

Name \_\_\_\_\_

## Solving Equations by Completing the Square

Date \_\_\_\_\_ Period \_\_\_\_\_

Solve each equation by completing the square.

1)  $a^2 + 2a - 3 = 0$

2)  $a^2 - 2a - 8 = 0$

3)  $p^2 + 16p - 22 = 0$

4)  $k^2 + 8k + 12 = 0$

5)  $r^2 + 2r - 33 = 0$

6)  $a^2 - 2a - 48 = 0$

7)  $m^2 - 12m + 26 = 0$

8)  $x^2 + 12x + 20 = 0$

9)  $k^2 - 8k - 48 = 0$

10)  $p^2 + 2p - 63 = 0$

11)  $m^2 + 2m - 48 = -6$

12)  $p^2 - 8p + 21 = 6$

## Solving Equations by Completing the Square

Solve each equation by completing the square.

1)  $a^2 + 2a - 3 = 0$

$\{1, -3\}$

2)  $a^2 - 2a - 8 = 0$

$\{4, -2\}$

3)  $p^2 + 16p - 22 = 0$

$\{1.273, -17.273\}$

4)  $k^2 + 8k + 12 = 0$

$\{-2, -6\}$

5)  $r^2 + 2r - 33 = 0$

$\{4.83, -6.83\}$

6)  $a^2 - 2a - 48 = 0$

$\{8, -6\}$

7)  $m^2 - 12m + 26 = 0$

$\{9.162, 2.837\}$

8)  $x^2 + 12x + 20 = 0$

$\{-2, -10\}$

9)  $k^2 - 8k - 48 = 0$

$\{12, -4\}$

10)  $p^2 + 2p - 63 = 0$

$\{7, -9\}$

11)  $m^2 + 2m - 48 = -6$

$\{5.557, -7.557\}$

12)  $p^2 - 8p + 21 = 6$

$\{5, 3\}$