### Warm up Week of 3.6.17

#### Monday:

Identify the domain and range of the following functions:

$$1.f(x)=2^x+5$$

$$2.f(x) = \sqrt{x+8}$$

$$3.f(x) = -(x-9)^2 + 3$$

**Tuesday:** 

$$f(x) = x^2 + 4x + 5$$
;  $g(x) = -2x - 9$ 

Find:

- 1. f(g(x))
- 2.  $(f \circ g)(3)$
- 3. 5f(-3) 2g(1)

Wednesday:

Identify the transformations from the parent function:

$$1.f(x) = x^2; f(x) = (x+7)^2 - 2$$

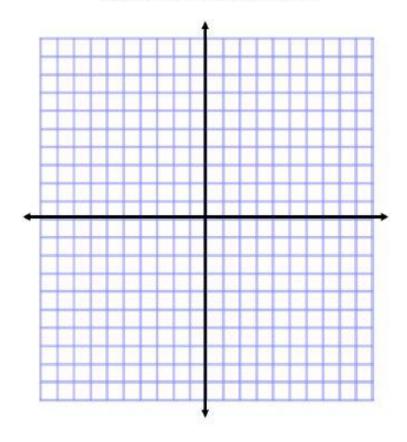
**2.** 
$$f(x) = 4^x$$
;  $f(x) = 4^{x-3} + 1$ 

$$3.f(x) = \sqrt{x}; \ f(x) = -\sqrt{x-2} - 3$$

## Thursday:

Sketch a graph of this piecewise function: 
$$f(x) = \begin{cases} 2x - 1, & \text{if } x > 3 \\ -x^2 + 2, & \text{if } x \leq 3 \end{cases}$$

### Coordinate Plane



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## Friday:

# Identify the best fit model for the data: {linear, quadratic, exponential}

4

4

11.