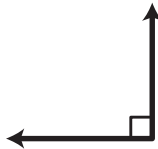
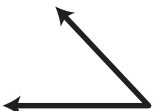



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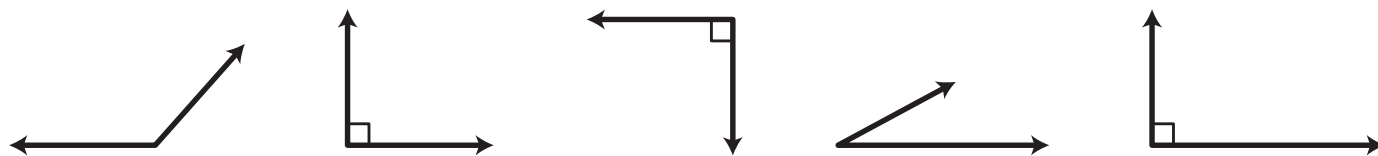
DATE _____

Right, Acute & Obtuse Angles

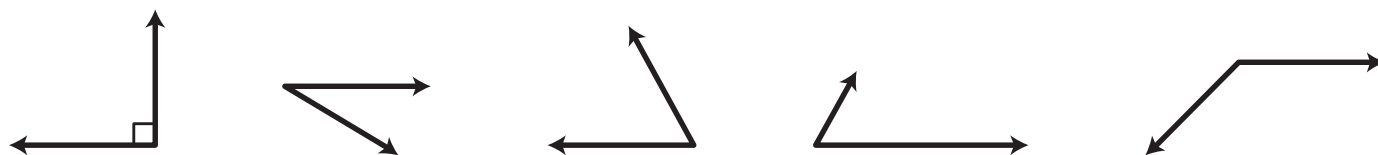
1 Use the information below to help solve the following problems.

<p>A right angle is exactly 90 degrees.</p> 	<p>An acute angle is less than 90 degrees.</p> 	<p>An obtuse angle is more than 90 degrees.</p> 
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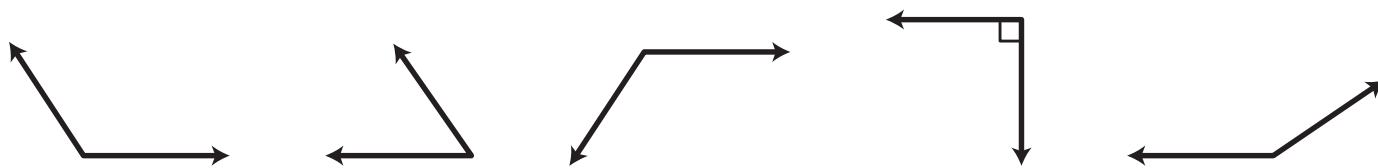
a Circle all the right angles.





b Circle all the acute angles.



c Circle all the obtuse angles.



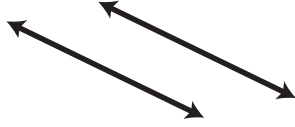
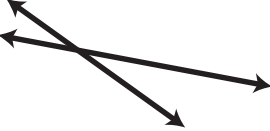
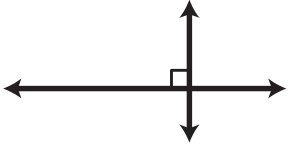
<p>2 Draw another ray to make an acute angle.</p> 	<p>3 Draw another ray to make an obtuse angle.</p> 
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NAME _____

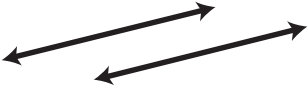

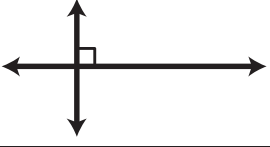

DATE _____

Parallel, Intersecting & Perpendicular Lines

Use the following information to help solve the problems below.

<p>Parallel lines are always the same distance apart. They will never cross.</p> 	<p>Intersecting lines cross each other.</p> 	<p>Perpendicular lines are special intersecting lines. Where they cross, they form a right angle.</p> 
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1 Fill in the bubble(s) next to the word(s) that best describe(s) each pair of lines.

