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$$\begin{aligned} \diamond & .x^2 + y^2 + 2x + 6y + 6 = 0 \\ & .x^2 + y^2 + 2x + 6y = -6 \\ & .x^2 + y^2 + 2x + 6y = -6 \\ & (2/2)^2 = 1 \quad (6/2)^2 = 9 \\ & (x + 2x + 1) + (y^2 + 6y + 9) = -6 \\ & (x + 1)^2 + (y + 3)^2 = -6 \\ & (x + 1)^2 + (y + 3)^2 = -6 + 9 + 1 \\ & (x + 1)^2 + (y + 3)^2 = 4 \\ & (x + 1)^2 + (y + 3)^2 = \sqrt{4} \\ & (x + 1)^2 + (y + 3)^2 = 2 \end{aligned}$$

Center is at (-1, -3) and radius = 2

$$\begin{aligned} \diamond & x^2 + y^2 - 4x + 10y - 8 = 0 \\ & .x^2 + y^2 - 4x + 10y = 8 \\ & .x^2 - 4x + y^2 + 10y = 8 \\ & (-4/2)^2 = 4 \quad (10/2)^2 = 25 \\ & (x^2 - 4x + 4) + (y^2 + 10y + 25) = 8 \\ & (x - 2)^2 + (y + 5)^2 = 8 + 4 + 25 \\ & \text{Center at } (2, -5) \text{ radius} = \sqrt{37} \end{aligned}$$