Fireworks – Vertex Form of a Quadratic Equation

- Recall that the standard form of a quadratic equation is

$$y = \mathbf{a} \cdot x^2 + \mathbf{b} \cdot x + \mathbf{c}$$

where **a**, **b**, and **c** are numbers and **a** *does not* equal 0.

- The **vertex form** of a quadratic equation is

$$y = \mathbf{a} \cdot (x - \mathbf{h})^2 + \mathbf{k}$$

where (**h**, **k**) are the coordinates of the vertex of the parabola and **a** is a number that *does not* equal 0.