<p>a</p> 	<p><input type="radio"/> parallel <input type="radio"/> intersecting <input type="radio"/> perpendicular</p>
<p>b</p> 	<p><input type="radio"/> parallel <input type="radio"/> intersecting <input type="radio"/> perpendicular</p>
<p>c</p> 	<p><input type="radio"/> parallel <input type="radio"/> intersecting <input type="radio"/> perpendicular</p>
<p>d</p> 	<p><input type="radio"/> parallel <input type="radio"/> intersecting <input type="radio"/> perpendicular</p>

2 Draw a pair of intersecting lines.

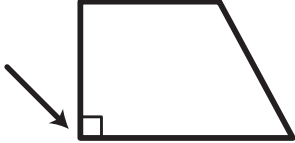
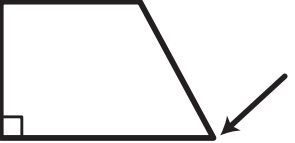


3 Draw three lines that are all parallel.

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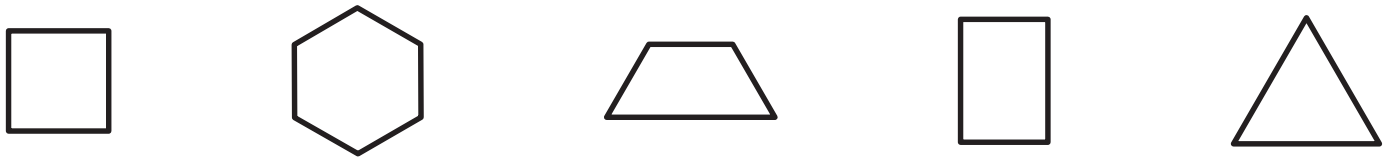
DATE _____

Angles & Sides

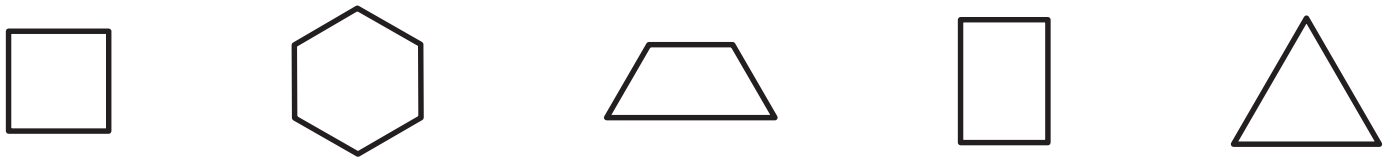
Use the following information to help solve the problems below.

<p>Right Angle exactly 90° a square corner</p> 	<p>Acute Angle smaller than a right angle</p> 	<p>Obtuse Angle larger than a right angle</p> 	<p>Parallel Sides would never cross if they went on forever</p> 
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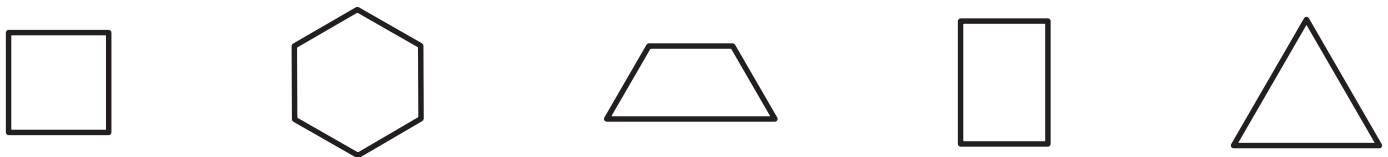
1 Circle the shape with *exactly* 1 pair of parallel sides.



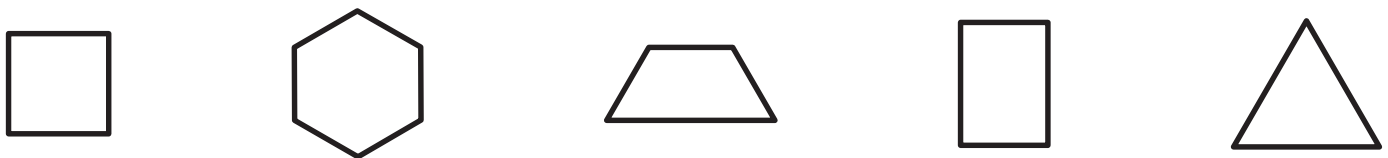
2 Circle the shape that has *only* acute angles.



