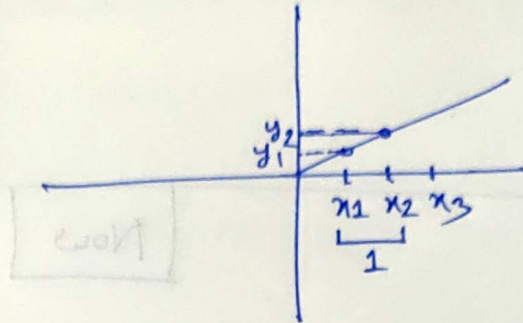


We increase  $x$  by 1,

$$\boxed{x = x + 1}$$

so, the difference between two consecutive  $x$  is 1

$$m = \frac{y_2 - y_1}{x_2 - x_1}$$



$$= \frac{y_2 - y_1}{1}$$

$$\Rightarrow y_2 - y_1 = m$$

$$\Rightarrow y_2 = y_1 + m \Rightarrow \text{next pixel } y \text{ value} = \text{previous pixel } y \text{ value} + m$$

$$m = \frac{y_2 - y_1}{x_2 - x_1}$$

$$m = \frac{1}{x_2 - x_1}$$

$$x_2 - x_1 = \frac{1}{m}$$

$$x_2 = x_1 + \frac{1}{m}$$

