comparison true?
F $=$ H $<$
G $>$ J $>$

3. A carpenter compared the lengths of two boards.
 $10.378 \text{ ft} \bigcirc 10.783 \text{ ft}$

Which symbol makes this comparison true?
A $>$ C $<$
B $=$ D Not here

4. Two students compared the distances they travel to school.
 $9.38 \text{ mi} \bigcirc 9.328 \text{ mi}$

Which symbol correctly completes this comparison?
F \times H $<$
G $>$ J $=$

5. Which statement is correct?
A $6.26 > 6.799$
B $3.729 < 3.705$
C $5.29 > 5.296$
D $8.145 < 8.53$

6. Which statement shows a correct comparison?
F $8.908 < 8.504$
G $3.43 > 3.408$
H $7.98 < 7.66$
J $1.447 > 1.658$

12 Grade 5 Mathematics STAAR Preparation and Practice

Questions are in an increasing order of difficulty.

Side-by-side questions are slightly different so read carefully!

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Additional In-Book Resources for STAAR Success

STAAR Problem-Solving

Learn strategies to solve STAAR problems like a pro!

Free Response Grids

Learn how to write answers in grids so you'll know what to do on test day.

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STAAR Problem-Solving Strategies

The STAAR Grade 5 Mathematics exam uses similar test questions each year. This means STAAR test questions are predictable. So using this workbook can help you learn exactly what you need to know for the STAAR test!

The secret to conquering the STAAR test is to take small daily steps forward. Start now, by learning the following strategies. Apply the strategies as you use this workbook so that they become habits. Developing good habits will lead to success on the STAAR test.

Read EVERY Word in Story Problems THREE TIMES

Most STAAR test questions are **word/story** problems that test your **reading comprehension skills**. A powerful strategy to help you make sense of a word/story problem is to read the problem 3 times.

- First, read the problem for the **big picture**. When you focus on the big picture, you ignore details such as names and numbers.
- Read the problem a **second time**. Look for **supporting facts** and underline what you are asked to find. Circle the important information and underline what you are asked to find.
 - Look at graphs, tables, and art. Titles, labels, and graph scales are important information, so read them carefully.
 - If the problem is multiple choice, scan the answer choices. Do they contain numbers, symbols, or words?
- Finally, read the problem one more time to make sure you fully understand it. Then write a **problem summary** that gives the answers to these two questions:
 - What do you know?** Identify the important facts or information.
 - What are you asked to find?** Look for this in the sentence ending with "?". Use the format "Given (information), find (what you are asked to find)."

Let's try this 3-read strategy. Read the problem one time and then answer question 1.

Ms. Sikes paid a total of \$95.40 for a 12-month magazine subscription. She paid the same amount each month. What amount did Ms. Sikes pay each month?

A \$7.95 C \$1,144.80
B \$7.96 D \$107.40

1. **Big Picture** She paid for a _____ subscription. *Ignore names & numbers.*

Read the problem again. Circle given information and underline what you are asked to find.

2. **Supporting Facts** Total of \$ _____ for a _____-month subscription.
What is the _____?

Read the problem a third time. Fill in the problem name.

3. **Problem Summary** Given the total amount and number of _____, find the _____.

STAAR Problem-Solving Strategies ix

STAAR strategies are modelled using released test questions.

Answering Griddables

Some questions on the Grade 5 STAAR Mathematics test are Griddables. You will show your numerical answer in a grid like the ones below.

Write whole numbers to the left of the decimal point. Write decimals to the right of the decimal point. Write mixed decimals on both sides of the decimal point.

The boxes represent the top of an answer grid. Write each number in the boxes.

1. 79 .

2. 6 .

3. 0.5 .

4. 0.07 .

5. 12.8 .

6. 5.39 .

Circle correct if the number is entered in the boxes correctly. Otherwise, circle incorrect.

7. 88 . correct | incorrect

8. 1.63 . correct | incorrect

9. 54.8 . correct | incorrect

10. 0.09 . correct | incorrect

xii Answering Griddables

Cumulative Review

Mixed practice after every 2 Lessons helps you remember what you've learned.

Supporting Success

Practice is provided in all 24 supporting TEKS, with at least one page per standard.

1-12 Cumulative Review

1. Jose buys pears at the farmers' market. The relationship between the number of pounds of pears, x , and the cost of the pears in dollars, y , is represented by the equation $y = 1.60x$. Which table could represent this relationship? (5-4C | Lesson 2)

Pears		Pears	
Number of Pounds, x	Cost, y	Number of Pounds, x	Cost, y
4	\$6.40	4	\$2.50
6	\$9.60	6	\$3.75
8	\$12.80	8	\$5.00
10	\$16.00	10	\$6.25

A C

Pears		Pears	
Number of Pounds, x	Cost, y	Number of Pounds, x	Cost, y
3	\$4.60	3	\$1.40
6	\$7.60	6	\$4.40
9	\$10.60	9	\$7.40
12	\$13.60	12	\$10.40

B D

2. The table shows the lengths and masses of a shark and a catfish.

	Fish Measurements	
	Length (m)	Mass (kg)
Shark	3.218	151.28
Catfish	2.6	249.14

Based on the table, which statement is true? (5.3K | Lesson 2)

F The shark is 1.418 m longer than the catfish.
G The combined mass of the two fish is 300.42 kg.
H The combined length of the two fish is 6.018 m.
J The catfish's mass is 97.96 kg greater than the shark's mass.

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Mixed review with items in a random order

5.8B Graphing on the Coordinate Plane

Describe the process for graphing ordered pairs of numbers in the first quadrant of the coordinate plane.

1. Christopher is using a coordinate grid. He wants to find the location of the ordered pair (9, 2) on the grid. Starting at the origin, which movement should Christopher do first?

A Move right along the y -axis to 2.
B Move up along the x -axis to 2.
C Move right along the x -axis to 9.
D Move up along the y -axis to 9.

2. A student will graph the point (7, 4) on a coordinate grid. Which steps should the student take in order to graph the point correctly?

F Start at the origin. Move 7 units right. Move 4 units right. Graph the point.
G Start at the origin. Move 7 units up. Move 4 units right. Graph the point.
H Start at the origin. Move 7 units up. Move 4 units up. Graph the point.
J Start at the origin. Move 7 units right. Move 4 units up. Graph the point.

3. Tatiana followed these steps to graph a point on a coordinate grid.

- Start at the origin.
- Move 6 units right.
- Move 1 unit up.
- Graph the point.

Which point did Tatiana graph on the coordinate grid?

A (6, 1)
B (7, 0)
C (1, 6)
D (0, 5)

Supporting Success RC 3: 5.8B 259

Practice for each Supporting TEKS

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Student Progress Monitoring Chart

- 1 Diagnostic** Mark a ✓ next to each test question that you answered correctly. Find the total.
- 2 Need Review?** If you did *not* check a question in **1**, circle the lesson next to it. Study each circled lesson, and put a ✓ in the Practiced column when done.
- 3 Post Test** Mark a ✓ next to each question that you answered correctly. Find the total. Repeat or review each lesson that is unchecked in column **3**.

	Question	1 Diagnostic	2 Need Review?	Practiced	3 Post Test	TEKS	Lesson Title
1		Lesson 1				5.2B	1 Comparing and Ordering Decimals
2		Lesson 2				5.3K	2 Adding and Subtracting Rational Numbers
3		Lesson 3				5.3E	3 Multiplying Decimals
4		Lesson 4				5.3G	4 Dividing Decimals by Whole Numbers
5		Lesson 5				5.3L	5 Dividing Fractions and Whole Numbers
6		Lesson 6				5.4F	6 Simplifying Numerical Expressions
7		Lesson 7				5.4B	7 Solving Problems with Whole Numbers
8		Lesson 8				5.5A	8 Classifying Two-Dimensional Figures
9		Lesson 9				5.4H	9 Solving Perimeter, Area, and Volume Problems
10		Lesson 10				5.8C	10 Graphing in the Coordinate Plane
11		Lesson 11				5.4C	11 Following Rules for Numerical Patterns
12		Lesson 12				5.9C	12 Using Data Displays
	/12			/12	Total Correct		

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Lesson 8

Classifying Two-Dimensional Figures

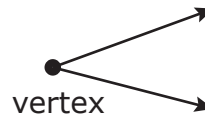
5.5A Classify two-dimensional figures in a hierarchy of sets and subsets using graphic organizers based on their attribute and properties.

