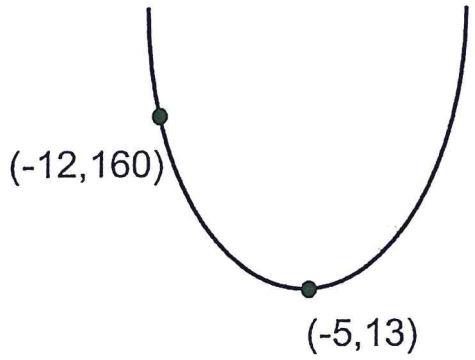
Bellwork Hon Alg 2 Wednesday, November 2, 2016

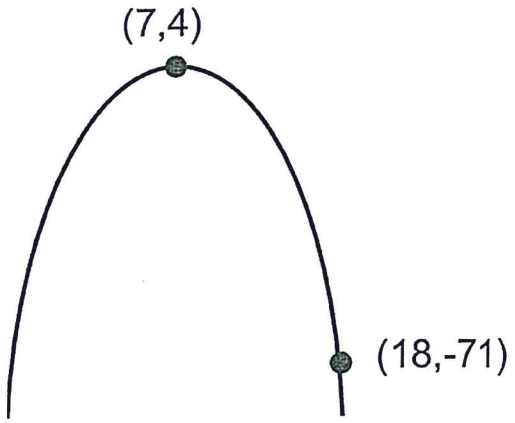
For 1 to 4, write the equation of each quadratic in Vertex Form.

1. Vertex is (-1, 8) and the x-intercept is 4

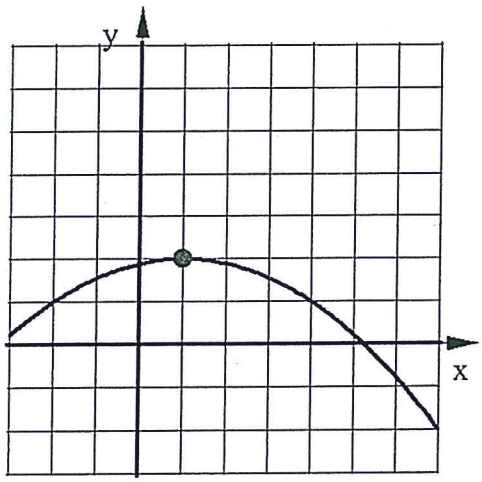
2.



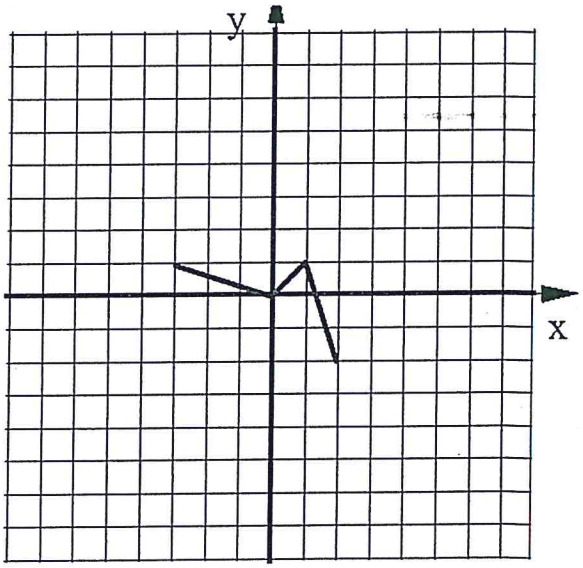
3.



4.



5. Below is the graph of $y = f(x)$
Graph this transformation of $y = -2f(x-5)+4$.

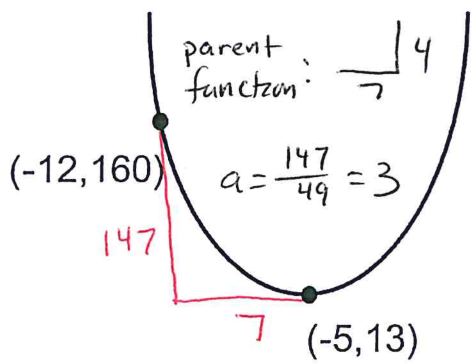


Bellwork Hon Alg 2 Wednesday, November 2, 2016 Answers

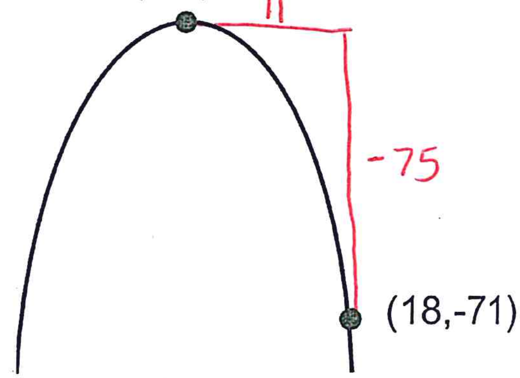
For 1 to 4, write the equation of each quadratic in Vertex Form.