3 Circle the shape that has *only* obtuse angles.



4 Circle the two shapes that have *only* right angles.

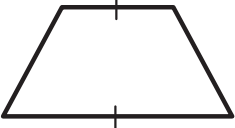

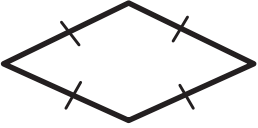
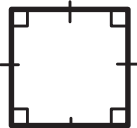



NAME _____


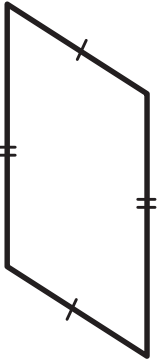
DATE _____

Different Kinds of Quadrilaterals

A *quadrilateral* is a shape with 4 sides. Here are some different kinds of quadrilaterals.

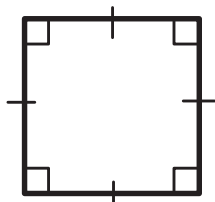
<p>Trapezoid: a quadrilateral with exactly 1 pair of parallel sides</p> 	<p>Rectangle: a quadrilateral with 2 pairs of parallel sides and 4 right angles</p> 
<p>Rhombus: a quadrilateral with 4 sides that are all the same length</p> 	<p>Square: a quadrilateral with 4 right angles and 4 sides that are all the same length</p> 
<p>Parallelogram: a quadrilateral with 2 pairs of parallel sides</p> 	

1 Circle the word(s) that describe each shape.

<p>a</p> <p>trapezoid parallelogram rectangle rhombus square</p> 	<p>b</p> <p>trapezoid parallelogram rectangle rhombus square</p> 
---	---

