

$$r^2 = 6^2 + 8^2$$

$$P(0;0) \in \gamma$$

$$\|\vec{CP}\| = r$$

$$\left\| \begin{pmatrix} 0-6 \\ 0-(-8) \end{pmatrix} \right\| = r$$

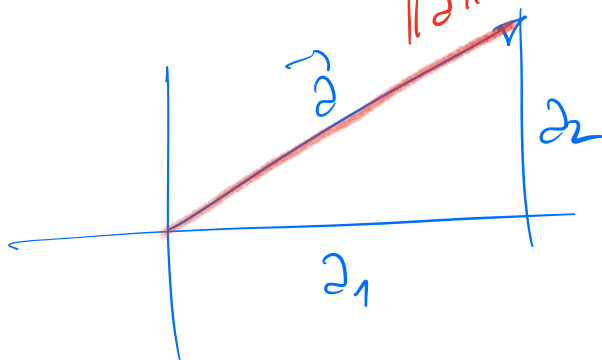
$$\sqrt{36+64} = r$$

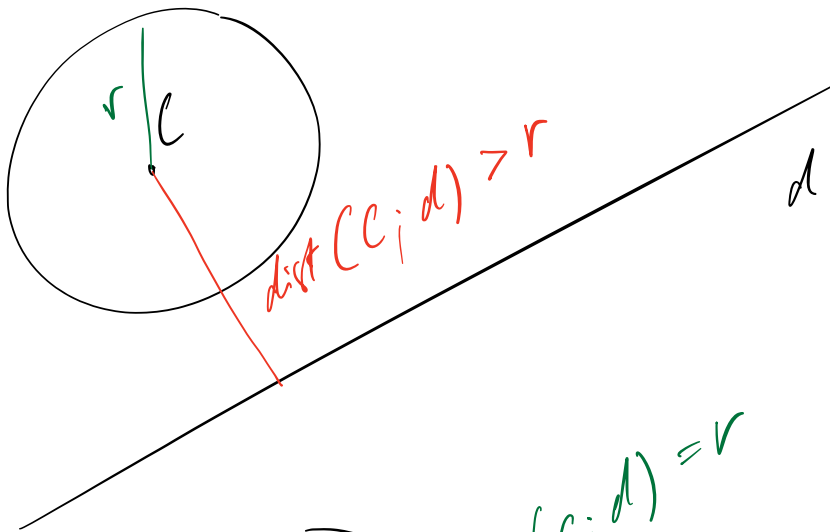
$$\left\| \begin{pmatrix} -6 \\ 8 \end{pmatrix} \right\| = \sqrt{(-6)^2 + (8)^2}$$

*definition*

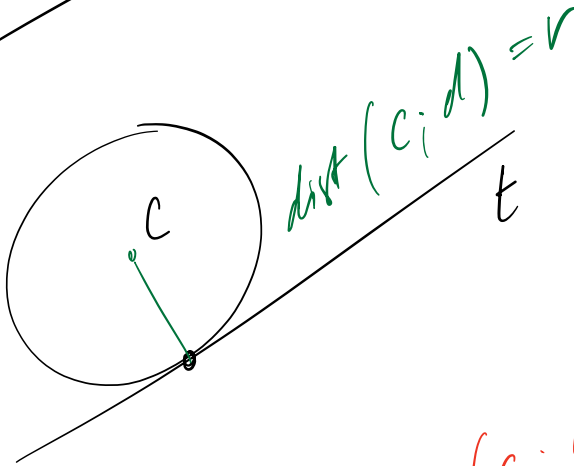
$$\left\| \begin{pmatrix} a_1 \\ a_2 \end{pmatrix} \right\| = \sqrt{a_1^2 + a_2^2}$$

$$\|\vec{a}\| = \sqrt{a_1^2 + a_2^2}$$

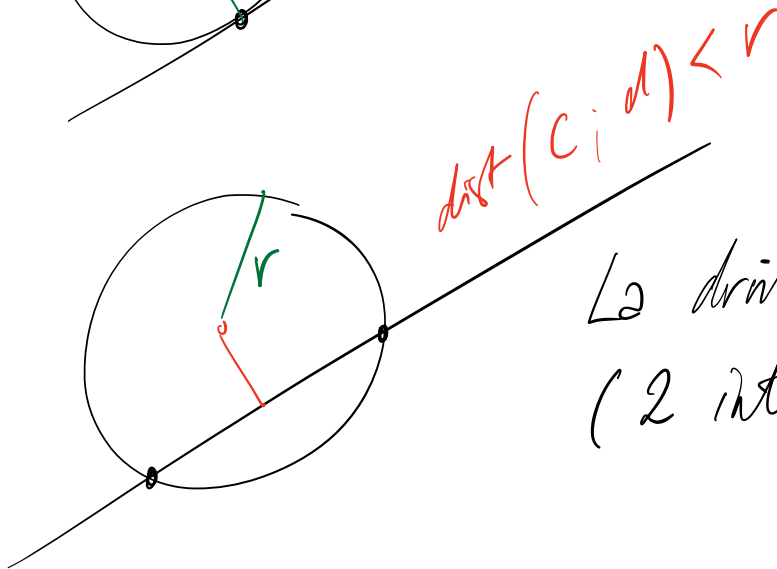




La droite est extérieure  
au cercle.  
(Pas d'intersection)

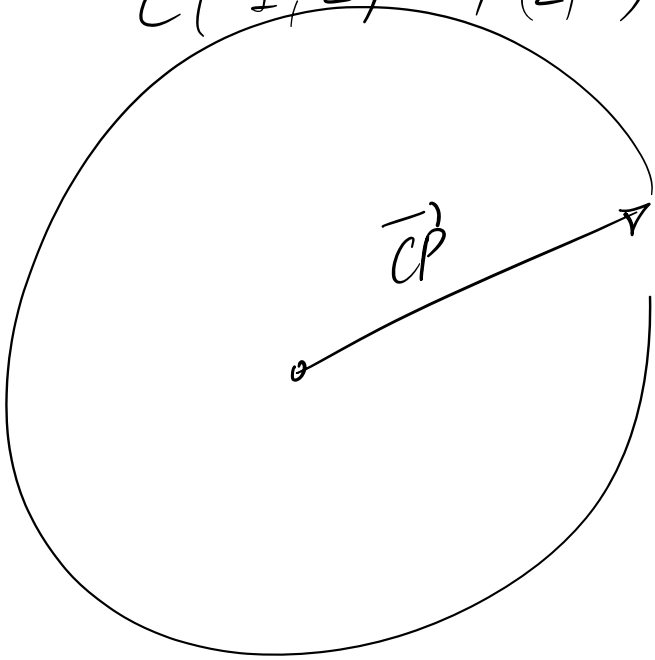


La droite est tangente



La droite est sécante  
(2 intersections)

$C(-1;2)$   $P(2;6)$



$$\vec{CP} = \begin{pmatrix} 2 - (-1) \\ 6 - 2 \end{pmatrix} = \begin{pmatrix} 3 \\ 4 \end{pmatrix}$$

$$\Rightarrow \|\vec{CP}\| = 5$$