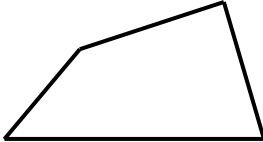

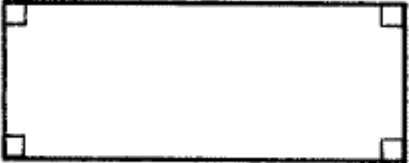
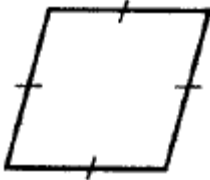
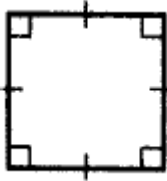
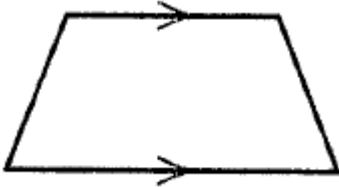
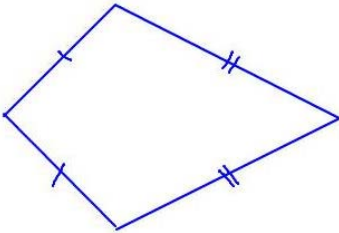


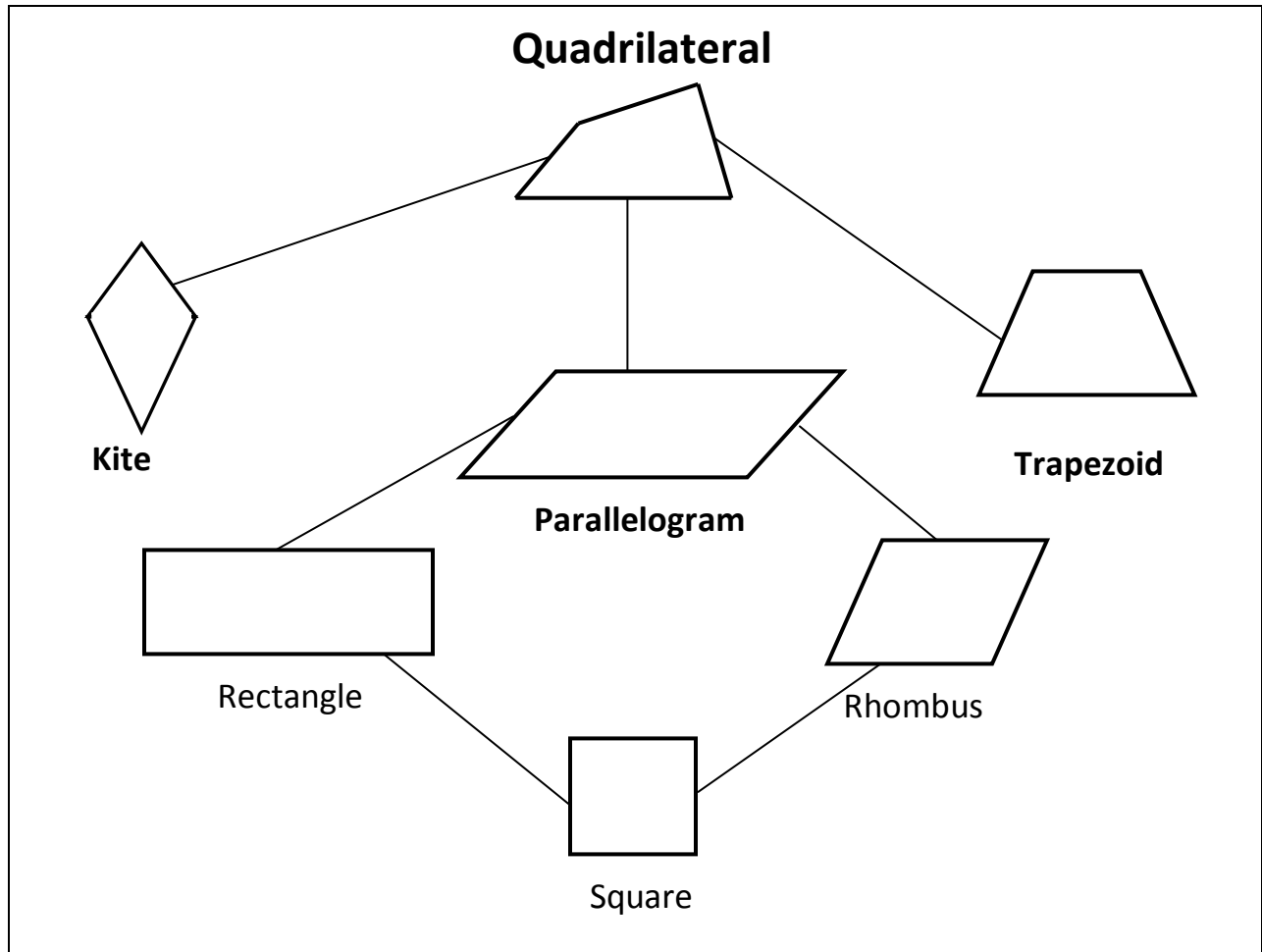
Classifying Quadrilaterals (SOL 6.13)