2 Jackie circled all these words for this shape. Is she right or wrong? Explain your answer.

- trapezoid
- parallelogram
- rectangle
- rhombus
- square

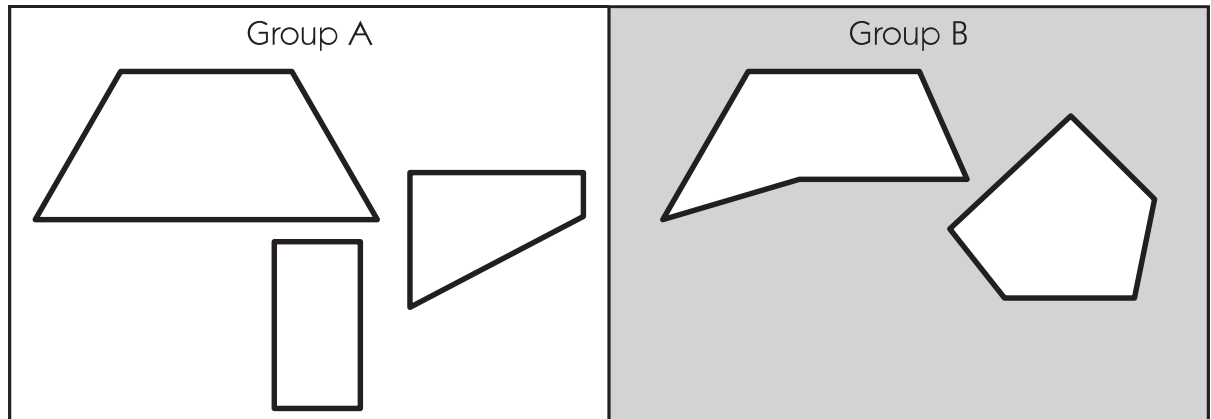


NAME _____

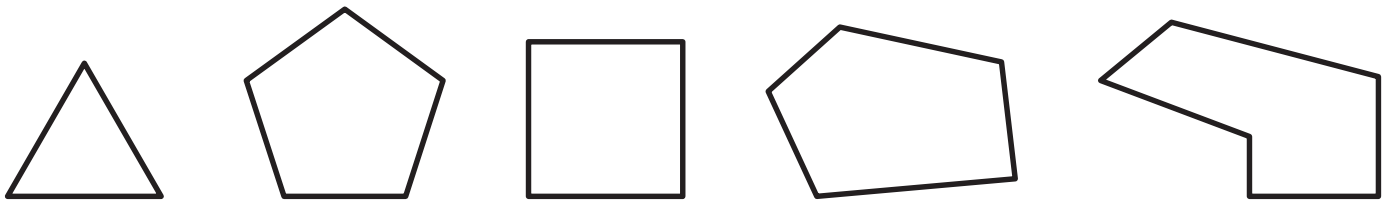
DATE _____

Shape Sorting

1 Walt sorted some shapes into these two groups.



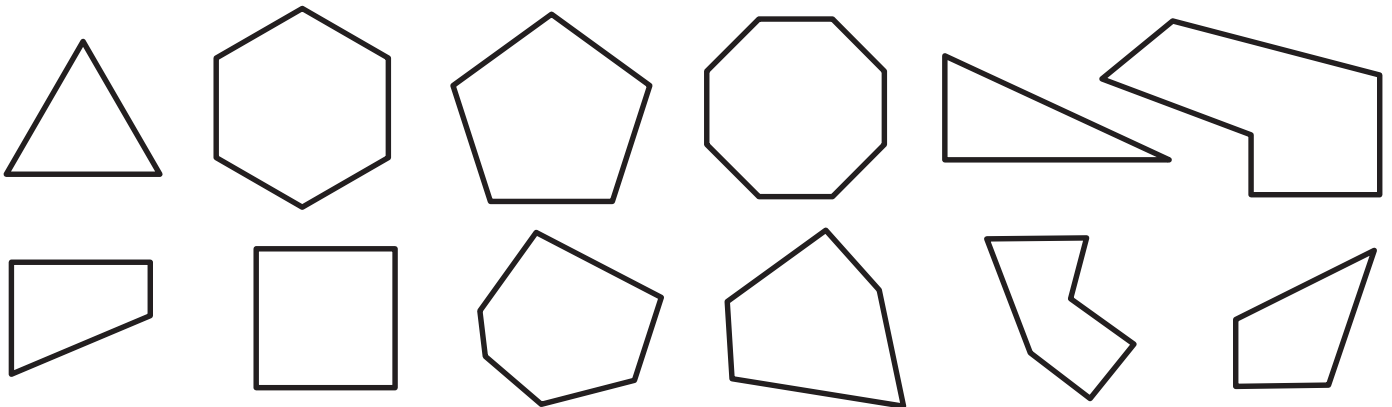
a Circle the shapes that belong in group B.



b What do the shapes in group B have in common?

2a How can you tell if a shape is a hexagon?

b Circle all the hexagons.



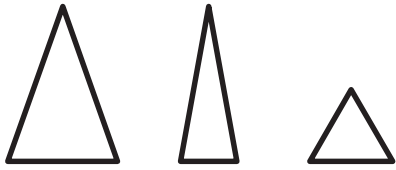

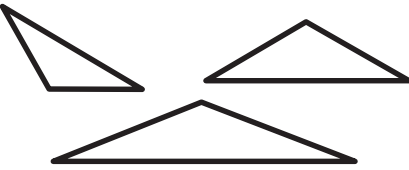
NAME _____

DATE _____


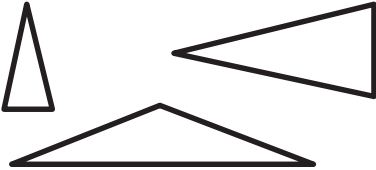
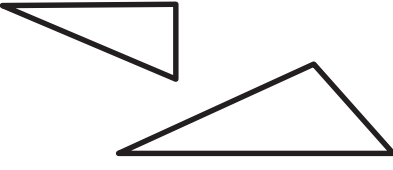
Different Types of Triangles

Use the following information to help solve the problems below.

