

For the following quadratic equations, identify  $a$ ,  $b$  and  $c$ , and then find the equation for the line of symmetry.

Sample #1:  $y = x^2 + 6x - 5$

Sample #2:  $y = -2x^2 - 5x + 7$

Answer:  $a = 1, b = 6, c = -5$

Answer:  $a = -2, b = -5, c = 7$

The line of symmetry:

$$x = \frac{-(6)}{2(1)}$$

$$x = -3$$

The line of symmetry:

$$x = \frac{-(-5)}{2(-2)}$$

$$x = -\frac{5}{4}$$

1.  $y = x^2 + 4x + 12$

2.  $y = x^2 + 10x - 3$

3.  $y = x^2 - 12x + 4$

4.  $y = 2x^2 + 8x - 5$

5.  $y = -3x^2 + 6x - 1$

6.  $y = -x^2 - 2x - 2$

7.  $y = x^2 + 3x - 8$

8.  $y = 4x^2 - 16$

9.  $y = -8x^2$

10.  $y = 2x^2 - 7x$