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:

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

Find:

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

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: $f(x)=\left\{\begin{array}{c}2 x-1, \text { if } x>3 \\ -x^{2}+2, \text { if } x \leq 3\end{array}\right.$


## Friday:

Identify the best fit model for the data: \{linear, quadratic, exponential\}
9.

| $x$ | $y$ |
| :---: | :---: |
| 0 | -12 |
| 1 | -11 |
| 2 | -8 |
| 3 | -3 |
| 4 | 4 |

10. 


11.

| $x$ | $y$ |
| :---: | :---: |
| 0 | 3 |
| 1 | 12 |
| 2 | 48 |
| 3 | 192 |
| 4 | 768 |

