

Intercept Form

$|a|$ stretches or compresses parabola
 $a > 0$ opens up; $a < 0$ opens down

$$y = a(x - p)(x - q)$$

x -intercept at point $(p,0)$

x -intercept at point $(q,0)$

Intercept Form

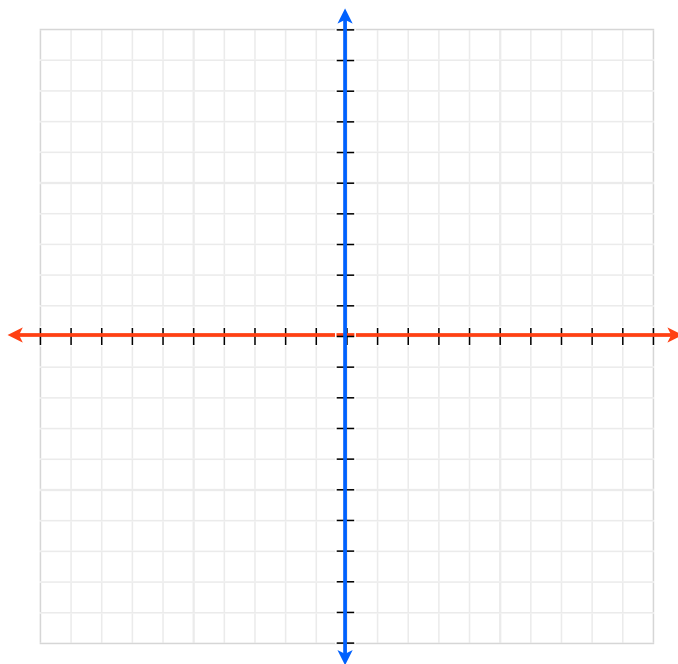
$$y = a(x - p)(x - q)$$

Given the quadratic function in intercept form, label a , p , and q .

$$y = 2(x + 4)(x - 6) \quad y = -(x - 1)(x + 3) \quad y = -\frac{1}{2}(x - 6)(x - 2) \quad y = (x + 5)(x + 7)$$

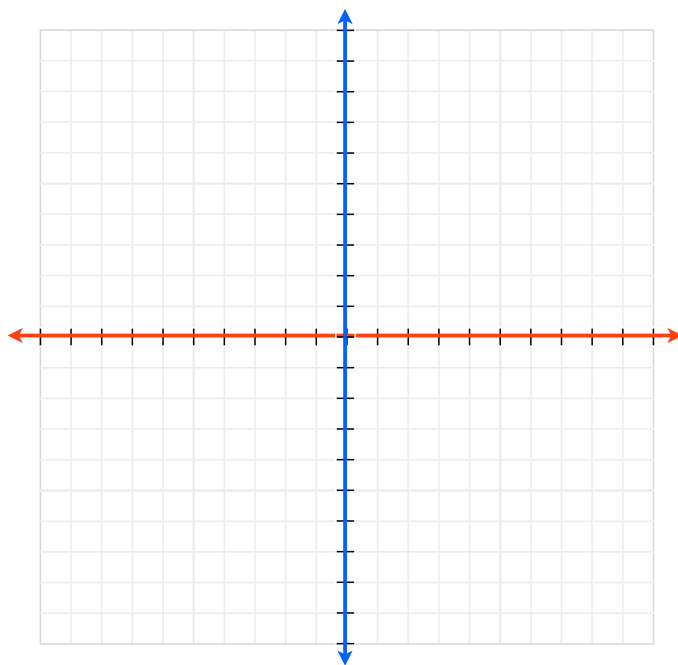
Graph the following quadratic functions

$$y = (x - 4)(x + 2)$$



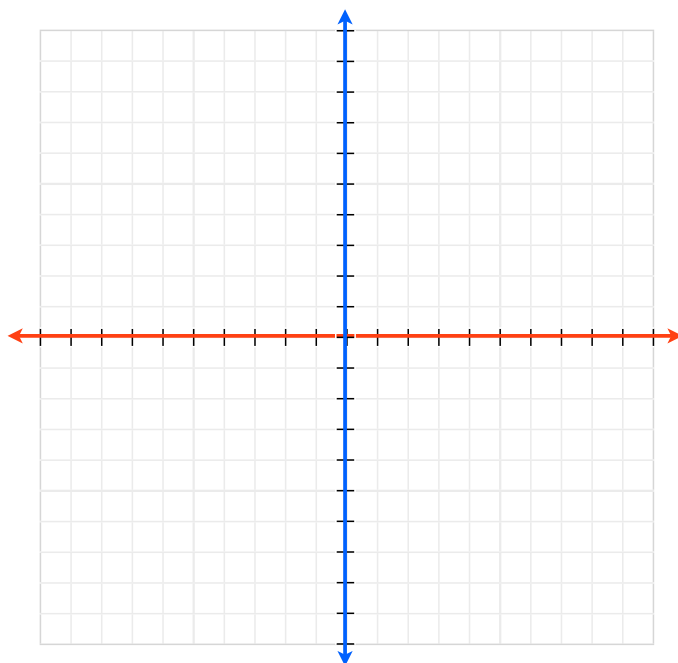
Graph the following quadratic functions

$$y = -2(x - 7)(x - 3)$$



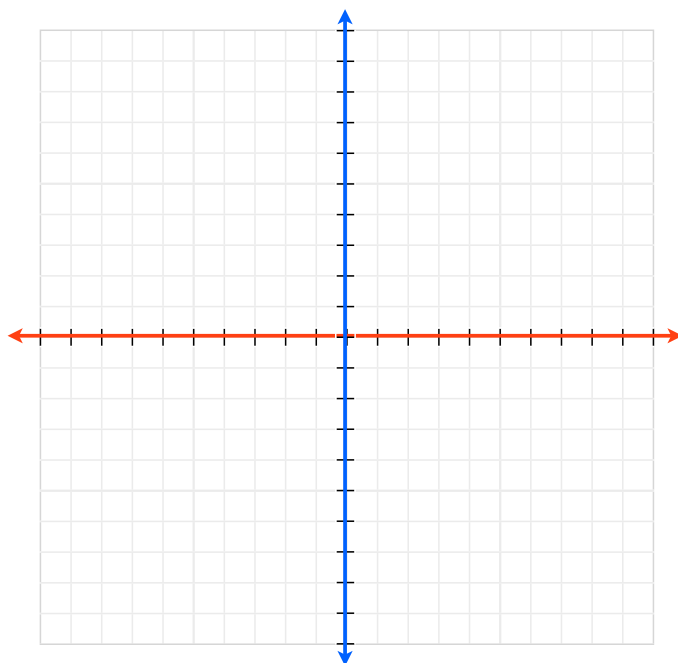
Graph the following quadratic functions

$$y = -\frac{1}{4}(x - 7)(x + 5)$$



Graph the following quadratic functions

$$y = 3(x + 3)(x + 5)$$



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