Every dachshund is a dog. But is every dog a dachshund? The answer is no, of course. Some dogs are dachshunds, but most are not. Dachshunds are a part of the much larger group of all dogs.

This idea appears in math, too. For instance, every multiple of 10 is a number, but not every number is a multiple of 10. In this lesson you will see how to apply this idea to geometric figures.

An **angle** is a geometric figure formed by two rays. The rays meet at a common endpoint called the **vertex** of the angle.

Angles are named by their measures.

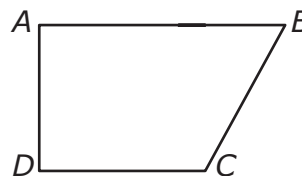


Angles	Example
A right angle measures 90° .	
An acute angle measures more than 0° but less than 90° .	
An obtuse angle measures more than 90° but less than 180° .	

An angle that measures exactly 180° is a straight line.

In the figure shown, angles *A* and *D* are right angles.

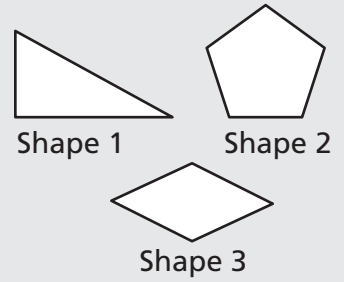
- Angle *B* | *C* is an obtuse angle.
- The remaining angle in the figure, angle *B* | *C* , is
right | acute | obtuse .



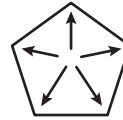
Example 1 Identifying Angles in Polygons

Use the shapes to answer each question.

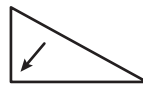
- Which shape has only obtuse angles?
- Which shape has a right angle?
- Which shape has both acute and obtuse angles?



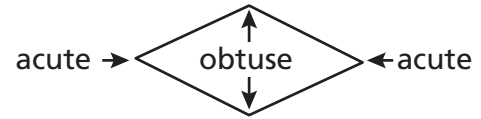
- All angles in Shape 2 measure more than 90° , so Shape 2 has only obtuse angles.



- Shape 1 has a right angle.



- Shape 3 has two angles that measure less than 90° and two angles that measure more than 90° .

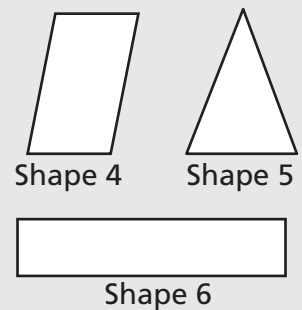


So, Shape 3 has two acute angles and two obtuse angles.

Your Turn 1

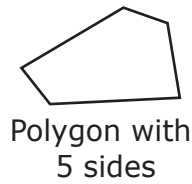
Use the shapes to answer each question.

- Which shape has only acute angles?
- Which shape has only right angles?
- Which shape has both acute and obtuse angles?



- Shape **4** | **5** | **6** has only acute angles because all of its angles measure **more than** | **less than** | **exactly** 90° .
- Shape **4** | **5** | **6** has only right angles because all of its angles measure **more than** | **less than** | **exactly** 90° .
- Shape **4** | **5** | **6** has both acute angles and obtuse angles.
This shape has _____ acute angles and _____ obtuse angles.

A **polygon** is a closed figure formed by three or more line segments. These segments are the *sides* of the polygon.



Polygons are named based on the number of sides.

Name of Polygon	Number of Sides	Example
triangle	3	
quadrilateral	4	
pentagon	5	
hexagon	6	

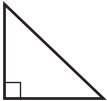

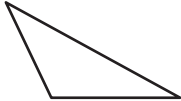
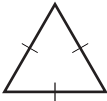

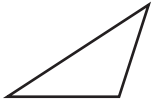
Do you see how polygons are like dogs? Triangles are part of the group of all polygons, just like dachshunds are part of the group of all dogs. So, every triangle is a polygon, but not every polygon is a triangle.

In some polygons, the sides and angles have special relationships.

<p>Parallel sides do not intersect, no matter how far they are extended.</p>	
<p>Perpendicular sides form a right angle.</p>	
<p>Congruent sides are the same length.</p>	
<p>Congruent angles have the same measure.</p>	

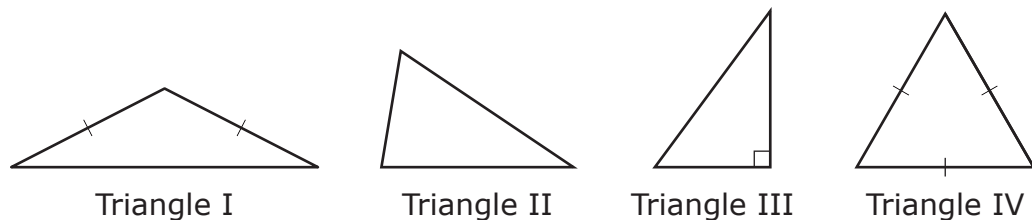
3. Sketch a triangle with exactly two congruent angles.

There are two main ways to classify triangles. One is by their angle measures. The other is by their side lengths.

Triangles		
Angle Measure Classification		
<p>A right triangle is a triangle with a right angle.</p> 	<p>An acute triangle is a triangle with three acute angles.</p> 	<p>An obtuse triangle is a triangle with an obtuse angle.</p> 
Side Length Classification		
<p>An equilateral triangle has three congruent sides.</p> 	<p>An isosceles triangle has two or more congruent sides.</p> 	<p>A scalene triangle has no congruent sides.</p> 

A triangle with three congruent sides is isosceles **and** equilateral!

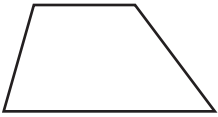
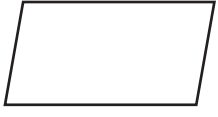
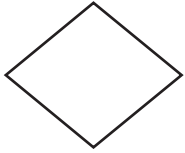

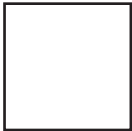
Use the four triangles shown to answer 4–6.



4. Triangle II is a(n) **acute** | **obtuse** triangle and a(n) **isosceles** | **scalene** triangle.
5. List all the ways Triangle IV can be classified.

6. Name the right scalene triangle or triangles.

There are five kinds of special quadrilaterals.

Special Quadrilaterals		
Name	Properties	Example
trapezoid	Exactly 1 pair of parallel sides	
parallelogram	<ul style="list-style-type: none"> • 2 pairs of congruent, parallel sides • 2 pairs of congruent angles 	
rhombus	<ul style="list-style-type: none"> • 4 congruent sides • 2 pairs of parallel sides • 2 pairs of congruent angles 	
rectangle	<ul style="list-style-type: none"> • 2 pairs of congruent, parallel sides • 4 right angles 	
square	<ul style="list-style-type: none"> • 4 congruent sides • 2 pairs of parallel sides • 4 right angles 	

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Example 2 Evaluating Statements About Polygons

Tell whether each statement is true or false.

- All rectangles are squares.
- Every pentagon is a polygon.
- If a figure is a square, then it is a rhombus.

- Check whether rectangles have all the properties of squares.
A square must have 4 congruent sides. A rectangle must have 2 pairs of congruent sides, but all 4 sides do not have to be congruent. **X**
So, not all rectangles are squares. The statement is false.
- Every pentagon is a polygon with 5 sides. The statement is true.

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- c. Check whether a square has all the properties of a rhombus.
 A rhombus must have 4 congruent sides, and a square has 4 congruent sides. ✓
 A rhombus must have 2 pairs of parallel sides, and a square has 2 pairs of parallel sides. ✓
 A rhombus must have 2 pairs of congruent angles. Because all angles in a square are right angles, they all measure 90° . So all the angles in a square are congruent. Therefore a square has 2 pairs of congruent angles. ✓
 A square has all the properties of a rhombus, so a square is also a rhombus. The statement is true.

Your Turn 2

Tell whether each statement is true or false.

- a. All trapezoids are quadrilaterals.
 b. Every rectangle is a parallelogram.
 c. If a figure is a hexagon, then it is a pentagon.

- a. A quadrilateral is a polygon with 4 sides.

A trapezoid **is** | **is not** a polygon.

How many sides does a trapezoid have? _____

So, all trapezoids **are** | **are not** quadrilaterals.

The statement is **true** | **false** .

