
Directions: Find the value of c that completes the square.

1) $x^2 + 6x + c$

2) $x^2 - 10x + c$

3) $x^2 - 7x + c$

4) $x^2 - \frac{1}{2}x + c$

5) $x^2 + 40x + c$

6) $x^2 + 28x + c$

Directions: Do the first 3 steps of completing the square. (Stop after you have factored & simplified).

7) $x^2 + 14x - 51 = 0$

8) $x^2 - 12x + 11 = 0$

9) $x^2 + 14x - 38 = 0$

10) $x^2 - 10x - 26 = 0$

11) $x^2 - 4x - 6 = 0$

12) $x^2 + 3x - 20 = 0$

Directions: Write the equation in standard form.

13) $x^2 + y^2 - 8x + 10y - 12 = 0$

14) $x^2 + y^2 - 5x + 11y - 6 = 0$

15) $x^2 + y^2 + 14x + 14y = 0$

16) $x^2 + y^2 - 6x + 20y - 18 = 0$

17) $x^2 + y^2 - 7x - 6.25 = 0$

18) $x^2 + y^2 + 10x + 16y + 3 = 0$

Directions: Find the center and radius of the circle.

19) $x^2 + y^2 + 18y + 17 = 0$

20) $x^2 + y^2 - 13x - 10y + 18.25 = 0$