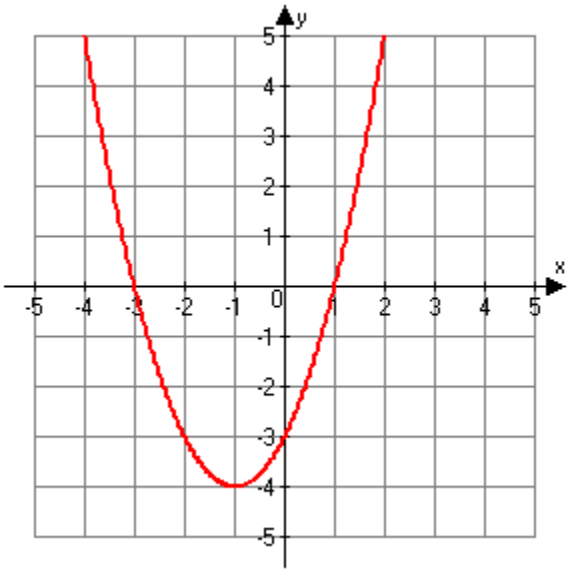
Algebra 2
Unit: Linear and Quadratic Functions
Section: Graphing Quadratics Functions

Flashcard Activity: Graphing Quadratic Functions

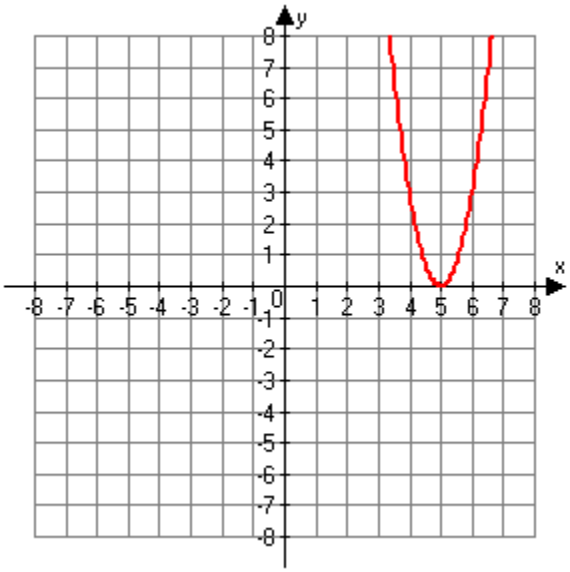
Directions: Study the quadratic equations and their graphs below.

1. f of x equals the quantity x plus 1 squared minus 4
$f(x) = (x + 1)^2 - 4$



Graph of parabola with points including (negative 4, 5), (negative 3, 0), (negative 2, negative 3), (negative 1, negative 4), (0, negative 3), (1, 0), and (2, 5).

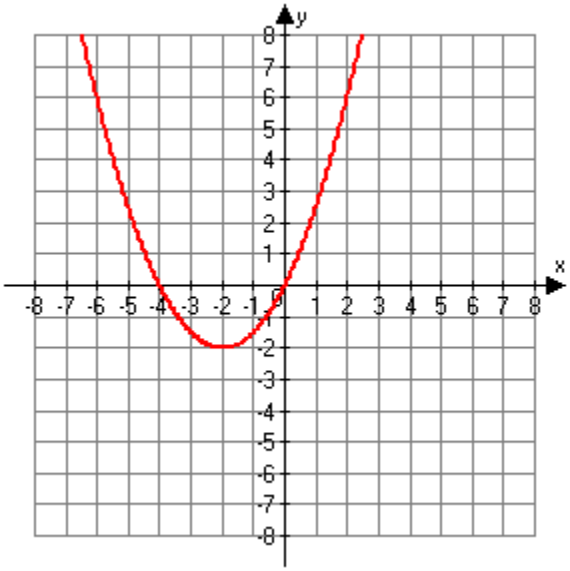
2. f of x equals 3 times the quantity x minus 5 squared
$f(x) = 3(x - 5)^2$



Graph of parabola with points including (4, 3), (5, 0), and (6, 3).

3. f of x equals one-half times the quantity x plus 2 squared minus 2

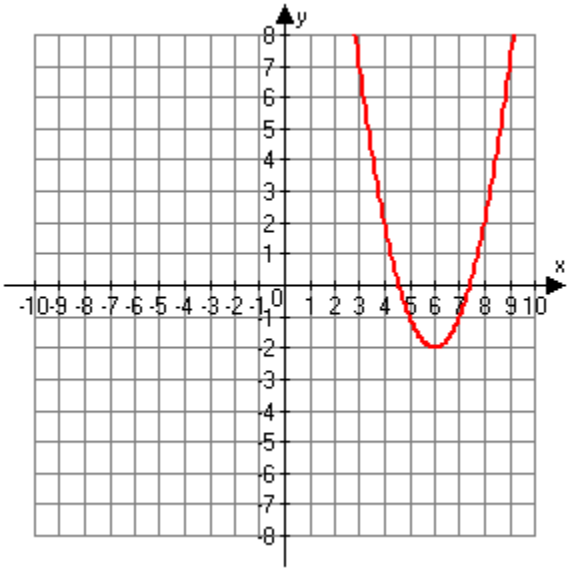
$$f(x) = \frac{1}{2}(x+2)^2 - 2$$



Graph of parabola with points including (negative 6, 6), (negative 4, 0), (negative 2, negative 2), (0, 0), and (2, 6).

4. f of x equals x minus 6 squared minus 2

$f(x) = (x - 6)^2 - 2$



Graph of parabola with points including (3, 7), (4, 2), (5, negative 1), (6, negative 2), (7, negative 1), (8, 2), and (9, 7).