Activity 0825

Date_____ Period____

Solve each equation.

1) $5 + v = 12$

2) $\frac{x}{19} = -13$

Solve each equation by taking square roots.

3) $49k^2 - 8 = 41$

4) $5k^2 - 4 = 341$

Solve each equation by factoring.

5) $n^2 + 7n = -10$

6) $n^2 = -7n + 8$

7) $2x^2 - 20 = -3x$

8) $3n^2 = 4n + 15$

Solve each equation by completing the square.

9) $p^2 - 12p - 6 = -10$

10) $b^2 - 14b + 46 = 2$

11) $2x^2 - 20x + 41 = -6$

12) $5n^2 + 10n - 34 = 6$

Algebra 2 Name_____ ID: 1

Activity 0825

Date_____ Period____

Solve each equation.

1) $5 + v = 12$

$\{7\}$

2) $\frac{x}{19} = -13$

$\{-247\}$

Solve each equation by taking square roots.

3) $49k^2 - 8 = 41$

$\{1, -1\}$

4) $5k^2 - 4 = 341$

$\{\sqrt{69}, -\sqrt{69}\}$

Solve each equation by factoring.

5) $n^2 + 7n = -10$

$\{-5, -2\}$

6) $n^2 = -7n + 8$

$\{-8, 1\}$

7) $2x^2 - 20 = -3x$

$\left\{\frac{5}{2}, -4\right\}$

8) $3n^2 = 4n + 15$

$\left\{-\frac{5}{3}, 3\right\}$

Solve each equation by completing the square.

9) $p^2 - 12p - 6 = -10$

$\{6 + 4\sqrt{2}, 6 - 4\sqrt{2}\}$

10) $b^2 - 14b + 46 = 2$

$\{7 + \sqrt{5}, 7 - \sqrt{5}\}$

11) $2x^2 - 20x + 41 = -6$

$\left\{\frac{10 + \sqrt{6}}{2}, \frac{10 - \sqrt{6}}{2}\right\}$

12) $5n^2 + 10n - 34 = 6$

$\{2, -4\}$