

8.3 Intro to Complete the Square WS2

Date _____ Period _____

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

1) $r^2 - 24r + \underline{\hspace{1cm}}$

2) $n^2 + 10n + \underline{\hspace{1cm}}$

3) $z^2 + 12z + \underline{\hspace{1cm}}$

4) $z^2 + 32z + \underline{\hspace{1cm}}$

Solve each equation by completing the square.

5) $r^2 - 8r + 12 = 0$

6) $n^2 + 16n + 55 = 0$

7) $x^2 + 20x + 84 = 0$

8) $x^2 - 14x + 24 = 0$

9) $n^2 + 12n + 30 = 0$

10) $n^2 - 10n - 13 = 0$

11) $k^2 - 10k - 28 = 0$

12) $k^2 - 12k - 93 = 0$

13) $b^2 - 8b - 44 = 0$

14) $r^2 + 6r - 47 = 0$

15) $x^2 + 18x - 91 = 0$

16) $x^2 - 4x - 9 = 0$