Standard From of a Circle

Write the standard form equation of each circle.

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

2) $8x + x^2 - 2y = 64 - y^2$

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

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

5) $x^2 + y^2 - 18x - 24y + 161 = 0$

6) $x^2 + y^2 + 16x - 28y + 224 = 0$

7) $x^2 + y^2 + 26x + 18y + 106 = 0$

8) $x^2 + y^2 + 4x + 28y + 175 = 0$

9) $x^2 + y^2 - 8x - 6y + 21 = 0$

10) $y^2 + 2x + x^2 = 24y - 120$

Use the information provided to write the standard form equation of each circle.

11) Center: $(-5, -6)$, Radius: 9 _____

12) Center: $(-12, -5)$, Area: 4π _____

13) Center: $(-11, -14)$, Area: 16π _____

14) Center: $(-3, 2)$, Area: 2π _____

15) Center: $(15, 14)$, Area: $2\pi\sqrt{15}$ _____

16) Center: $(-4, -8)$, Radius: 4 _____

17) Center: $(-6, -15)$, Radius: $\sqrt{5}$ _____

18) Center: $(-10, -15)$, Radius: 3 _____