1. Vertex is (-1, 8) and the x-intercept is 4

2. $y = 3(x+5)^2 + 13$



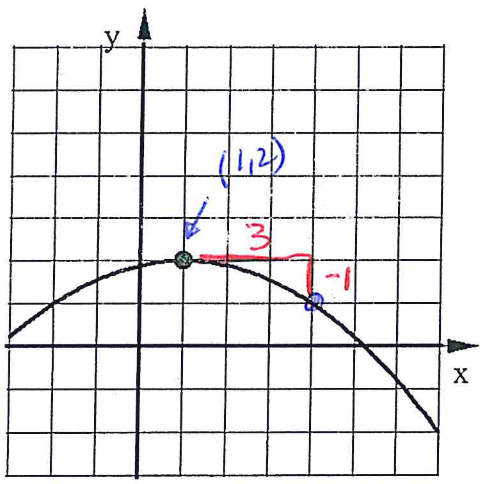
3. $y = \frac{-75}{121}(x-7)^2 + 4$



parent function: 11, 121

$a = \frac{-75}{121}$

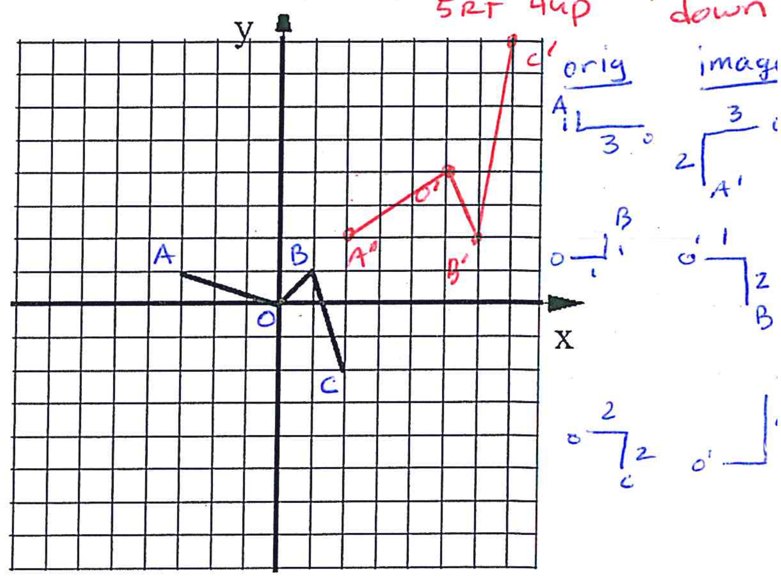
4. $y = \frac{-1}{9}(x-1)^2 + 2$



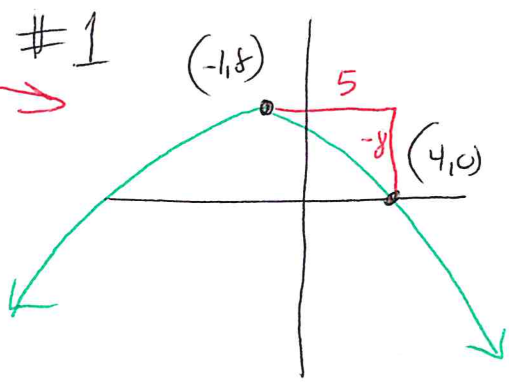
parent function: 3, 9 $a = \frac{-1}{9}$

5. Below is the graph of $y = f(x)$
Graph this transformation of $y = -2f(x-5) + 4$

5 RT 4 up → 2x Taller, upside down



#1



$y = \frac{-8}{25}(x+1)^2 + 8$

parent function: 5, 25

$a = \frac{\text{image}}{\text{original}} = \frac{-8}{25}$