- b. Check whether rectangles have all the properties of parallelograms.

A parallelogram must have 2 pairs of congruent, parallel _____.

Does a rectangle have this property? **Yes** | **No**

A parallelogram must have 2 pairs of _____ angles.

Does a rectangle have this property? **Yes** | **No**

So, every rectangle **is** | **is not** a parallelogram.

The statement is **true** | **false** .

- c. How many sides does a hexagon have? _____

How many sides does a pentagon have? _____

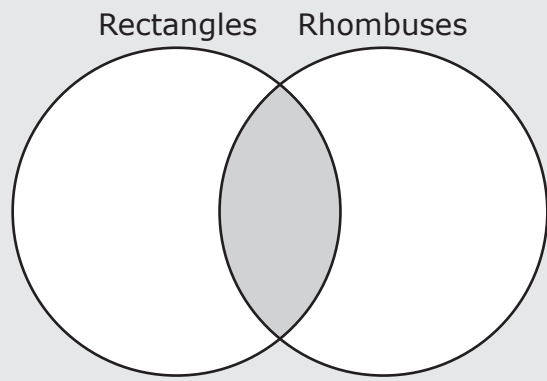
So, if a figure is a hexagon, then it **is** | **is not** a pentagon.

The statement is **true** | **false** .

Diagnostic Test Item

5.5A

8 In the Venn diagram, one circle represents the group of all rectangles and the other circle represents the group of all rhombuses. All polygons in the shaded section belong in both groups.



Which kind of polygon belongs in the shaded section?

- F** Parallelograms
- H** Trapezoids
- G** Quadrilaterals
- J** Squares

The polygons in the shaded section must have the properties of both rectangles and rhombuses.

List the properties of rectangles and rhombuses. What must be true for a polygon to have the properties of both?

For a polygon to have both "2 pairs of congruent sides" and "4 congruent sides," it must have 4 congruent sides.

Rectangle	Rhombus	Both
2 pairs of congruent sides	4 congruent sides	4 congruent sides
2 pairs of parallel sides	2 pairs of parallel sides	2 pairs of parallel sides
4 right angles	2 pairs of congruent angles	4 right angles

So, polygons in the shaded section must have 4 congruent sides, 2 pairs of parallel sides, and 4 right angles. These are the properties of squares.

The correct answer is **J**.

7. A student said the correct answer is **G** because rectangles and rhombuses are quadrilaterals. Tell why this reasoning is not correct.

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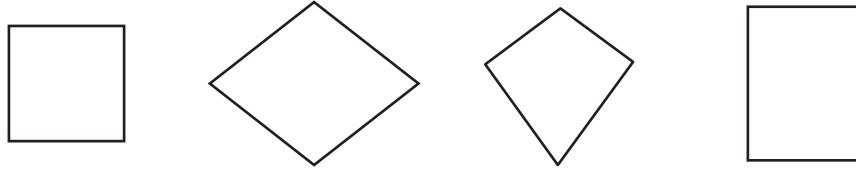
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8

Skills & Concepts Practice 5.5A

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1. Circle all of the shapes that are rhombuses.



2. Tanya says a polygon is a type of hexagon. Is she correct? Tell why or why not.

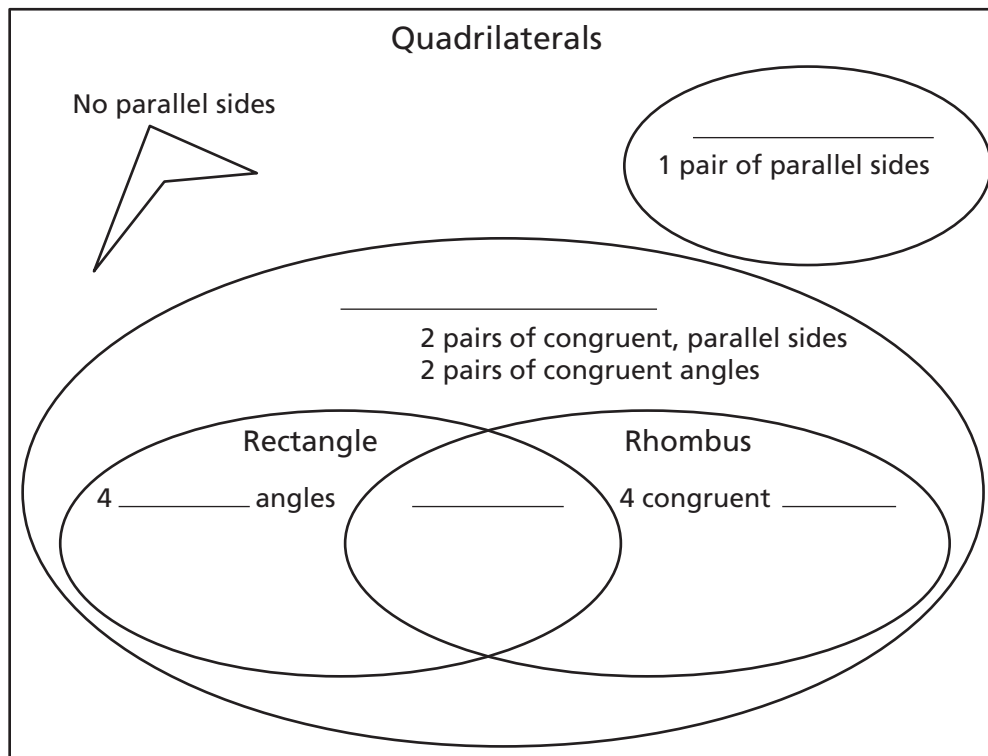
Draw a trapezoid that has the angles described.

3. 2 acute angles

4. 2 right angles

5. 2 obtuse angles

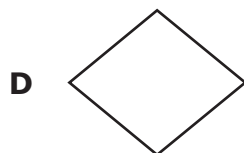
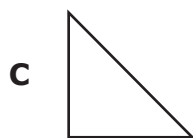
6. Each oval in the diagram represents a group of special quadrilaterals. Fill in the diagram. Include a sketch in each oval.



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Odds

- 1 Lorena drew a two-dimensional shape with exactly one pair of parallel sides. Which could be the shape Lorena drew?

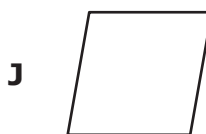
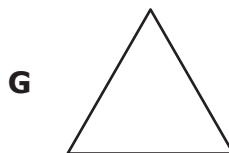
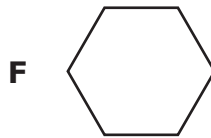


- 3 Sandra cut a shape from construction paper. The shape had two pairs of congruent sides. Which shape could Sandra have cut?

- A Trapezoid
 B Circle
 C Rectangle
 D Triangle

Evens

- 2 Mr. Williams drew a polygon on the board. The polygon had both acute and obtuse angles. Which polygon could Mr. Williams have drawn?



- 4 Alex drew a polygon with three acute angles. Which polygon could Alex have drawn?

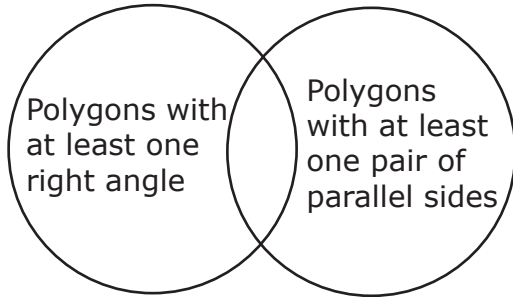
- F Triangle
 G Trapezoid
 H Parallelogram
 J Square

Remember, an acute angle measures less than 90° .

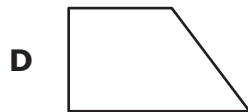
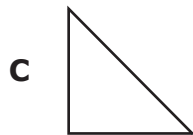
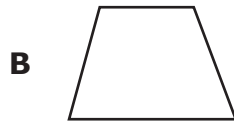
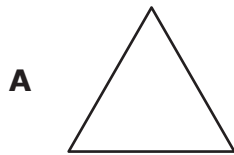
Odds

Evens

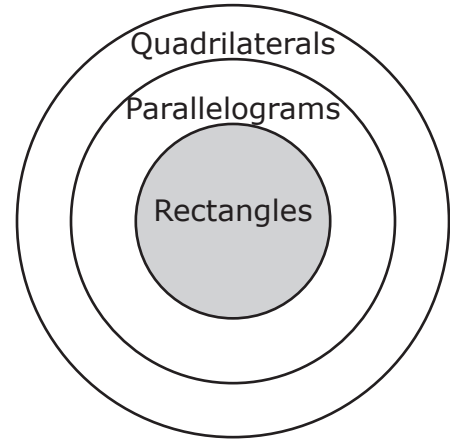
- 5** Each circle in this diagram represents a group of polygons. Polygons in the overlapping section belong in both groups.



