

1- $V = \{0, 1\}$, pixels $p(3, 0)$ e $q(0, 3)$

$y \rightarrow$	1	2	3	
0	3	1	2	(1)
1	2	1	0	2
2	1	2	1	1
3	(1)	0	1	2
	0	2	3	1

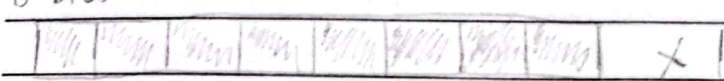
$$\begin{aligned}\text{Distância Euclidiana} &= \sqrt{(x_1 - x_2)^2 + (y_1 - y_2)^2} \\ &= \sqrt{(3 - 0)^2 + (0 - 3)^2} \\ &= \sqrt{18} \\ &\approx 3\end{aligned}$$

$$\begin{aligned}\text{Distância City-Block} &= |x_1 - x_2| + |y_1 - y_2| \\ &= |3 - 0| + |0 - 3| \\ &= 3 + 3 \\ &= 6\end{aligned}$$

$$\begin{aligned}\text{Distância Chessboard} &= \max\{|x_1 - x_2|, |y_1 - y_2|\} \\ &= \max\{|3 - 0|, |0 - 3|\} \\ &= \max\{3, 3\} \\ &= 3\end{aligned}$$

2-Bytes de armazenamento para imagens de 512×512 com 2 bits por pixel?

8 bits



7 bits



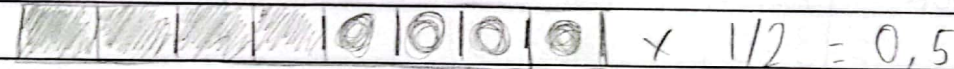
6 bits



5 bits



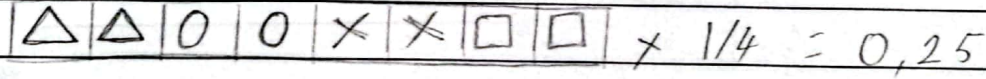
4 bits



3 bits



2 bits



1 bit



$$512 \times 512 \times 0,25 = \frac{65,536 \text{ bits}}{8} = 8,192 \text{ Bytes}$$

FORON: