

Algebra 1 Bellwork Monday, May 16, 2016

1. Find the equation of the LOS and the coordinates of the Vertex for each parabola.

a) $y = -2x^2 + 8x - 1$

b) $f(x) = x^2 - 9x + 8$

c) $y = 7x^2 - 113$

2. Find the y-intercept for each parabola.

a) $f(x) = 11x^2 + x - 14$

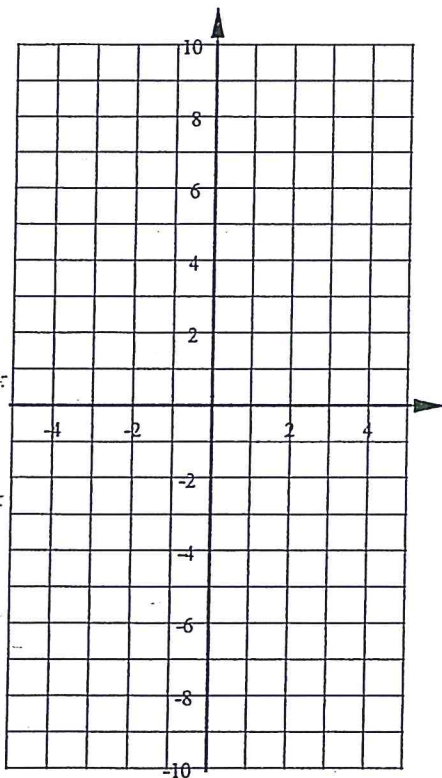
b) $y = 9x^2 - 2x$

3. Write an equation for a parabola to fits the following description.

a) The Vertex is at the point $(0, -5)$ and the parabola opens up.

b) The parabola opens down but the Line of Symmetry is to the left of the y-axis.

4. Graph this quadratic with at least 5 points. $y = -3x^2 + 12x - 4$



1. Find the equation of the LOS and the coordinates of the Vertex for each parabola.

LOS: $x = \frac{-8}{2(-2)} = 2$

LOS: $x = \frac{-9}{2(1)} = 4.5$

LOS: $x = 0$

a) $y = -2x^2 + 8x - 1$

b) $f(x) = x^2 - 9x + 8$

c) $y = 7x^2 - 113$

Vertex $(2, 7)$

Vertex $(4.5, -12.25)$

Vertex $(0, -113)$

2. Find the y-intercept for each parabola.

a) $f(x) = 11x^2 + x - 14$

b) $y = 9x^2 - 2x$

y-int = -14

y-int = 0

3. Write an equation for a parabola to fits the following description.

a) The Vertex is at the point $(0, -5)$ and the parabola opens up.

ex answer:

$y = x^2 - 5$

b) The parabola opens down but the Line of Symmetry is to the left of the y-axis.

moved down 5

a is pos

ex answer

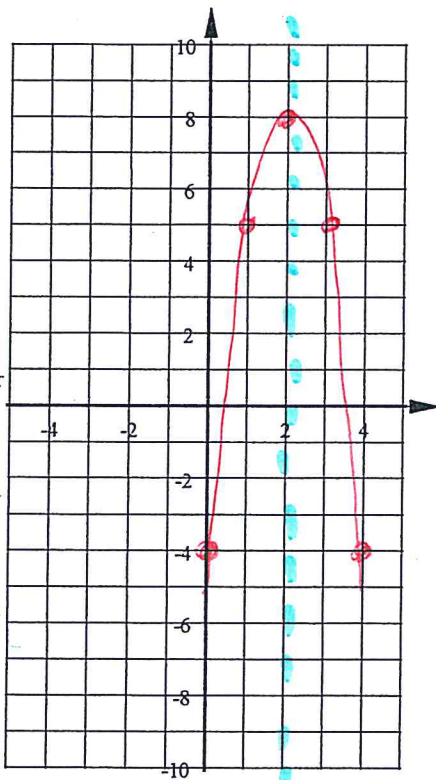
a is neg

$-\frac{b}{2a}$ is neg

$y = -2x^2 - 4x +$

4. Graph this quadratic with at least 5 points. $y = -3x^2 + 12x - 4$

opens down & Narrow



LOS: $x = \frac{-12}{2(-3)} = 2$

vertex $(2, 8)$

y-int = -4

X	Y
1	5

LOS
 $x = 2$