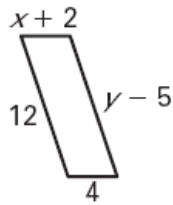Name _____ Date _____

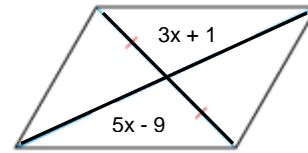## Day 6 – Properties of Rhombi, Squares, Trapezoids and Kites

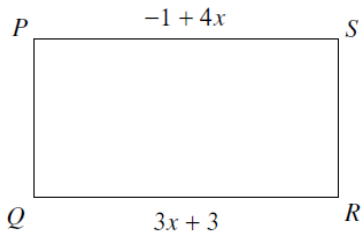**Find the missing variable in each parallelogram.**

1.

$x + 2$

12 $y - 5$

4

2.

$3x + 1$

$5x - 9$

3.

P $-1 + 4x$ S

Q $3x + 3$ R

4.

$UH = 19$
$FH = 5x - 7$

H E
U
G F

5.

$2y + 4$

A B

$5y + 1$ $3x$

D $5x - 4$ C

6.

A B
$x°$ $y°$

$(z - 15)°$ $(2z)°$
D C
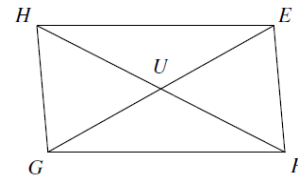
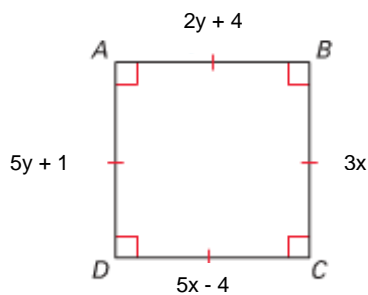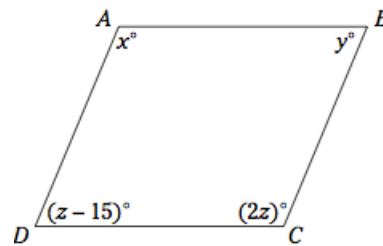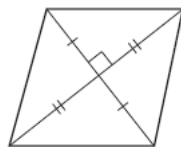**Decide if the figure is a parallelogram. If yes, can you identify the type of parallelogram? If it is not, explain why not.**

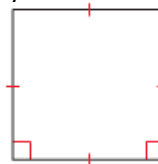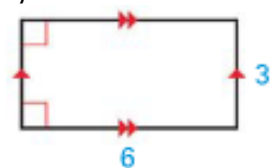7.   8.   9)   10)

3

6

11. Suppose points A (1, 2), B (3, 6), and C (6, 4) are three vertices of a parallelogram.

a. Give the coordinates of a point that could be the fourth vertex. Sketch the parallelogram in a coordinate plane.

b. Explain how to check to make sure the figure you drew in part a is a parallelogram.

c. How many different parallelograms can be formed using A, B, and C as vertices? Sketch each parallelogram and label the coordinates of the fourth vertex.