

## Assignment

Solve each equation by completing the square. Leave answers as simplified radicals.

1)  $x^2 + 6x - 68 = 4$

2)  $x^2 + 18x + 63 = -2$

3)  $r^2 - 18r + 41 = -4$

4)  $k^2 - 8k - 1 = 8$

5)  $m^2 + 8m - 88 = -4$

6)  $v^2 - 16v + 40 = -8$

7)  $6n^2 - 12n - 43 = 5$

8)  $9b^2 - 18b - 17 = 10$

9)  $4p^2 + 16p - 45 = 3$

10)  $7x^2 + 14x - 17 = 4$

11)  $4v^2 + 8v - 56 = 8$

12)  $2r^2 - 16r + 14 = -2$

13)  $11a^2 - 6a - 77 = -10a + 10a^2$

14)  $x^2 - 14x - 70 = 7$

15)  $2x^2 + 8x - 23 = 4 + x^2$

16)  $12x^2 - 68 = -4 + 16x + 4x^2$

17)  $12m^2 - 23m + 21 = -3 - 7m + 10m^2$

18)  $x^2 + 16x = -x^2 + 72$