

Homework 9/13

Graphing Quadratics:

If the following equation is a quadratic, write the equation in standard form.

1. $y = 7 + 3x - 5$

2. $10x + 2y = 8x^2 - 2$

3. $3x^2 - 2x = 2x^2 - 7$

Find the axis of symmetry, the vertex, and the y-intercept of each parabola. Graph the quadratic.

4. $y = x^2 + 2x - 8$

5. $y = x^2 - 4x + 3$

6. $y = 3x^2 - 4x$

Without graphing, does the graph of the given equation open up or down? Is the graph wider or narrower than the parent equation of $y = x^2$? What is the y-intercept?

7. $f(x) = -0.6x^2 + 3x - 6$

8. $g(x) = 1.3x^2 + 4x$

Find the zeros of the following quadratics by graphing.

9. $y = x^2 - 4x + 3$

10. $y = -x^2 - 8x - 15$