



$$P = P_0 + t(P_1 - P_0)$$

$$= (x, y) = (x_0, y_0) + t(x_1 - x_0, y_1 - y_0)$$

$$= \begin{cases} x = x_0 + t(x_1 - x_0) \\ y = y_0 + t(y_1 - y_0) \end{cases}$$

$$\therefore x - x_0 = t(x_1 - x_0) \rightarrow t = \frac{x - x_0}{x_1 - x_0} \quad \therefore y = y_0 + t(y_1 - y_0)$$

$$y = y_0 + \left(\frac{x - x_0}{x_1 - x_0} \right) (y_1 - y_0)$$

$$y = y_0 + (x - x_0) \cdot \frac{y_1 - y_0}{x_1 - x_0} \rightarrow \text{Constante}$$

Sabemos estes valores quando temos $P_1 \neq P_0$

$$y = y_0 + a \cdot (x - x_0) \rightarrow y = \underbrace{y_0 + ax}_{\text{Constantes}} - \underbrace{ax_0}_{\text{Constantes}}$$

$$\therefore y = ax + b$$