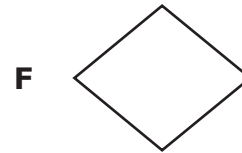
Which polygon belongs in the overlapping section?



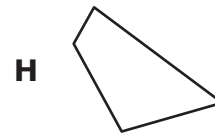
- 6** In the diagram, each circle represents a group of polygons. If a polygon belongs in a circle, it also belongs in any larger circle.



Which shape is included in the group represented by the shaded circle?

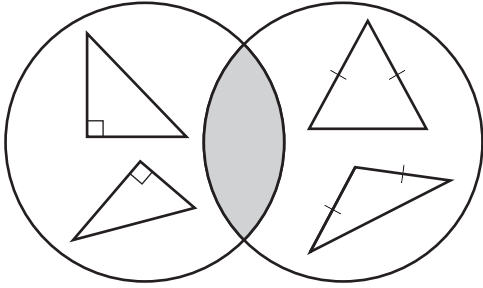


What are the properties of a shape that belongs in the shaded circle?



Odds

- 7 This Venn diagram is being used to classify two types of triangles.

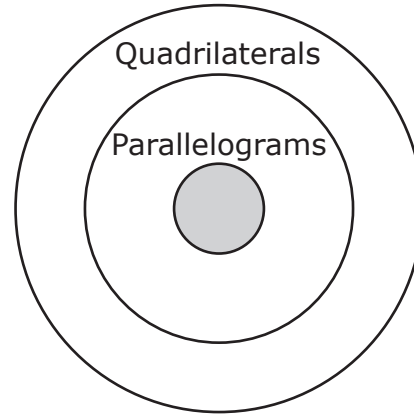


Which type of figure will always belong in the shaded section of this Venn diagram?

- A Equilateral triangles
- B Isosceles right triangles
- C Scalene triangles
- D Acute equilateral triangles

8**Evans**

- 8 In the diagram shown, each circle represents a group of polygons. If a polygon belongs in a circle, it also belongs in any larger circle.



Which kind of polygon belongs in the shaded circle?

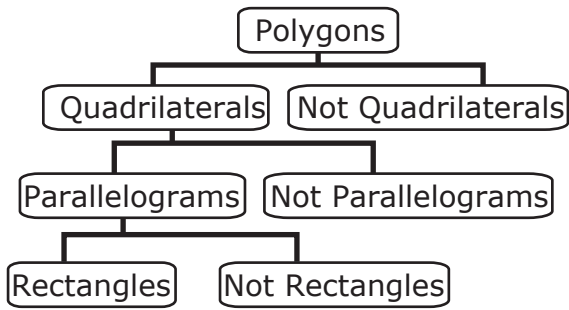
- F Rhombuses
- G Triangles
- H Pentagons
- J Trapezoids

What are the properties of a shape that belongs in the shaded circle?

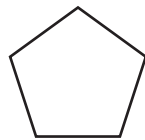
Odds

Evens

9 A graphic organizer is shown below.



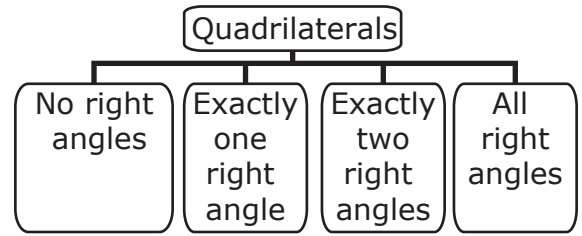
In which section does this polygon belong?



Read the graphic organizer by following the branches.

- A** Rectangles
- B** Not Parallelograms
- C** Not Rectangles
- D** Not Quadrilaterals

10 Andrés made this graphic organizer to classify quadrilaterals based on their angles.

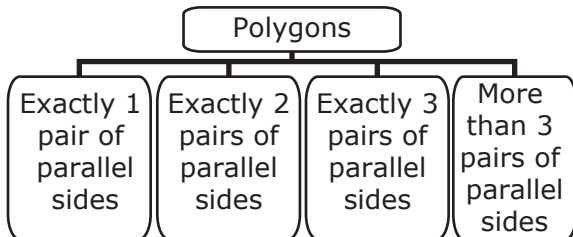


In which box should Andrés classify the quadrilateral below?



- F** No right angles
- G** Exactly one right angle
- H** Exactly two right angles
- J** All right angles

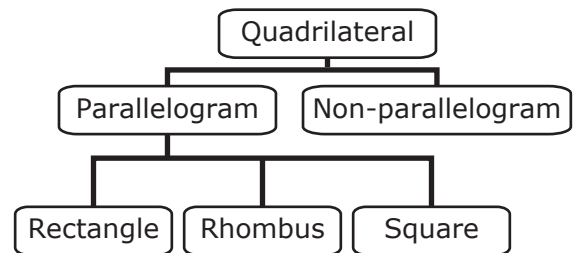
11 Here is a section of a graphic organizer about polygons.



Mia drew a polygon with four sides and four congruent angles. In which box does Mia's polygon belong?

- A** Exactly one pair of parallel sides
- B** Exactly two pairs of parallel sides
- C** More than four pairs of parallel sides
- D** Exactly three pairs of parallel sides

12 A graphic organizer is shown.



In which box does a quadrilateral with four right angles and four congruent sides belong?

- F** Non-parallelogram
- G** Rhombus
- H** Square
- J** Rectangle

Odds




Evens

13 In which table are the check marks placed in all the correct boxes?

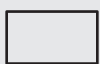


Key: I = Parallelogram
 II = Polygon
 III = Quadrilateral

Can you cross out any answer choices?




A

	I	II	III
	✓	✓	✓
		✓	✓
			

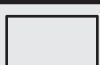


B

	I	II	III
		✓	✓
		✓	✓
		✓	

C

	I	II	III
		✓	✓
	✓	✓	✓
		✓	

D

	I	II	III
	✓	✓	
		✓	✓
			✓

14 In which table are the check marks placed in all the correct boxes?

F

	Must have an acute angle	May have a right angle
Trapezoid	✓	✓
Triangle		
Rhombus	✓	

G

	Must have an acute angle	May have a right angle
Trapezoid		✓
Triangle	✓	
Rhombus		✓

H

	Must have an acute angle	May have a right angle
Trapezoid	✓	✓
Triangle	✓	✓
Rhombus		✓

J

	Must have an acute angle	May have a right angle
Trapezoid	✓	
Triangle	✓	
Rhombus	✓	

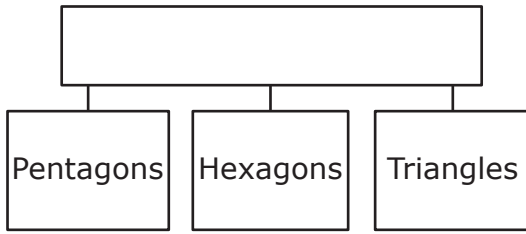
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Odds

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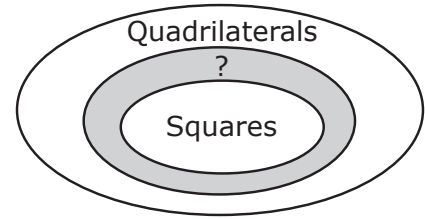
15 Amelia drew the diagram below to show some relationships among shapes.



Which label goes in the empty box?

- A** Circles
- B** Rectangles
- C** Polygons
- D** Quadrilaterals

16 In the diagram shown, each oval represents a group of polygons. If a polygon belongs in an oval, it also belongs in any larger oval.

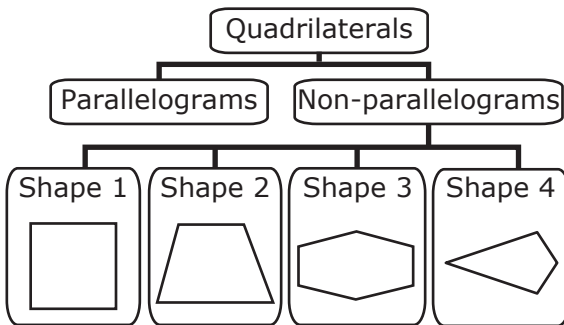


Which group of polygons CANNOT be represented by the shaded oval?

