Bellwork Alg 2A Friday, February 10, 2017

1. Write the equation of the quadratic described below:

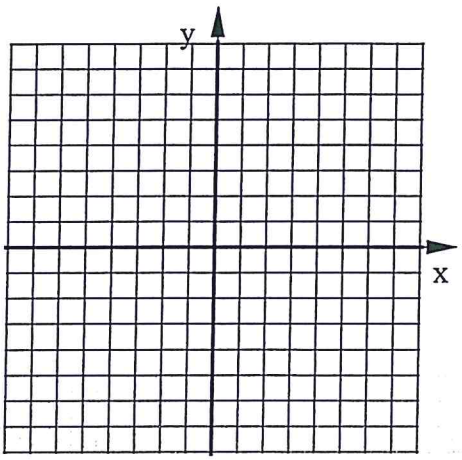
Opens down, 4 times taller than the Parent Function, moved 8 units right

2. State the coordinates of the vertex, the equation for the Line of Symmetry, and the y-intercept of this quadratic: $y = -\frac{2}{3}(x+\frac{6}{5})^2 - 13$

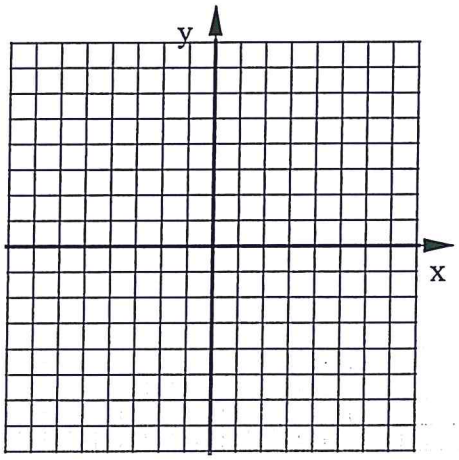
Vertex: EQ of LOS: y-int:

Graph each quadratic using at least five points.

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



4. $y = -2(x-4)^2 + 1$



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ANSWERS

1. Write the equation of the quadratic described below:

Opens down, 4 times taller than the Parent Function, moved 8 units right

$y = -4(x-8)^2$

2. State the coordinates of the vertex, the equation for the Line of Symmetry, and the y-intercept of this quadratic: $y = -\frac{2}{3}(x+\frac{6}{5})^2 - 13$

Vertex: $(-\frac{6}{5}, -13)$ EQ of LOS: $X = -\frac{6}{5}$ y-int:

$-\frac{2}{3}(0+\frac{6}{5})^2 - 13$

$= -\frac{2}{3}(\frac{36}{25}) - 13$

$= -\frac{24}{25} - \frac{13}{1}\cdot\frac{25}{25}$

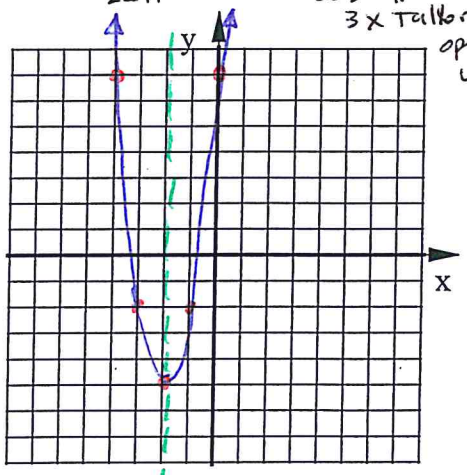
$= -\frac{24}{25} - \frac{325}{25}$

$= \frac{-349}{25}$

Graph each quadratic using at least five points.

3. $y = 3(x+2)^2 - 5$ Vertex $(-2,-5)$ LOS $x=-2$ 3x Taller opens up

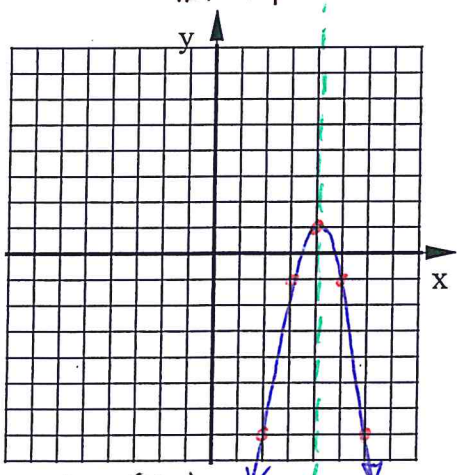
2 left 5 down



1 → 3

4 → 12

4. $y = -2(x-4)^2 + 1$ 4 RT 1 up



Vertex $(4,1)$ LOS $x=4$ opens down 2x Taller

1 → 2

4 → 8