

Ex 3:

$$\frac{x^5 - y^5 + x - y}{5x^4 - 5y^4 \cdot y' + 1 - y'} = 2 \quad \Rightarrow y = \dots$$

$$5x^4 - 5y^4 \cdot y' + 1 - y' = 0$$

$$5x^4 + 1 - (5y^4 + 1)y' = 0$$

$$y' = \frac{5x^4 + 1}{5y^4 + 1}$$

$$y = y(x), \quad (y^5)' = 5y^4 y'$$

$$(0, -1)$$

$$k = y' \Big|_{\frac{1}{6}}$$

$$y = kx + u$$

$$u = -1$$

$$\frac{dy}{dx} = 0$$

$$y = f(x)$$

$$\left. \begin{array}{l} k = y' \Big|_{\frac{1}{6}} \\ y = kx + u \\ u = -1 \end{array} \right\} \Rightarrow y = \frac{1}{6}x - 1$$