Act. #65

Circles & Complete the Square

List: Center (h,k) & the radius (r)

1) $x^2 + y^2 = 16$

2) $(x - 2)^2 + (y - 3)^2 = 36$

3) $(x + 1)^2 + (y + 4)^2 = 8$

Part II: Write the Circle equation in standard form: $(Ax^2 + By^2 + Cx + Dy + E = 0)$

4) $C(3,2)$ $r = 4$

5) $C(-2,5)$ $r = \sqrt{3}$

Part III: Complete the Square: Find the Center (h,k) and the radius (r)

6) $x^2 + y^2 + 6x + 2y + 6 = 0$

7) $x^2 + y^2 + 8x + 4y + 16 = 0$

8) $x^2 + y^2 - 4x - 12y - 9 = 0$

9) $x^2 + y^2 + 12x - 6y - 4 = 0$

10) $x^2 + y^2 - 2x - 15 = 0$

11) $x^2 + y^2 - 6y - 7 = 0$

12) $x^2 + y^2 - 8y + 10x - 3 = 0$

13) $x^2 + y^2 + 12x - 6y + 2 = 0$

14) $x^2 + y^2 - 10y + 2x - 1 = 0$

15) $x^2 + y^2 + 4x - 2 = 0$

16) $x^2 + y^2 = 9$

17) $x^2 + y^2 - 2x + 14y - 2 = 0$

18) $x^2 + y^2 - 6x - 4y + 3 = 0$

19) $x^2 + 4x + y^2 - 5 = 0$

20) $x^2 + 8x + y^2 = 6$