(1)[3 points] State the center and radius of the circle:

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

(2)[2 points] State the center and radius of the circle:

$$\left(x - \frac{1}{2}\right)^2 + \left(y + \frac{3}{2}\right)^2 = 1$$

(3)[5 points] Put the equation of the circle into standard form and find the center and radius:

$$x^2 + y^2 - 20x + 16y + 128 = 0$$

(4)[5 points] Find the equation of the circle with endpoints of a diameter at $(-1, 4)$ and $(3, 8)$.