

Circles - Class XI

Related Questions with Solutions

Questions

Question: 01

If $(-4, 3)$ and $(12, -1)$ are the ends of diameter of a circle which makes an intercept of 2λ on the y -axis, then λ is

- A. $\sqrt{13}$
 - B. $4\sqrt{13}$
 - C. $3\sqrt{13}$
 - D. $2\sqrt{13}$
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Solutions

Solution: 01

The circle is $[x + 4][x - 12] + [y - 3][y + 1] = 0$

Also, $x = 0 \Rightarrow y^2 - 2y - 51 = 0$

y intercept $= 2\sqrt{(1)^2 - (-51)}$

$(\because y - \text{intercept} = 2\sqrt{f^2 - c})$

$= 2\sqrt{52} = 4\sqrt{13}$

$\Rightarrow 2\lambda = 4\sqrt{13} \Rightarrow \lambda = 2\sqrt{13}$

Correct Options

Answer:01

Correct Options: D