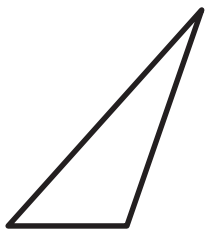




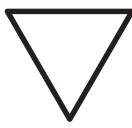
- You can group triangles by the size of their angles.

<p>Acute Triangles all 3 angles are acute</p> 	<p>Right Triangles 1 angle is a right angle</p> 	<p>Obtuse Triangles 1 angle is an obtuse angle</p> 
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- You can also group triangles by the lengths of their sides.

<p>Equilateral Triangles all 3 sides are the same length</p> 	<p>Isosceles Triangles 2 sides are the same length</p> 	<p>Scalene Triangles no sides are the same length</p> 
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1 Fill in the bubble to show what kind of triangle each one is.

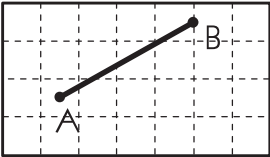
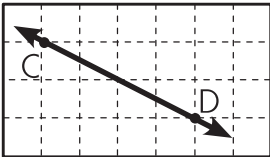
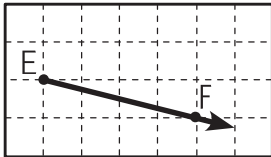
<p>a</p> <p><input type="radio"/> acute <input type="radio"/> right <input type="radio"/> obtuse</p> 	<p>b</p> <p><input type="radio"/> acute <input type="radio"/> right <input type="radio"/> obtuse</p> 	<p>c</p> <p><input type="radio"/> acute <input type="radio"/> right <input type="radio"/> obtuse</p> 
<p>d</p> <p><input type="radio"/> equilateral <input type="radio"/> isosceles <input type="radio"/> scalene</p> 	<p>e</p> <p><input type="radio"/> equilateral <input type="radio"/> isosceles <input type="radio"/> scalene</p> 	<p>f</p> <p><input type="radio"/> equilateral <input type="radio"/> isosceles <input type="radio"/> scalene</p> 

NAME _____

DATE _____

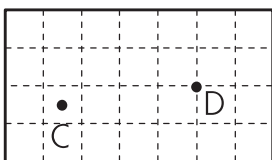
Drawing Line Segments, Lines & Rays

Use the following information to help solve the problems below.

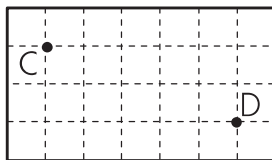
<p>A line segment connects two points.</p> 	<p>A line goes through two points and keeps going in both directions.</p> 	<p>A ray starts at one point and keeps going in just one direction.</p> 
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1 Draw a *line* to connect the two points on each grid. You can use a ruler to make the lines straight.

