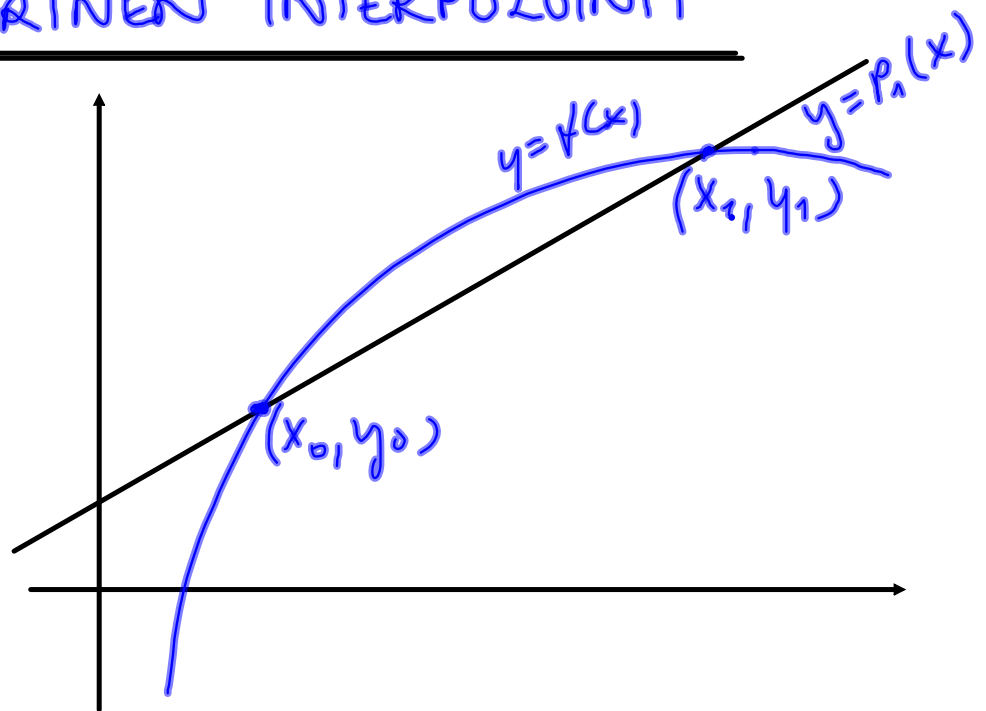


LINEAARINEN INTERPOLINTTI



esim
(501)

$$(x_0, y_0) = (1; 1,2)$$

$$(x_1, y_1) = (2; 1,8)$$

$$(x_2, y_2) = (3; 2,1)$$

[1,2]

[2,3]

$$y - y_0 = k(x - x_0)$$

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

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

MAVL
S. 43

$$\begin{cases} (x_0, y_0) = (1; 1,2) \\ (x_1, y_1) = (2; 1,8) \\ (x_2, y_2) = (3; 2,1) \end{cases}$$

a) $1 \leq x \leq 2$

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

$$y = \frac{1,8 - 1,2}{2 - 1} (x - 1) + 1,2$$

$$= \frac{0,6}{1} (x - 1) + 1,2$$

$$= 0,6x - 0,6 + 1,2$$

$$y = 0,6x + 0,6$$

~~$$= 0,6(x + 1)$$~~

✓

$$y = 0,6(x + 1)$$

$$2 \leq x \leq 3$$

$$y = \frac{2,1 - 1,8}{3 - 2} (x - 2) + 1,8$$

$$= 0,3(x - 2) + 1,8$$

$$= 0,3x - 0,6 + 1,8$$

$$= 0,3x + 1,2$$

$$y = 0,3(x + 4)$$

b) $f(1,1) = 0,6 \cdot 1,1 + 0,6$
 $= 1,26$

$f(2,6) = 0,3 \cdot 2,6 + 1,2$
 $= 1,98$

huom! oikea
funktion

Viikhe s.83