- F** Parallelograms
- G** Rectangles
- H** Rhombuses
- J** Trapezoids

What properties do quadrilaterals have? What properties do squares have?

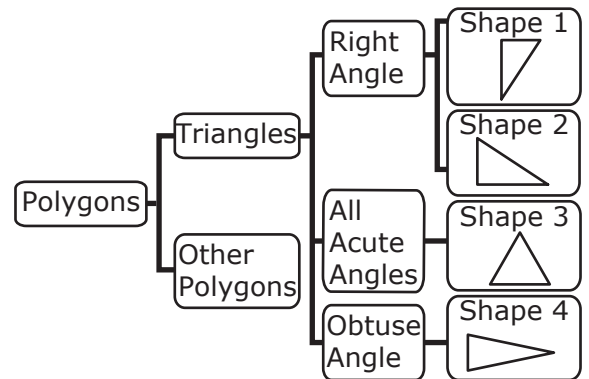
17 Hugo drew a graphic organizer to classify quadrilaterals. A section of his graphic organizer is shown below.



Which shapes appear to be classified correctly?

- A** Shape 3 only
- B** Shapes 1 and 3
- C** Shapes 2 and 4
- D** Shapes 2, 3, and 4

18 Susan filled out a graphic organizer about polygons. Here is part of her graphic organizer.




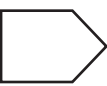




Which shapes appear to be classified correctly?

- F** Shape 3 only
- G** Shapes 1 and 2
- H** Shapes 2 and 4
- J** Shapes 1, 2, and 3

19 Marco classified shapes based on pairs of parallel sides. The table shows his classifications.

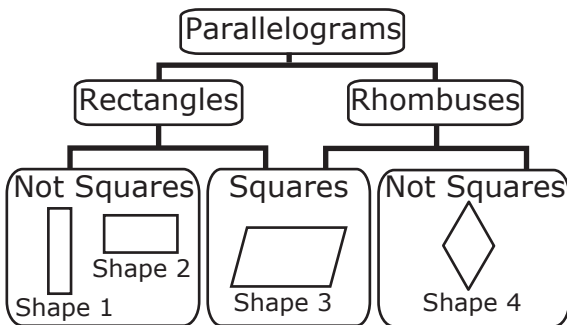
Parallel Sides

One Pair	Two Pairs	No Parallel Sides
Shape 1 	Shape 3 	Shape 5 
Shape 2 	Shape 4 	Shape 6 

Which shape was NOT classified correctly?

- A Shape 2
- B Shape 3
- C Shape 4
- D Shape 5

21 Nico made this graphic organizer to classify parallelograms.









Which shapes do NOT appear to be classified correctly?

- A Shape 2 only
- B Shape 3 only
- C Shapes 1 and 2
- D Shapes 3 and 4

20 Samantha classified shapes based on their angles, as shown in the table.

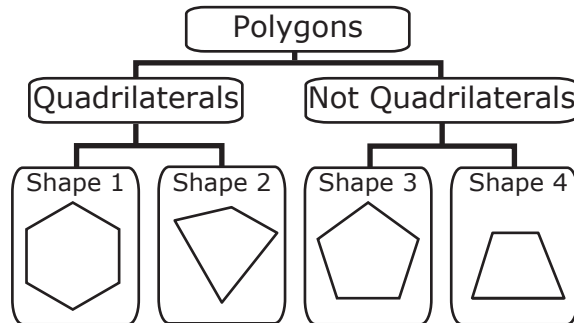
Angles

Acute and Obtuse Angles	Obtuse Angles Only	Right Angles Only
Shape 1 	Shape 3 	Shape 5 
Shape 2 	Shape 4 	Shape 6 

Which shapes are NOT classified correctly?

- F 3 and 6
- G 1 and 4
- H 3 and 5
- J 4 and 5

22 Ana classified polygons in a graphic organizer. Here is a section of her graphic organizer.



Which shapes are NOT classified correctly?

- F 1 only
- G 2 and 3
- H 1 and 4
- J 1, 2, and 4

Which shapes are quadrilaterals?

Odds

Evens

23 A student used this graphic organizer to classify different figures.

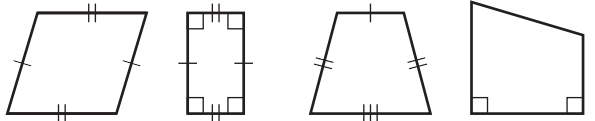
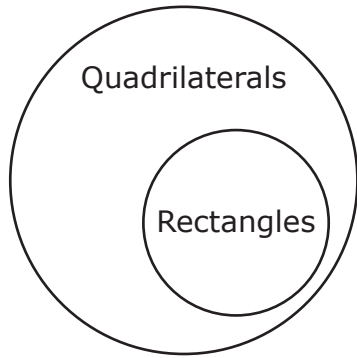


Figure I Figure II Figure III Figure IV

Which figure(s) belong in the part of the organizer labeled "Rectangles"?

- A** Figures I and II only
- B** Figures II and IV only
- C** Figure II only
- D** Figures I, II, and III only

24 The graphic organizer below is used to classify triangles.

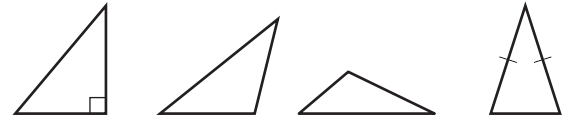
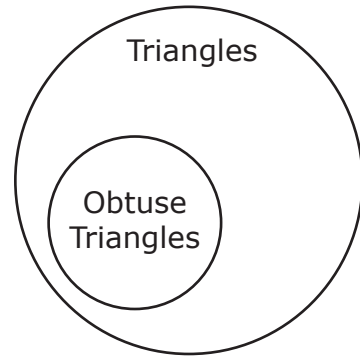


Figure I Figure II Figure III Figure IV

Which figures belong in the part of the organizer labeled "Obtuse Triangles"?

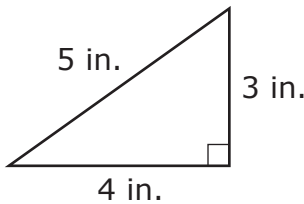
- F** Figures I, II and III only
- G** Figures I and IV only
- H** Figures II, III, and IV only
- J** Figures II and III only

25 The graphic organizer below classifies triangles based on their angle measures and side lengths.

Triangles

Angle Measure Classification		
Acute	Right	Obtuse
Side Length Classification		
Isosceles	Equilateral	Scalene

Which list shows all the ways this triangle could be classified?



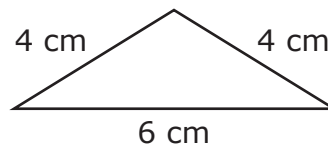
- A** Acute and scalene only
- B** Right and equilateral only
- C** Right and scalene only
- D** Obtuse and isosceles only

26 Two graphic organizers are shown below. They are used to classify triangles according to their angle measures and side lengths.

Based on Side Lengths		
Scalene	Isosceles	Equilateral

Based on Angle Measures		
Obtuse	Right	Acute

Which list shows all the ways this triangle could be classified?



- F** Obtuse and isosceles only
- G** Acute and scalene only
- H** Obtuse and equilateral only
- J** Acute and isosceles only

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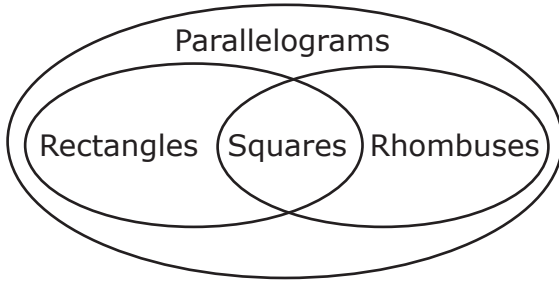
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To obtain a copy of the answers to this Sampler, email:
Teachers@SiriusEducationSolutions.com

Odds

Evens

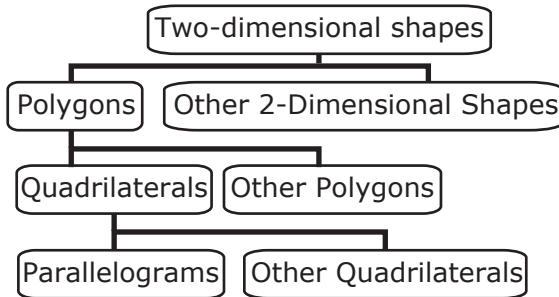
27 The diagram below shows some relationships among quadrilaterals.



