

Rewrite the equation in standard form for the circle.

$$1. \ x^2 + y^2 + 4y + 3 = 16$$

$$x^2 + y^2 + 4y + \boxed{4} = 13 + \boxed{4}$$

$(y+2)(y+2)$

$$\boxed{x^2 + (y+2)^2 = 17}$$

$$2. \ x^2 - 8x + y^2 + 2y = 5$$

$$x^2 - 8x + \boxed{16} + y^2 + 2y + \boxed{1} = 5 + \boxed{16} + \boxed{1}$$

$(x-4)(x-4) + (y+1)(y+1)$

$$\boxed{(x-4)^2 + (y+1)^2 = 22}$$