

### Characteristics of Special Quadrilaterals

**Parallelogram:** both pairs of opposite sides are parallel

**Rhombus:** a Parallelogram with 4  $\cong$  sides

**Rectangle:** a Parallelogram with 4 right angles

**Square:** a Parallelogram with 4  $\cong$  sides and 4 right angles

**Kite:** a Quadrilateral with two pairs of adjacent sides that are congruent and no opposite sides congruent.

**Trapezoid:** a Quadrilateral with exactly one pair of parallel sides (bases)

**Isosceles Trapezoid:** a Trapezoid whose nonparallel sides are congruent (legs)

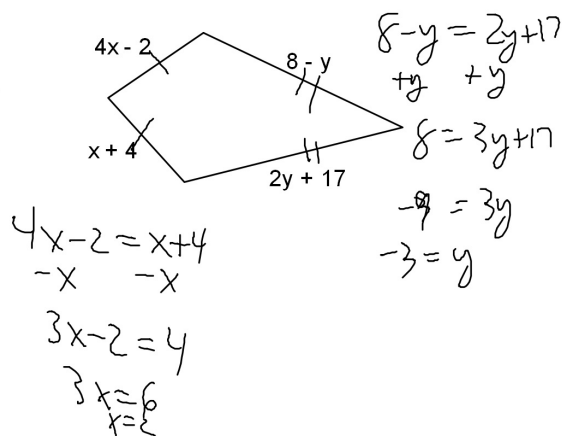
### Geometry Bellwork Thursday, March 27, 2014

Use the properties of special quadrilaterals to find the value of each variable.

1. This figure is a Kite.

$$x = \underline{2}$$

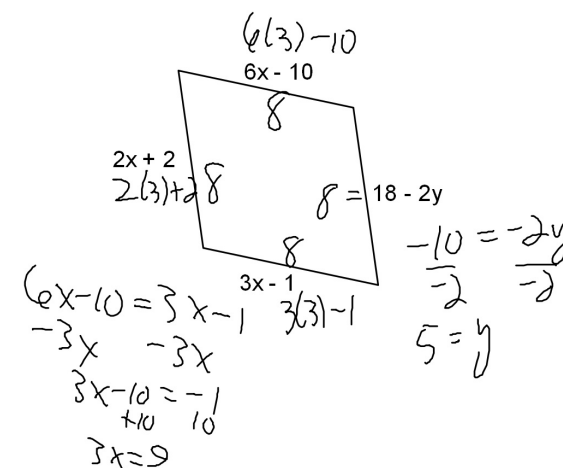
$$y = \underline{-3}$$



2. This figure is a Rhombus

$$x = \underline{3}$$

$$y = \underline{5}$$



3. This figure is a Parallelogram.

$$x = \underline{15}$$

$$8x + 40 + 5x + 25 = 180$$

$$13x - 15 = 180$$

$$13x = 195$$

$$x = 15$$

