

Name: _____

Solving Quadratic Functions by Factoring



Directions: Solve each equation by factoring

1.) $x^2 = -2x + 24$

2.) $x^2 + 25 = 10x$

3.) $x^2 + 6x - 7 = 0$

4.) $x^2 - 12 = x$

5.) $12 = 8y - y^2$

6.) $3x^2 + 10x + 21 = 2x^2$

7.) $(2m + 1)(m - 5) = 0$

8.) $3x^2 + x = 0$

9.) $x^2 = 2x + 3$

10.) $8x - 3 = 4x^2$

11.) $x^2 - 70 = 3x$

12.) $25x^2 - 64 = 0$

13.) $x^2 + 19x + 90 = 0$

14.) $x^2 - 48 = 2x$

ANSWER KEY

(1). $x = 4, x = -6$

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

(3). $x = 1, x = -7$

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

(5). $y = 2, y = 6$

(6). $t = -\frac{1}{2}, t = \frac{1}{2}$

(7). $m = -\frac{1}{2}, m = 5$

(8). $x = 0, x = -\frac{1}{3}$

(9). $x = -1, x = 3$

(10). $x = \frac{1}{2}, x = \frac{3}{2}$

(11). $x = 10, x = -7$

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

(13) $x = -9, x = -10$

(14) $x = 8, x = -6$