Circles - Class XI

Past Year JEE Questions

Questions

Quetion: 01

If the two circles $(x-1)^2+(y-3)^2=r^2$ and $x^2+y^2-8x+2y+8=0$ intersect in two distinct point, then

A. $r>2$

B. $2<r<8$

C. $r<2$

D. $r=2$.

Solutions

Solution: 01

Explanation

$|r_1-r_2|<C_1C_2$ for intersection

$\Rightarrow r-3<5\Rightarrow r<8 \quad \ldots(1)$

and $r_1+r_2>C_1C_2$,

$r+3>5\Rightarrow r>2 \quad \ldots(2)$

From (1) and (2), $2<r<8$.