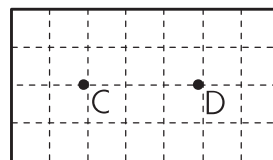
a



b

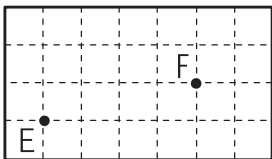


c

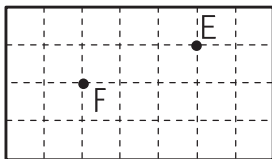


2 Draw a *ray* that starts at point E and goes through point F on each grid.

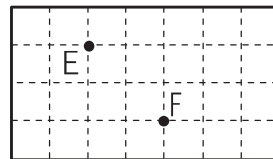
a



b

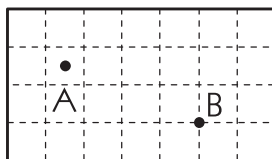


c

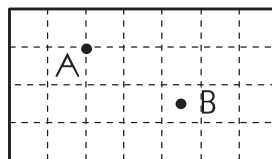


3 Draw a *line segment* that goes from point A to point B on each grid.

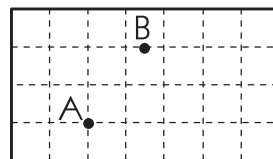
a



b



c

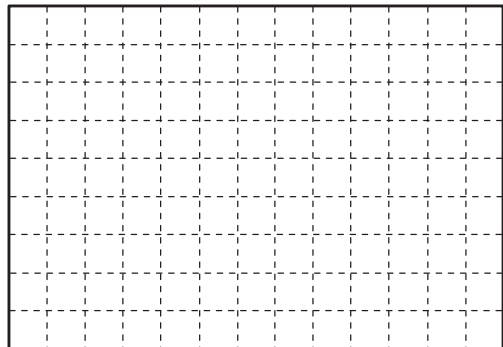


NAME _____

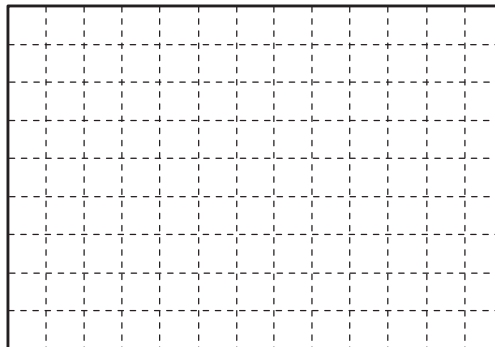
DATE _____

Drawing Shapes

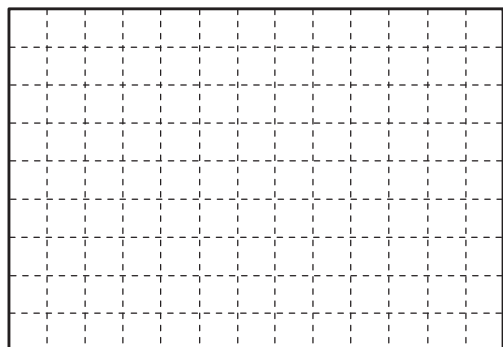
1 Draw a shape with 5 sides and one right angle.



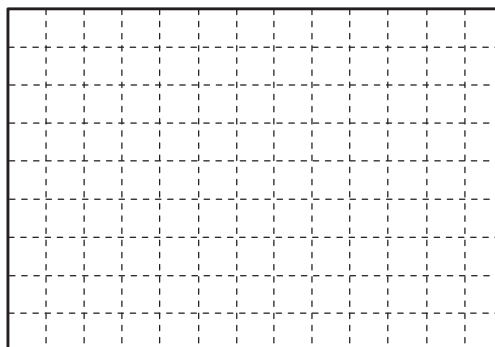
2 Draw a shape with only two parallel sides.



3 Draw a shape with 2 acute angles.



4 Draw a shape with only obtuse angles.



CHALLENGE

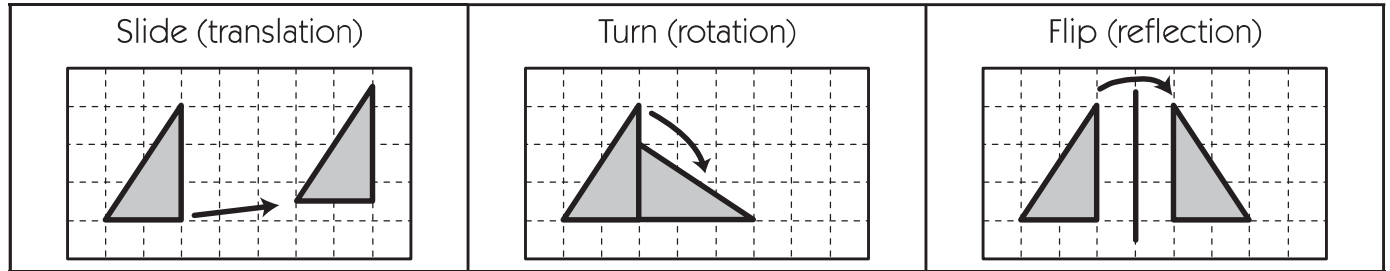
5 What is the smallest number of sides that the shape in problem 4 could have? Explain how you know.

NAME _____

DATE _____

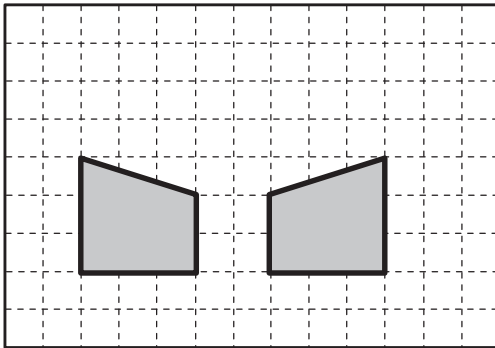
Slides, Turns & Flips

There are three different kinds of transformations.



