

## Warm-up 2: Circles

$$x^2 + y^2 - 4x + 4y - 1 = 0$$

$$x^2 - 4x + \underline{4} + y^2 + 4y + \underline{4} = 1 + \underline{4} + \underline{4}$$

$$(x-2)^2 + (y+2)^2 = 9$$

$$\text{center} = \underline{\underline{(2, -2)}}$$

$$\text{radius} = \underline{\underline{3}}$$

