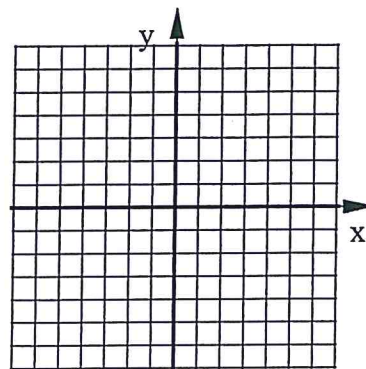
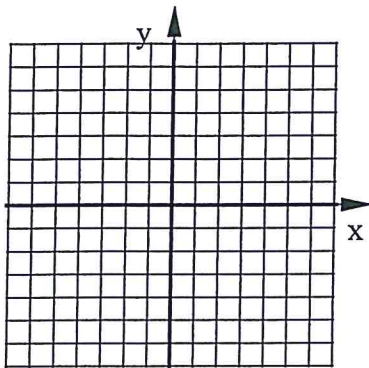


Bellwork Alg 2A Tuesday, February 7, 2017

Graph each parabola using at least five points. Draw the LOS as a dashed line.

1. $y = -3x^2 + 6x + 2$

2. $y = 2x^2 - 16x + 29$



3. Use the equation: $y = -5x^2 + 24x - 100$

a) Does this parabola have a Max or a Min?

b) Find the y-intercept.

c) Find the coordinates of the vertex of this parabola.

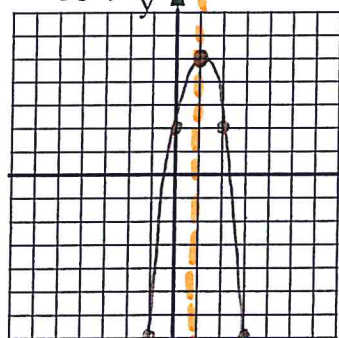
4. The vertex of a parabola is the point $(-13, 23)$. The point $(-9, -25)$ is also on the parabola. Find the coordinates of three other points on the parabola.

Bellwork Alg 2A Tuesday, February 7, 2017

Graph each parabola using at least five points. Draw the LOS as a dashed line.

1. $y = -3x^2 + 6x + 2$

LOS: $x = \frac{-6}{2(-3)} = \frac{-6}{-6} = 1$

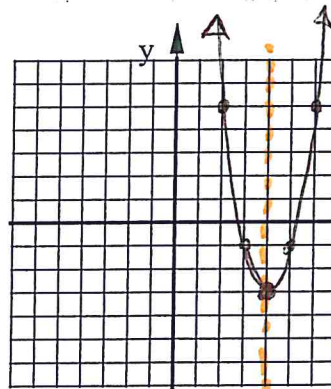


vertex
(1, 5)

$$\begin{aligned} \downarrow 1 &\rightarrow \downarrow -3 \\ \downarrow 4 &\rightarrow \downarrow -12 \end{aligned}$$

2. $y = 2x^2 - 16x + 29$

LOS: $x = \frac{16}{2(2)} = \frac{16}{4} = 4$



vertex (4, -3)

$$\begin{aligned} \downarrow 1 &\rightarrow \downarrow 2 \\ \downarrow 4 &\rightarrow \downarrow 8 \end{aligned}$$

3. Use the equation: $y = -5x^2 + 24x - 100$

a) Does this parabola have a Max or a Min?

opens down

MAX

c) Find the coordinates of the vertex of this parabola.

LOS: $x = \frac{-24}{2(-5)} = \frac{-24}{-10} = 2.4$

vertex (2.4, -71.2)

b) Find the y-intercept.

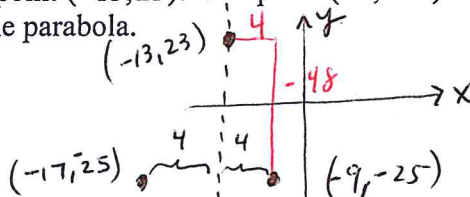
$y\text{-int} = c$

-100

4. The vertex of a parabola is the point $(-13, 23)$. The point $(-9, -25)$ is also on the parabola. Find the coordinates of three other points on the parabola.

parent: this parabola:

$\downarrow 16 \rightarrow \downarrow -48 \quad a = -3$



(-17, -25)
(-14, 20) & (-12, 20)
(-15, 11) & (-11, 11)
(-16, -4) & (-10, -4)