Based on the diagram, which statement is true?

- A** All rectangles are squares.
- B** All squares are rhombuses.
- C** All rhombuses are squares.
- D** All quadrilaterals are parallelograms.

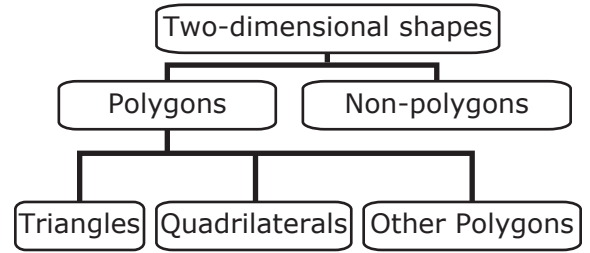
29 A graphic organizer is shown.



Based on the graphic organizer, which statement is NOT true?

- A** All parallelograms are polygons.
- B** Some quadrilaterals are not polygons.
- C** All quadrilaterals are two-dimensional shapes.
- D** Some quadrilaterals are parallelograms.

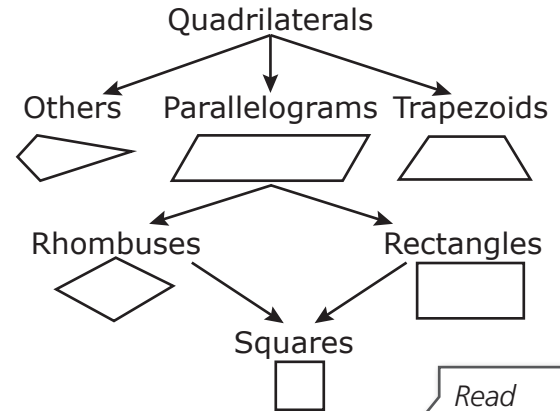
28 Mr. Martinez gave his students this graphic organizer.



Based on the diagram, which statement is true?

- F** All two-dimensional shapes are quadrilaterals.
- G** Some triangles are quadrilaterals.
- H** No two-dimensional shapes are polygons.
- J** No quadrilaterals are triangles.

30 A graphic organizer is shown below.



Based on the diagram, which statement is NOT true?

- F** All squares are rectangles.
- G** All rhombuses are rectangles.
- H** All rectangles are quadrilaterals.
- J** All squares are parallelograms.

Planning Each Lesson for Student Engagement

Each lesson includes a page of **resources** and **strategies** to help teachers enable all students to learn the STAAR tested math.

Key Vocabulary in English and Spanish

Opening/Closing Question

Comparing and Ordering Decimals

Lesson Overview

TEKS 5.2B Compare and order two decimals to thousandths and represent comparisons using the symbols $>$, $<$, or $=$.


STAAR Focus Students order decimals by comparing two decimals at a time. The STAAR test includes ordering up to 5 decimals and finding which number is first, second, third, and so on.

Key Vocabulary English | Spanish


- decimal** | *decimal*
- greatest** | *máximo*
- inequality symbol** | *simbolo desigualdad*
- least** | *minimo*
- place value** | *valor posicional*

Motivate the Lesson


Help students understand the opening scenario of comparing three prices.



\$34.88



\$34.72



\$34.65

Opening/Closing Question

Q: How can you compare two decimals?
Line up the decimal points. Start at the left and compare the digits in each place value.

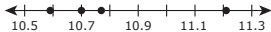
Reaching All Learners

Graphic Organizer Using a place-value chart can help students focus on the value of each digit. For the **opening activity**, have students write all three decimals in a place-value chart and compare digits in each column.

H	T	O	.	Tth	Hth	Tthth
3	4	.		8	8	
3	4	.		7	2	
3	4	.		8	5	

Visual Model Students can use a number line to model order. This will help them see how the numbers are ordered. To order from least to greatest, they can read the number line from left to right, and from right to left when ordering from greatest to least. Students should label the number line with the second place value that is different.

In **Example 2**, the second place value that is different is the tenths, so label the number line by tenths. Then plot a point for each value: 11.21, 10.59, 10.77, 10.7.



Students do not have to find the exact location of each point. As long as they know between which tick marks the numbers are located, they will probably be able to order the numbers.

ERROR PREVENTION Some students may confuse the directional aspect of inequality symbols. Tell them that the symbol always points to the lesser number. Since 6 is less than 12, you can write $6 < 12$ or $12 > 6$. Show how the symbol always points to the smaller number, 6. Finally, relate this comparison to decimals such as $1.06 < 1.12$ or $1.12 > 1.06$.

Check for Understanding Using 4 books from the library, have students record the books' Dewey Decimal numbers and order the books by placing their numbers in order from least to greatest. If library books are not available, draw pictures of books on the board labeled with decimals. Have students describe their steps as they order the books.

Giving Students Actionable Feedback

The *Sirius Mathematics Teacher's Edition* includes **full solutions** and **margin notes**.

Two sets of paired questions for use in class and at home, or in groups and individually.

Assignment Guide

ASSIGNMENT GUIDE		
Easy	Medium	Hard
1–8	9–18	19–32

STAAR Practice

5.2B

Odds	Evens
<p>1 Which symbol makes this comparison true?</p> <p style="text-align: center;">6.68 <input type="checkbox"/> 6.86</p> <p>A > <input checked="" type="checkbox"/> B < C = D +</p> <p style="text-align: center; font-size: small;">Compare the digits in each place value.</p>	<p>2 The statement below compares two numbers.</p> <p style="text-align: center;">27.5 <input type="checkbox"/> 27.05</p> <p>Which symbol makes the comparison true?</p> <p>F = H < G ÷ <input checked="" type="checkbox"/> J ></p>
<p>3 A carpenter compared the lengths of two boards.</p> <p style="text-align: center;">10.378 ft <input type="checkbox"/> 10.783 ft</p> <p>Which symbol makes this comparison true?</p> <p>A > <input checked="" type="checkbox"/> B < C = D Not here</p>	<p>4 Two students compared the distances they travel to school.</p> <p style="text-align: center;">9.38 mi <input type="checkbox"/> 9.328 mi</p> <p>Which symbol correctly completes this comparison?</p> <p>F × H < <input checked="" type="checkbox"/> G > J =</p>
<p>5 Which statement is correct?</p> <p>A 6.26 > 6.799 B 3.729 < 3.705 C 5.29 > 5.296 <input checked="" type="checkbox"/> D 8.145 < 8.53</p>	<p>6 Which statement shows a correct comparison?</p> <p>F 8.908 < 8.504 <input checked="" type="checkbox"/> G 3.43 > 3.408 H 7.98 < 7.66 J 1.447 > 1.658</p>

2 J The whole numbers are the same. Compare tenths: $5 > 0$, so $27.5 > 27.05$.

TEACHING TIP When comparing two numbers, there are only 3 possibilities.

number 1 > number 2
 number 1 < number 2
 number 1 = number 2

4 G The whole numbers and tenths digits are the same. Compare hundredths: $8 > 2$, so $9.38 > 9.328$.

ERROR PREVENTION Students who chose H may think that $9.38 < 9.328$ because $38 < 328$. These students may find it helpful to rewrite numbers with the same number of decimal places before comparing. Show how to add a zero to rewrite 9.38 as 9.380 .

6 G Comparing hundredths shows that $3.43 > 3.408$.

TEST-TAKING STRATEGY Many test items, like this one, require students to examine each answer choice. When students determine that an answer choice is incorrect, encourage them to write an X next to it or to cross it out entirely on their test paper.

Margin notes include:

- Error Prevention
- Test-Taking Strategy
- Teaching Tip
- English Language Learners

Problem Summary

STAAR GRADE 5 MATHEMATICS REFERENCE MATERIALS

PERIMETER

Square

$$P = 4s$$

Rectangle

$$P = 2l + 2w$$

AREA

Square

$$A = s \times s$$

Rectangle

$$A = l \times w$$

or

$$A = bh$$

VOLUME

Cube

$$V = s \times s \times s$$

Rectangular prism

$$V = l \times w \times h$$

or

$$V = Bh$$

Inches

0

1

2

3

4

5

6

7

8

SAMPLER

GRADE 5 MATHEMATICS CONTENTS

Visit SiriusEducationSolutions.com for additional STAAR resources.

