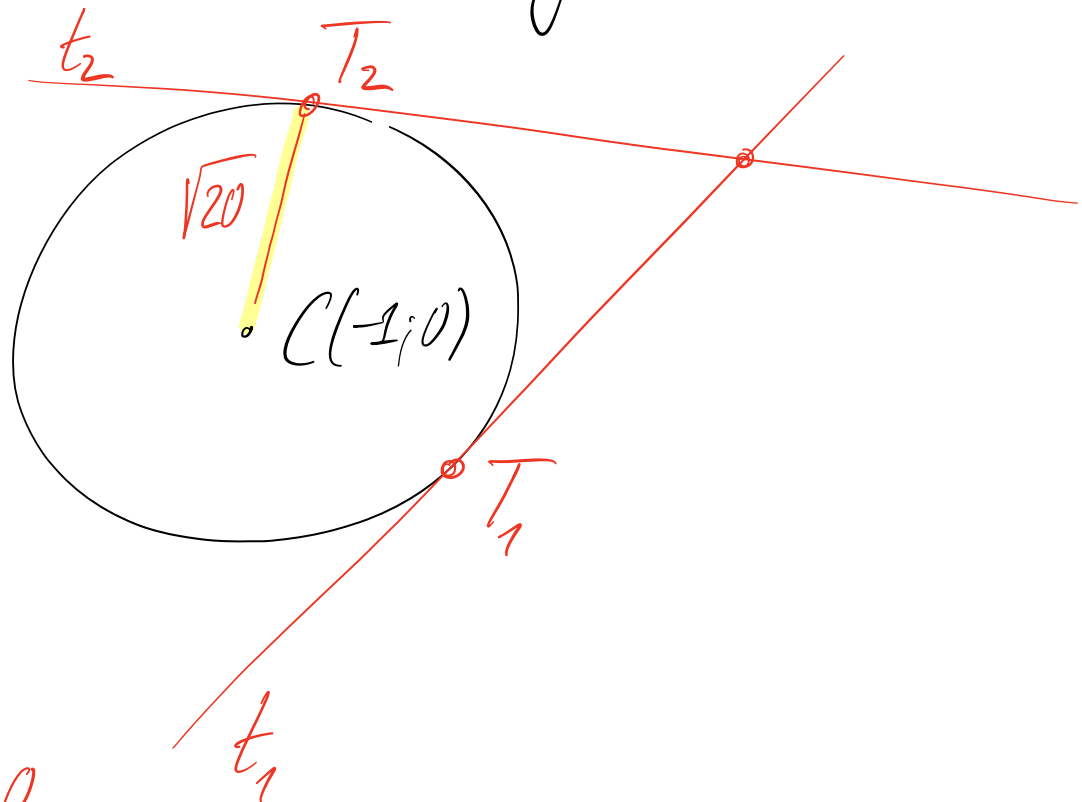


$$x^2 + y^2 = 19 - 2x \iff (x+1)^2 + (y-0)^2 = 20$$

$A(1;6)$



$$t_{1,2}: y = mx + h$$

$$mx - y + h = 0$$

$$\textcircled{1} \text{ } t \text{ passe por } (1;6): m \cdot 1 - 6 + h = 0$$

$$h = 6 - m$$

$$\Rightarrow t: mx - y + 6 - m = 0$$

$$\textcircled{2} \text{ } \text{dist}(C(-1;0), t) = \sqrt{20}$$

$$\Leftrightarrow \frac{|m(-1) - 0 + 6 - m|}{\sqrt{m^2 + 1}} = \sqrt{20}$$

$$\Leftrightarrow \frac{|-2m + 6|}{\sqrt{m^2 + 1}} = \sqrt{20}$$

$$\Leftrightarrow (-2m + 6)^2 = (m^2 + 1) \cdot 20$$

$$\Leftrightarrow 4m^2 - 24m + 36 = 20m^2 + 20$$

$$\Leftrightarrow 16m^2 + 24m - 16 = 0$$

$$\Leftrightarrow 2m^2 + 3m - 2 = 0$$

$$\Leftrightarrow m = \frac{-3 \pm \sqrt{9 + 16}}{4} < \begin{matrix} 1/2 \\ -2 \end{matrix}$$

On peut donc écrire:

$$t_1: y = \frac{1}{2}x + h = \frac{1}{2}x + 6 - \frac{1}{2}$$

$$y = \frac{1}{2}x + \frac{11}{2}$$

$$t_2: y = -2x + h = -2x + 6 - (-2)$$

$$y = -2x + 8$$