Skills Practice: Converting General Form to Standard Form.

Directions: Write each circle in Standard Form by completing the square. Then state the center and radius.

1. $x^2 + y^2 + 6x - 6y - 31 = 0$

 $2. x^2 + y^2 + 2x + 10y - 10 = 0$

3. $x^2 + y^2 + 16x - 14y + 97 = 0$

 $4. x^2 + y^2 + 20x + 12y + 120 = 0$

5.
$$x^2 + y^2 - 22x + 4y + 89 = 0$$

6. $x^2 + y^2 - 16x - 6y + 48 = 0$

7.
$$x^2 + y^2 - 16x - 14y + 77 = 0$$

8. $x^2 + y^2 + 12x - 14y - 15 = 0$

Answers to Converting General Form to Standard Form Skills Practice:

1. $(x+3)^2 + (y-3)^2 = 49$ 2. $(x+1)^2 + (y+5)^2 = 36$ 3. $(x+8)^2 + (y-7)^2 = 16$ 4. $(x+10)^2 + (y+6)^2 = 16$ 5. $(x-11)^2 + (y+2)^2 = 36$ 6. $(x-8)^2 + (y-3)^2 = 25$ 7. $(x-8)^2 + (y-7)^2 = 36$ 8. $(x+6)^2 + (y-7)^2 = 100$