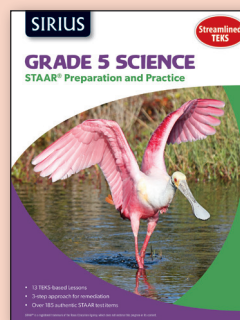
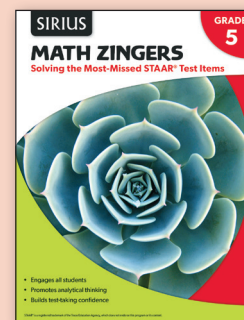
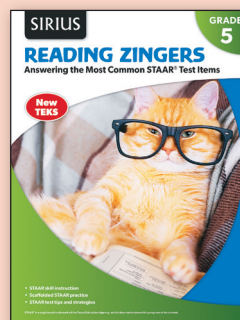
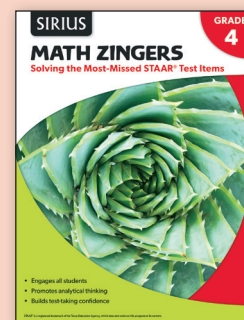
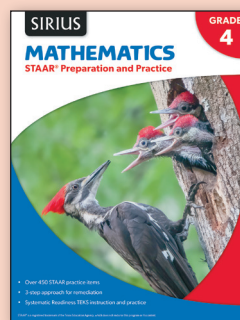
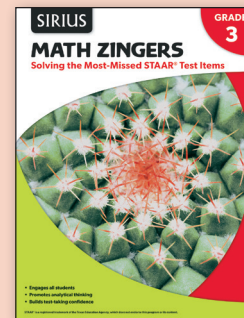
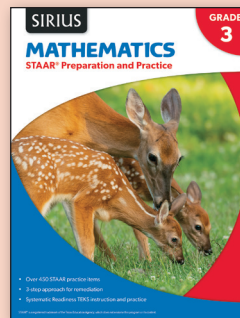
READINESS REVIEW

- 1 Comparing and Ordering Decimals
- 2 Adding and Subtracting Rational Numbers
- 1-2 CUMULATIVE REVIEW
- 3 Multiplying Decimals
- 4 Dividing Decimals
- 1-4 CUMULATIVE REVIEW
- 5 Dividing Fractions and Whole Numbers
- 6 Simplifying Numerical Expressions
- 1-6 CUMULATIVE REVIEW
- 7 Solving Problems with Whole Numbers
- 8 Classifying Two-Dimensional Figures**
- 1-8 CUMULATIVE REVIEW
- 9 Solving Perimeter, Area, and Volume Problems
- 10 Graphing in the Coordinate Plane
- 1-10 CUMULATIVE REVIEW
- 11 Following Rules for Numerical Patterns
- 12 Using Data Displays
- 1-12 CUMULATIVE REVIEW

SUPPORTING SUCCESS

Practice in all 24 Supporting TEKS

Use with your class for free!

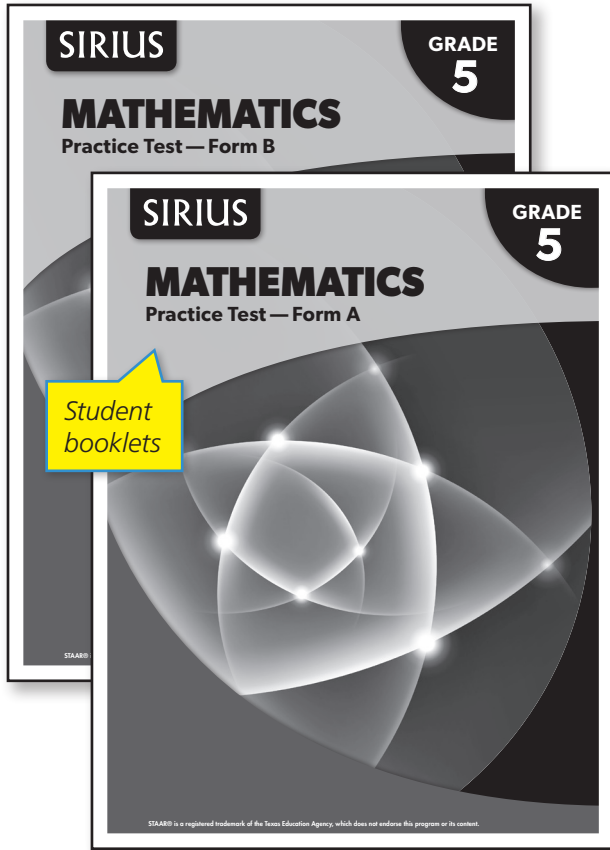


STAAR GRADE 5 MATHEMATICS

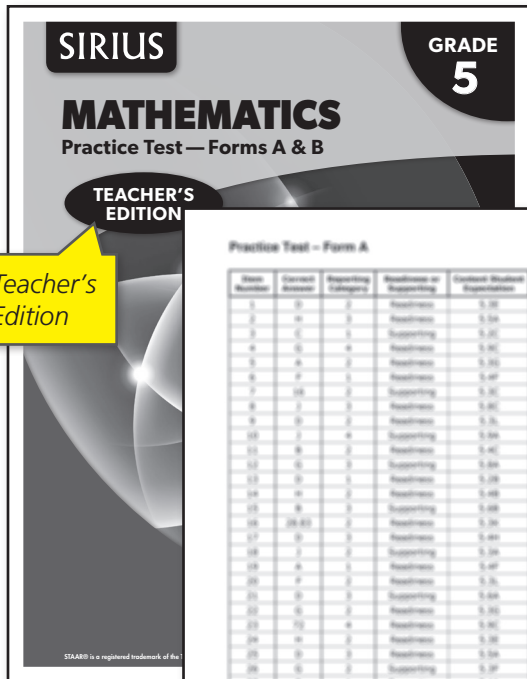
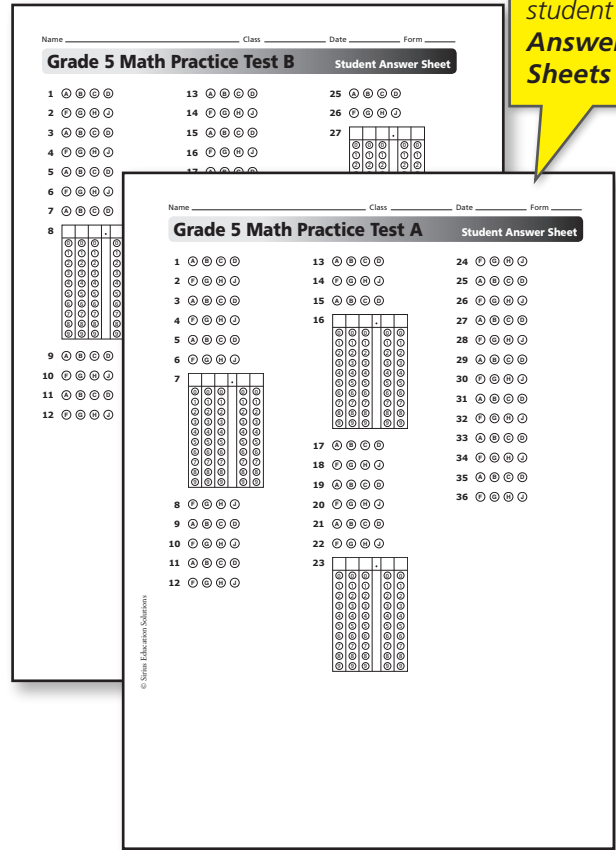
STAAR Practice Tests Forms A & B

Two distinct secure form tests that closely match the released STAAR test items and blueprint.