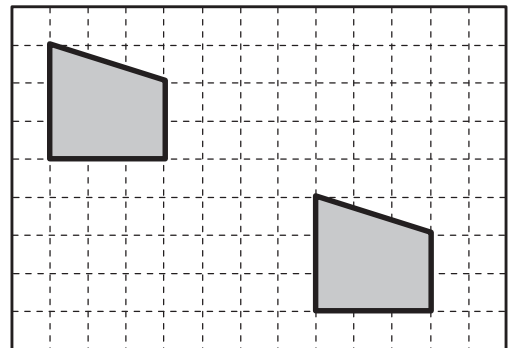
1 Fill in the bubble to name the transformation on each grid.

a



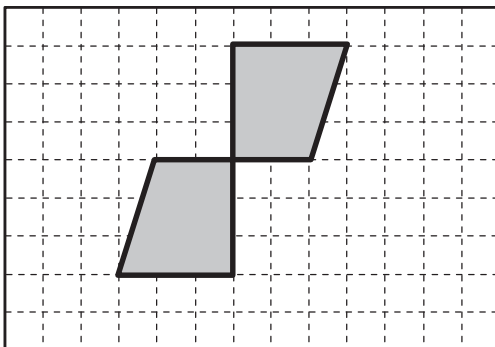
slide turn flip

b



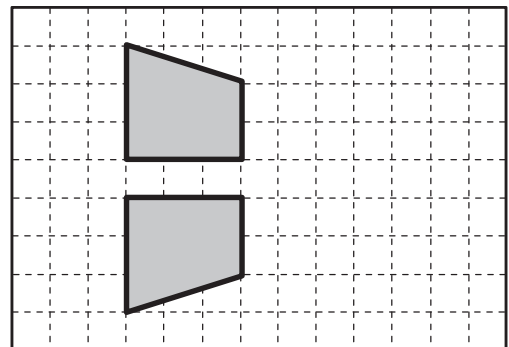
slide turn flip

c



slide turn flip

d



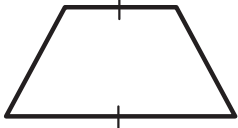

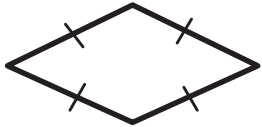
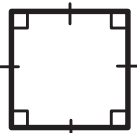

slide turn flip

NAME _____

DATE _____

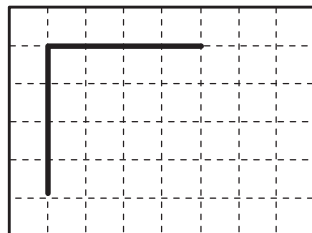
Quadrilateral Review

A *quadrilateral* is a shape with 4 sides. Here are some different kinds of quadrilaterals.

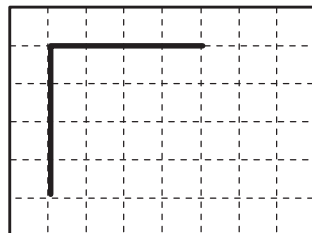
<p>Trapezoid: a quadrilateral with exactly 1 pair of parallel sides</p> 	<p>Rectangle: a quadrilateral with 2 pairs of parallel sides and 4 right angles</p> 
<p>Rhombus: a quadrilateral with 4 sides that are all the same length</p> 	<p>Square: a quadrilateral with 4 right angles and 4 sides that are all the same length</p> 
<p>Parallelogram: a quadrilateral with 2 pairs of parallel sides</p> 	

