

Practice Exercise For Lecture 13

- Q1. Convert the following equation into the standard form of circle and then identify the center and radius:

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

(Ans. Center: $(-2, 2)$, radius: $2\sqrt{2}$)

- Q2. Convert the following equation into the standard form of circle and then identify the center and radius:

$$x^2 + y^2 - 3y - 4 = 0$$

(Ans. Center: $(0, 3/2)$, radius: $5/2$)

- Q3. Write the equation of circle if center is at $(-1, 2)$ and diameter is 8.

(Ans. $x^2 + y^2 + 2x - 4y - 11 = 0$)