2.1 Quadratic Functions and Models

Name: Date: June 10, 2013

P 30. Graph

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

Find the x and y-intercepts, if any. Find the axis of symmetry and the point of maxima or minima. Include a table of "nice" values for which to evaluate f and the corresponding value of f.

P 31. Graph

$$h(x) = 4x^2 - 4x + 21$$

Find the x and y-intercepts, if any. Find the axis of symmetry and the point of maxima or minima. Include a table of "nice" values for which to evaluate h and the corresponding value of h.

P 32. Graph

$$f(x) = 2x^2 - x + 1.$$

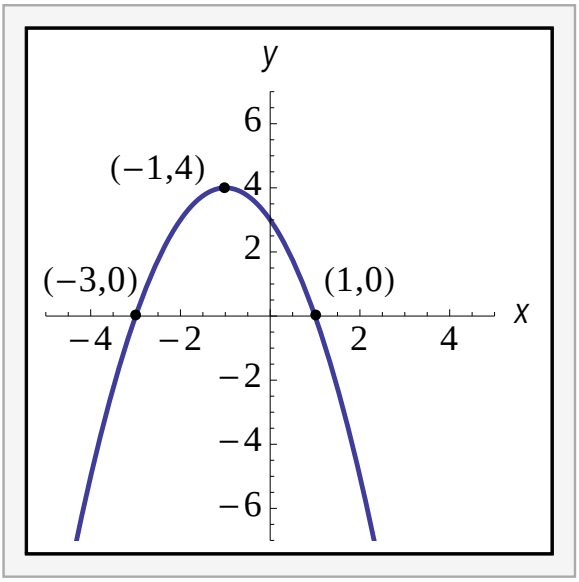
Find the x and y-intercepts, if any. Find the axis of symmetry and the point of maxima or minima. Include a table of "nice" values for which to evaluate f and the corresponding value of f.

P 33. Graph

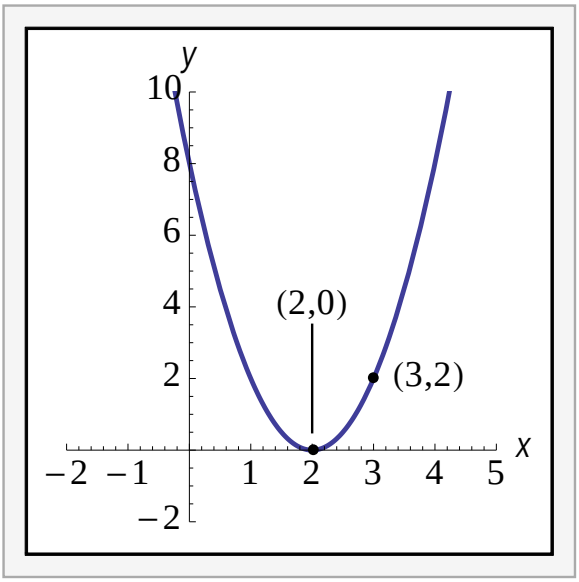
$$f(x) = \frac{1}{4}x^2 - 2x - 12.$$

Find the x and y-intercepts, if any. Find the axis of symmetry and the point of maxima or minima. Include a table of "nice" values for which to evaluate f and the corresponding value of f.

P 43. Write an equation for the parabola in standard form



P 46. Write an equation for the parabola in standard form



P 47. Write the standard form of the equation of the parabola that has vertex $(-2, 5)$ and passes through the point $(0, 9)$.

P 55. Write the standard form of the equation of the parabola that has vertex $(-5/2, 0)$ and passes through the point $(-7/2, -16/3)$.