1 Draw in the missing sides to complete each quadrilateral.

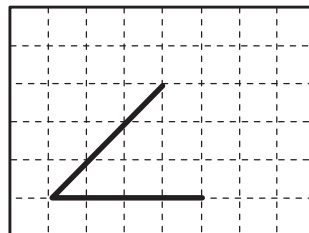
a square



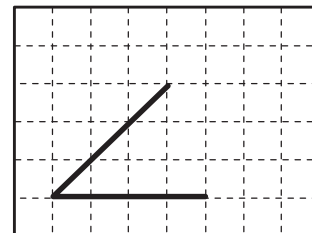
b trapezoid



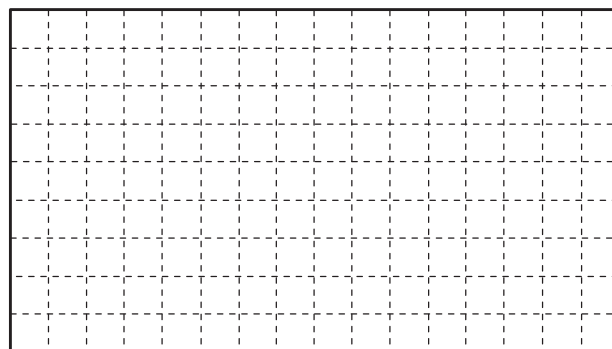
c parallelogram



d trapezoid



2 Mayra says that squares and rectangles are parallelograms too, but rhombuses are not. Is she correct? Explain your answer. Use the grid if you want to.

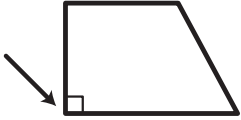
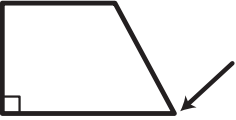
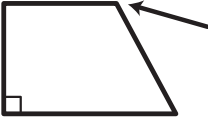
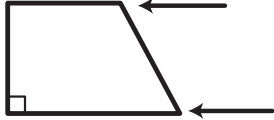


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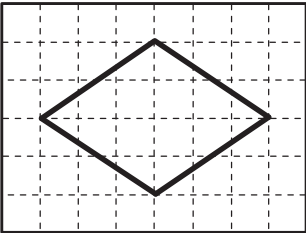
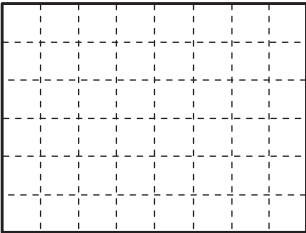
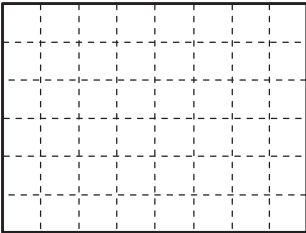
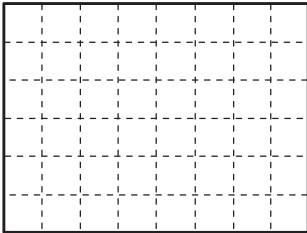
DATE _____

Angles, Sides & Shapes Review

Use the information below to help solve the following problems.

<p>Right Angle exactly 90° a square corner</p> 	<p>Acute Angle smaller than a right angle</p> 	<p>Obtuse Angle larger than a right angle</p> 	<p>Parallel Sides would never cross if they went on forever</p> 
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1 Follow the instructions to draw a quadrilateral on grids a, b and c. There will be more than one way to draw a figure that matches each description. Then fill in the bubble next to the word or words that name the figure you drew.

<p>example It has 4 equal sides and no right angles.</p>	<p>a It has only 1 pair of parallel sides and no right angles.</p>	<p>b It has 2 pairs of parallel sides and no right angles.</p>	<p>c It has exactly 2 right angles.</p>
			
<p><input checked="" type="radio"/> rhombus <input type="radio"/> trapezoid <input checked="" type="radio"/> parallelogram</p>	<p><input type="radio"/> rhombus <input type="radio"/> trapezoid <input type="radio"/> parallelogram</p>	<p><input type="radio"/> rhombus <input type="radio"/> trapezoid <input type="radio"/> parallelogram</p>	<p><input type="radio"/> rhombus <input type="radio"/> trapezoid <input type="radio"/> parallelogram</p>



CHALLENGE

2 Shamim says that you can draw figure 1b with all obtuse angles. Is he correct? Explain how you know. You can draw on the grid to help.

