Circles - Class XI

Related Questions with Solutions

Questions

Quetion: 01

If one end of a diameter of the circle $3x^2 + 3y^2 - 9x + 6y + 5 = 0$ is $(1, 2)$, then the other end is

A. (2, 1)
B. (2, 4)
C. (2, – 4)
D. (– 4, 2)

Solutions

Solution: 01

Equation of circle is $3x^2 + 3y^2 - 9x + 6y + 5 = 0$

$\Rightarrow \quad x^2 + y^2 - 3x + 2y + \frac{5}{3} = 0$

Centre is $\left(\frac{3}{2}, -1\right)$ and one end of the diameter is $(1, 2)$.

Let the other end of the diameter be [x, y].

$\therefore \frac{x+1}{2} = \frac{3}{2}, \frac{y+2}{2} = -1$

$\Rightarrow \quad x = 2, y = -4$

$\therefore$ Coordinates of the other end of the diameter are $(2, -4)$.

Correct Options

Answer:01
Correct Options: C