Includes student Answer Sheets



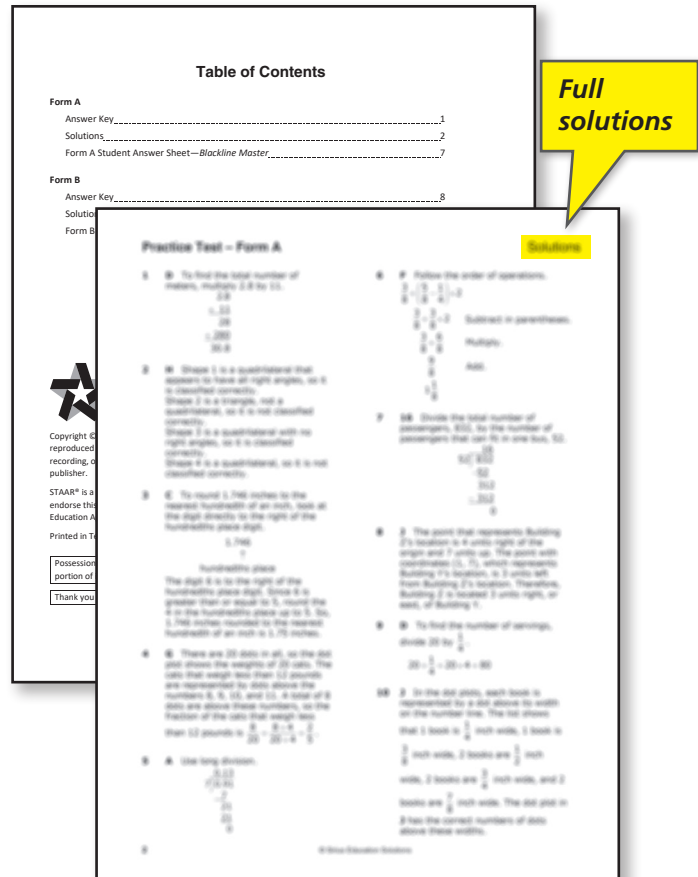
Student booklets



Teacher's Edition

Practice Test – Form A

Item Number	Content Area	Reporting Category	Readiness or Supporting	Content Standard Expectation	Process Standard Expectation
1	1	1	Readiness	5.1B	5.1A, 5.1B, 5.1F
2	1	1	Readiness	5.1B	5.1A, 5.1B, 5.1F
3	1	1	Supporting	5.1C	5.1A, 5.1B, 5.1F
4	1	1	Readiness	5.1C	5.1A, 5.1B, 5.1E, 5.1F
5	1	1	Readiness	5.1D	5.1B, 5.1F
6	1	1	Readiness	5.1D	5.1B, 5.1F
7	1	1	Supporting	5.1C	5.1A, 5.1B, 5.1F
8	1	1	Readiness	5.1C	5.1A, 5.1B, 5.1E, 5.1F
9	1	1	Readiness	5.1E	5.1A, 5.1B, 5.1F
10	1	1	Supporting	5.1A	5.1A, 5.1B, 5.1E, 5.1F
11	1	1	Supporting	5.1C	5.1B, 5.1D, 5.1F
12	1	1	Supporting	5.1C	5.1B, 5.1D
13	1	1	Readiness	5.1B	5.1A, 5.1B, 5.1F
14	1	1	Readiness	5.1B	5.1A, 5.1B, 5.1E, 5.1F
15	1	1	Supporting	5.1C	5.1A, 5.1B, 5.1E, 5.1F
16	1	1	Supporting	5.1C	5.1A, 5.1B, 5.1E, 5.1F
17	1	1	Readiness	5.1A	5.1A, 5.1B, 5.1E, 5.1F
18	1	1	Supporting	5.1A	5.1A, 5.1B, 5.1E, 5.1F
19	1	1	Readiness	5.1A	5.1A, 5.1B, 5.1E, 5.1F
20	1	1	Readiness	5.1A	5.1A, 5.1B, 5.1E, 5.1F
21	1	1	Supporting	5.1A	5.1A, 5.1B, 5.1E, 5.1F
22	1	1	Readiness	5.1B	5.1A, 5.1B, 5.1E, 5.1F
23	1	1	Readiness	5.1B	5.1A, 5.1B, 5.1E, 5.1F
24	1	1	Readiness	5.1B	5.1A, 5.1B, 5.1E, 5.1F
25	1	1	Supporting	5.1C	5.1A, 5.1B, 5.1E, 5.1F
26	1	1	Supporting	5.1C	5.1A, 5.1B, 5.1E, 5.1F
27	1	1	Supporting	5.1C	5.1A, 5.1B, 5.1E, 5.1F



Full solutions

Practice Tests are sold in 10-packs: 10 Form A & 10 Form B student booklets with bubble sheets, and 1 Teacher's Edition

Using the Grades 3-5 Math Zingers

Solving the Most-Missed STAAR® Test Items

Wow, 42% of the students tested missed this problem!

Challenge students to try solving the problem before using the instruction below it.

STEP 1 READ and UNDERSTAND

Read the problem **carefully**. What is it asking you to find?

Use the numbered questions below the problem to help **understand** and summarize the problem.

STEP 2 PLAN and SOLVE

Read how some students solved the problem. Did they get it right?

Watch out for errors. Finding their mistakes will help you **avoid making** the same mistakes.

STEP 3 LOOK BACK

Now that you have seen how other students attempted to solve the problem, what did you learn? Would you have solved the problem the same way?

Or maybe you **learned** a **new way**. Knowing different ways to solve problems gives you tools to use in the future.

STEP 4 GUIDED PRACTICE

Now **solve a similar problem** with **help** for the key steps in the solution process.

STEP 5 INDEPENDENT PRACTICE

Use everything you learned to solve problems **on your own** (and without support).

With practice, you can **confidently solve** the problems most students missed!

ZINGER 6 5.3 whole numbers.

READ and UNDERSTAND Read the problem carefully. *42% of students missed it!*

The math team does practice drills that each last $\frac{1}{6}$ hour. In February the team did practice drills for a total of 24 hours. How many practice drills did the math team do in February?

A 4 **C** 30
B 144 **D** 240 STAAR Grade 5 2017 #8

- Each practice drill lasts $\frac{1}{6}$ | 6 hour(s).
- The math team did practice drills for 6 | 24 hours in February.
- You must find the number of drills | hours in February.

PLAN and SOLVE Read what each student thinks.

Sasha thinks . . .
I'll draw a picture. Each drill lasts $\frac{1}{6}$ hour.

1 hour					
$\frac{1}{6}$	$\frac{1}{6}$	$\frac{1}{6}$	$\frac{1}{6}$	$\frac{1}{6}$	$\frac{1}{6}$

So in 1 hour, they do 6 drills.
In 24 hours, they do 6×24 drills.
My choice is B.

Nora thinks . . .
I need to find how many $\frac{1}{6}$ s are in 24.
So I have to find $24 \div \frac{1}{6}$.
Dividing by $\frac{1}{6}$ is the same as multiplying by 6.
$$\begin{array}{r} 24 \times 6 \\ (20 \times 6) + (4 \times 6) \\ 120 + 24 \\ 144 \end{array}$$

My choice is B.

LOOK BACK Answer each question.

- Sasha's picture shows the number of drills in 1 hour | 6 hours .
- Nora is | is not correct to say that dividing by $\frac{1}{6}$ is the same as multiplying by 6.

Circle the answer.

12 Grade 5 Mathematics STAAR Zingers Solving the Most-Missed STAAR Test Items

7. Whose solution do you prefer? Why? _____

8. The correct answer is A | B | C | D .

GUIDED PRACTICE Read the problem carefully.

Amy cut 32 feet of chain into pieces that were each $\frac{1}{4}$ ft long. How many of these pieces did Amy have after cutting the chain?
Record your answer in the boxes.
Be sure to use the correct place value.

STAAR Grade 5 2016 #37

0	1	2	3	4
5	6	7	8	9
0	1	2	3	4
5	6	7	8	9
0	1	2	3	4
5	6	7	8	9
0	1	2	3	4
5	6	7	8	9

9. Complete the picture to show how many pieces of length $\frac{1}{4}$ foot make up 1 foot of chain.
There are _____ pieces in 1 foot of chain.

10. Amy has _____ feet of chain in all. After cutting, the total number of pieces is equal to _____ \times _____.

11. The multiplication problem in #10 is the same as $32 \div$ _____.

12. The correct answer is _____. Enter this number in the boxes and fill in the bubbles.

INDEPENDENT PRACTICE Solve each problem.

- Alex divides 10 pounds of trail mix into bags that each weigh $\frac{1}{3}$ lb. How many bags does Alex make? _____
- Sofia has 24 inches of ribbon. How many pieces of length $\frac{1}{2}$ inch can Sofia cut? _____

Show your thinking.

Complete the step-by-step solution.

Zinger 6 (5.3L) 13