

Circles - Class XI

Related Questions with Solutions

Questions

Question: 01

A circle passes through the points $(-1, 1)$, $(0, 6)$ and $(5, 5)$. The point(s) on this circle, the tangent(s) at which is/are parallel to the straight line joining the origin to its centre is/are:

- A. $(1, -5)$
 - B. $(5, 1)$
 - C. $(-5, -1)$
 - D. $(-1, 5)$
-
-

Solutions

Solution: 01

Note that D is right angled at $[0, 6]$. Centre of the circle is $[2, 3]$. Slope of the line joining origin to the centre is $3/2$. Take parametric equation of a line through $[2, 3]$ with

$$\tan \theta = -\frac{2}{3} \text{ as } \frac{x-2}{\cos \theta} = \frac{y-3}{\sin \theta} = \pm r \text{ where } r = \sqrt{13}$$

Now, Get the co-ordinates on the circle

Correct Options

Answer:01

Correct Options: B, D