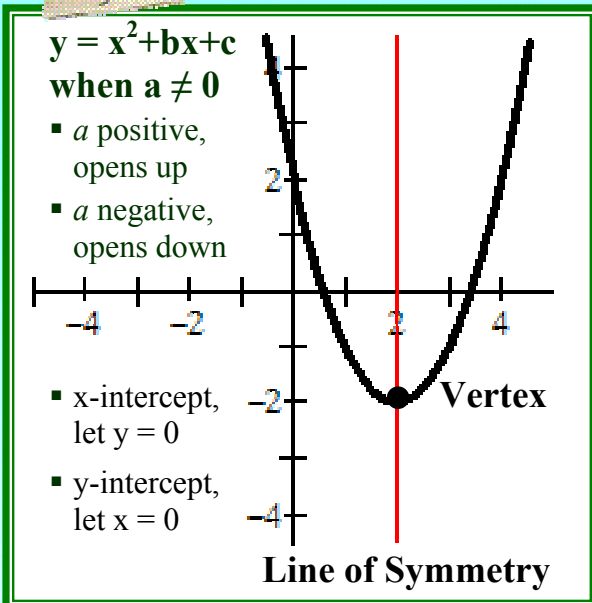


Mr. B's Algebra Connections

Perfectly Comfortable Parabolas

Fall
2005



Parabola. The graph of a quadratic equation:

$$y = ax^2 + bx + c \text{ when } a \neq 0$$

Vertex. The lowest point of a parabola opening upward or the highest point of a parabola opening downward.

Link of Symmetry. The vertical line through the vertex.

Vertex Formula of parabola, $y = ax^2 + bx + c$ ($a \neq 0$):

- **x-coordinate** = $(-b)/(2a)$
- **y-coordinate**, substitute x-coordinate in original equation and solve for y.