Definitions

Examples

Definitions	Examples
<p>Quadrilaterals must have</p> <ul style="list-style-type: none"> • 4 sides 	
<p>Parallelogram must have</p> <ul style="list-style-type: none"> • Opposite sides parallel (2 pairs) • Opposite sides congruent • Opposite angles congruent 	
<p>Rectangle must have</p> <ul style="list-style-type: none"> • Opposite side parallel (2 pairs) • Opposite sides congruent • 4 right angles 	
<p>Rhombus must have</p> <ul style="list-style-type: none"> • Opposite sides parallel (2 pairs) • 4 congruent sides • Opposite angles congruent 	
<p>Squares must have</p> <ul style="list-style-type: none"> • Opposite sides parallel (2 pairs) • 4 congruent sides • 4 right angles 	
<p>Trapezoid must have</p> <ul style="list-style-type: none"> • 1, and only 1, set of <u>parallel sides</u> 	
<p>Kite must have</p> <ul style="list-style-type: none"> • Two DISTINCT pairs of adjacent <u>congruent</u> sides • <u>Opposite sides are NOT congruent</u> 	

Hierarchy of Quadrilaterals (SOL 6.13)



Tell whether each statement is *sometimes*, *always*, or *never* true.

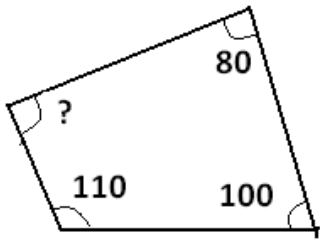
- 1) A rhombus is a square. _____
- 2) A square is a parallelogram. _____
- 3) A parallelogram is a square. _____
- 4) A parallelogram is a trapezoid. _____
- 5) A square is quadrilateral. _____
- 6) A rhombus is a rectangle. _____
- 7) A quadrilateral is a rectangle. _____

• Find the Missing Angle in a Quadrilateral

*****All angles in a quadrilateral add up to 360°*****

Steps to finding the measure of a missing angle:

1. Find the sum of the angles you are given
2. Subtract that sum from 360°
3. Check- Add up all four angles to make sure your answer is correct!



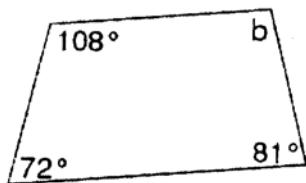
$$1) 110^\circ + 100^\circ + 80^\circ = 290^\circ$$

$$2) 360^\circ - 290^\circ = 70^\circ$$

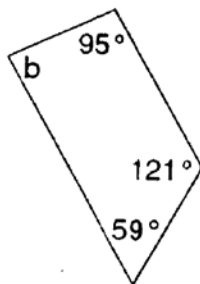
$$3) 110^\circ + 100^\circ + 80^\circ + 70^\circ = 360^\circ$$

Find the missing angle measure for the quadrilaterals below.

1)



2)

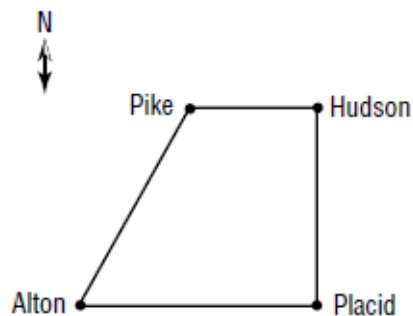


Quadrilaterals

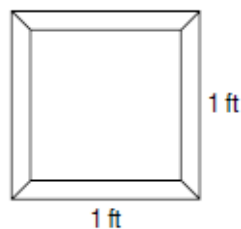
1. **KITES** A kite is shown below. What is the best name to classify the shape of the kite? Explain.



2. **MAPS** A map showing the road connecting the towns of Pike, Hudson, Placid, and Alton is shown. The road connecting Pike and Hudson is parallel to the road connecting Alton and Placid. What is the best name to classify the shape of the roads connecting the four towns? Explain.



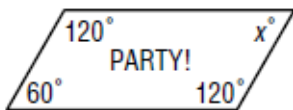
3. **ART** A picture frame is shown below. What is the *best* name to classify the shape of the frame?



4. **SCHOOL SUPPLIES** The side view of an eraser is shown below. What is the best name to classify the shape of the eraser?



5. **PARTY** The front of a birthday party invitation is shown below. Find the measure of the missing angle.



6. **TABLE** The top of Mr. Bautista's new coffee table is shown below. Find the measure of the missing angle.

