

$$x^2 y + y^2 = 6$$

$$(x^2 y)' + (y^2)' = 0$$

$$(x^2)' y + x^2 y' + 2y y' = 0$$

$$2xy + y'(x^2 + 2y) = 0$$

$$y' = \frac{-2xy}{x^2 + 2y}$$

$$\begin{aligned} a) \lim_{x \rightarrow \infty} \frac{2x^2 + 7}{x^2 + 5} \\ = \frac{2x^2}{x^2} = 2 \end{aligned}$$

$$b) \lim_{x \rightarrow 2} \frac{x^2 - 5}{x - 3} = \frac{4 - 5}{2 - 3} = \frac{-1}{-1} = 1$$

$$\lim_{x \rightarrow 0} \frac{e^{2x} - 1}{x^2} = \frac{e^0 - 1}{0^2} = \frac{0}{0} = 0$$

$$\text{R.H.} \frac{(e^{2x} - 1)'}{(x^2)'} = \frac{2e^{2x}}{2x} = \frac{e^{2x}}{x} \rightarrow \frac{1}{0} \rightarrow +\infty$$

$$\lim_{x \rightarrow 4} \frac{|x-4|}{x-4} = \frac{0}{0}$$

trajectoire * tir sans la trajectoire

$$x^4 y + y^2 = 5 - xy$$

$$\text{Impedif } y' = \frac{y + 2x + y^2}{x^4 + x}$$

$$\text{Prod: } y'_{(1,2)} = -6$$

$$A(1,2)$$

$$A': (1,2)$$