Math 2 Name_____

Math 2 Practice Quiz 4.1 & 4.2

Period____

Find the value that completes the square and then rewrite as a perfect square.

1) $y^2 - 34y + \_\_$

2) $x^2 - 30x + \_\_$

3) $x^2 - 17x + \_\_$

4) $m^2 + 17m + \_\_$

Solve each equation by completing the square.

5) $v^2 + 4v - 38 = 6$

6) $r^2 + 5r + 15 = 5 - 3r$

7) $7n^2 + 25n - 82 = 6n + 5n^2$

8) $-27 = -3n^2 + 15n$

Math 2 Name_____

Math 2 Practice Quiz 4.1 & 4.2

Period____

Find the value that completes the square and then rewrite as a perfect square.

1) $y^2 - 34y + \_\_$

$289;\ (y - 17)^2$

2) $x^2 - 30x + \_\_$

$225;\ (x - 15)^2$

3) $x^2 - 17x + \_\_$

$\frac{289}{4};\ \left(x - \frac{17}{2}\right)^2$

4) $m^2 + 17m + \_\_$

$\frac{289}{4};\ \left(m + \frac{17}{2}\right)^2$

Solve each equation by completing the square.

5) $v^2 + 4v - 38 = 6$

$\{-2 + 4\sqrt{3}, -2 - 4\sqrt{3}\}$

6) $r^2 + 5r + 15 = 5 - 3r$

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

7) $7n^2 + 25n - 82 = 6n + 5n^2$

$\left\{\frac{-19 + 3\sqrt{113}}{4}, \frac{-19 - 3\sqrt{113}}{4}\right\}$

8) $-27 = -3n^2 + 15n$

$\left\{\frac{5 + \sqrt{61}}{2}, \frac{5 - \sqrt{61}}{2}\right\}$