Algebra II
7-5
(Day 2)
Quadratic Functions and Their Graphs

<u>Recapping yesterday's activity</u>

1) In the equation $y = x^2 + k$, k causes the graph to

$y = x^2 + 2$
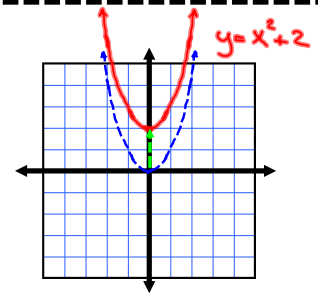
2)   In the equation $y = ax^2$, if a is:
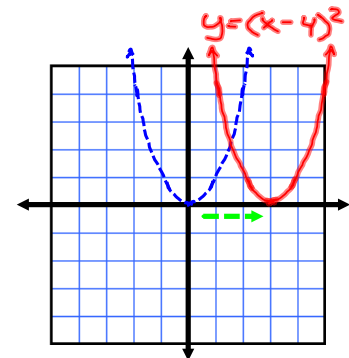
      negative - _____
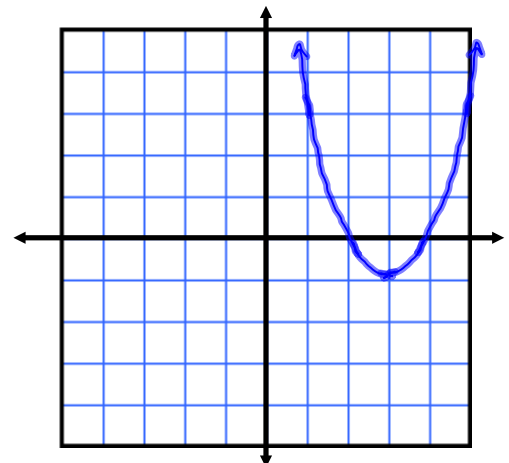
      $|a| > 1$, _____

      $0 < |a| < 1$, _____

$y = -\frac{1}{2}x^2$
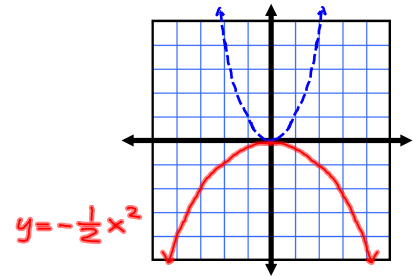
3)   In the equation $y = (x - h)^2$, h causes the graph to
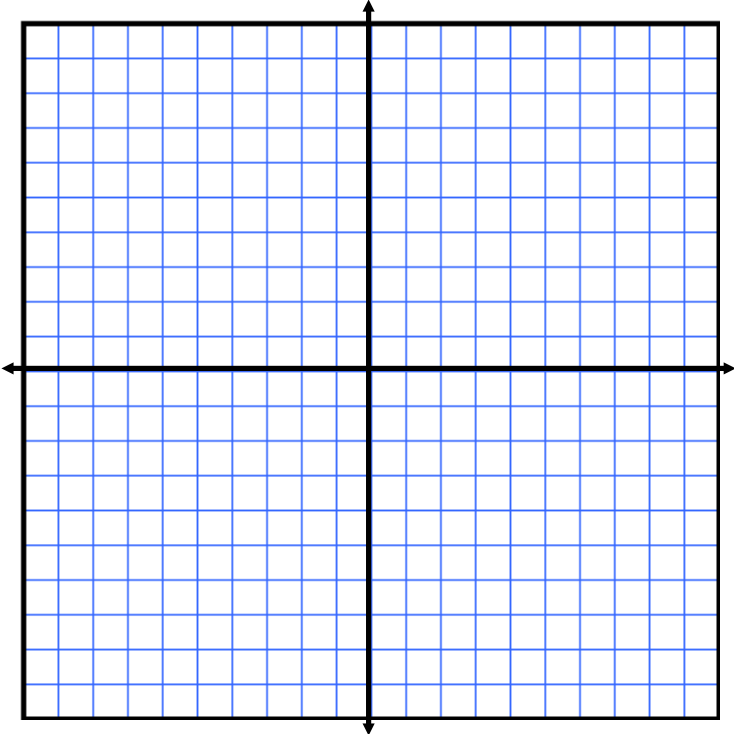
$y = (x - 4)^2$

<u>Putting it all Together</u>

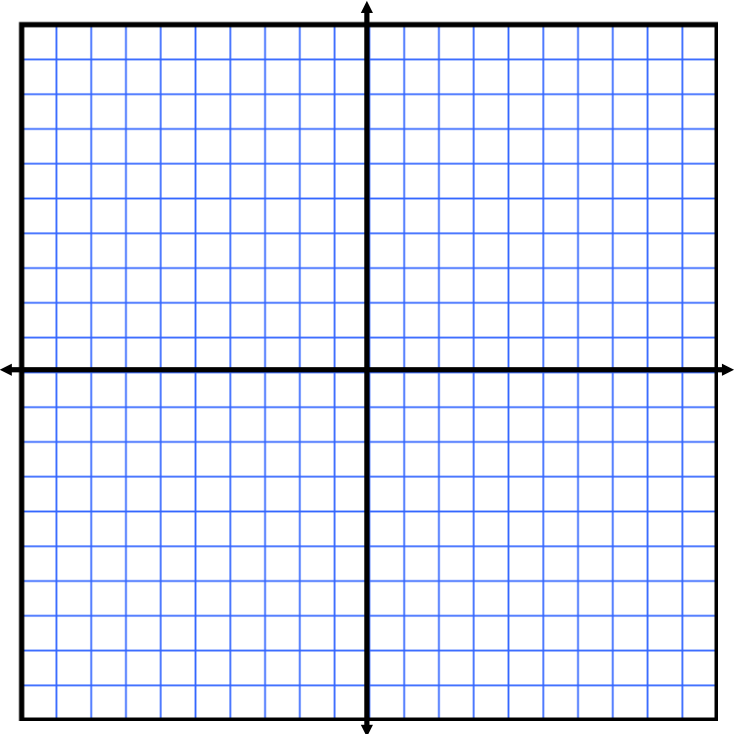 <u>Standard Form of a Quadratic Equation</u> -

Graph each equation. Label the vertex and axis of symmetry. Find all intercepts.
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1) $y = -3x^2$

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

Find an equation in $y = a(x - h)^2 + k$ for each parabola described.

    19) Vertex (4, -3), contains (2, -1)

    23) Vertex (3, 5), y - intercept 2

What is the Standard Form good for?

What is the General Form good for?

How do I find y - intercepts?

How do I find x - intercepts?

How do I find the axis of symmetry?