

Name: _____



Solving Quadratic Functions by Completing the Square

Directions: Solve each equation by completing the square

(1). $x^2 - 2x - 8 = 0$

(2). $x^2 + x = 56$

(3). $x^2 = 6x + 40$

(4). $a^2 = a + 20$

(5). $x^2 + 3x = -2$

(6). $y^2 = -10y - 24$

(7). $p^2 + 10 = 7p - 2$

(8). $3x^2 + 15 = -14x$

(9). $12 - x^2 = 14x$

(10). $50 - 5x = x^2$

(11). $7a - a^2 = -18$

(12). $56 = y + y^2$

ANSWER KEY

(1). $x = 4, x = -2$

(2). $x = -8, x = 7$

(3). $x = 10, x = -4$

(4). $a = 5, a = -4$

(5). $x = -1, x = -2$

(6). $y = -4, y = -6$

(7). $p = 3, p = 4$

(8). $x = -\frac{5}{3}, x = -3$

(9). $x = -7 + \sqrt{61}, x = -7 - \sqrt{61}$

(10). $x = 5, x = -10$

(11). $a = 9, a = -2$

(12). $y = 7, y = -8$