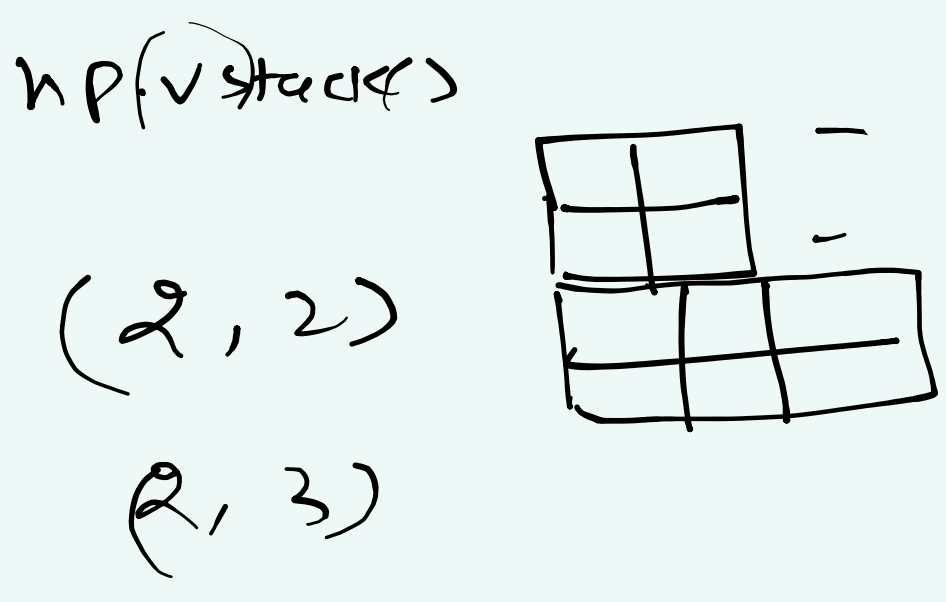
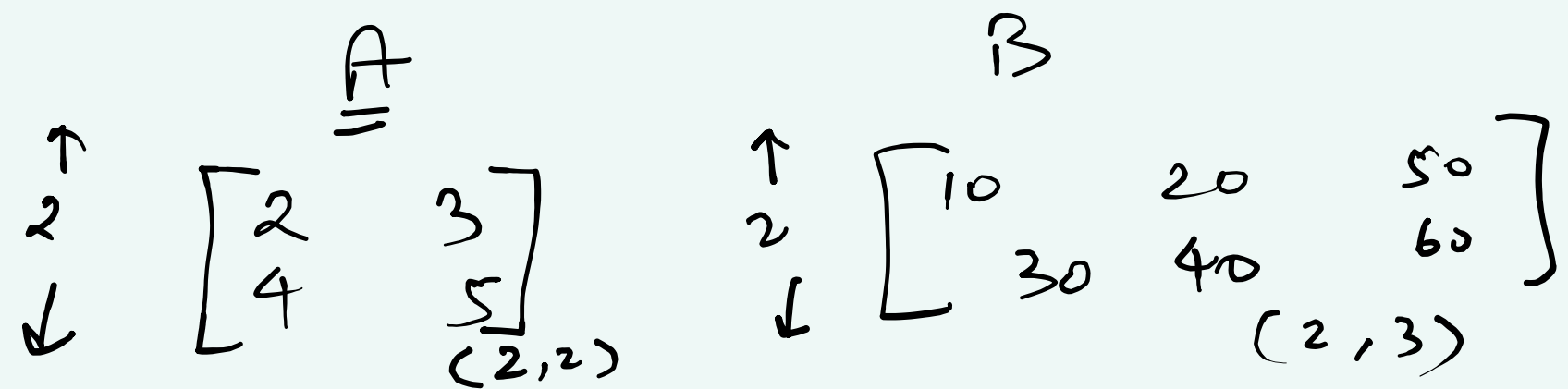


Agenda :

- ①     , sort,
- ② Broadcasting
- ③ axis = 0, 1  
uhnc
- ④ 3D → Image.

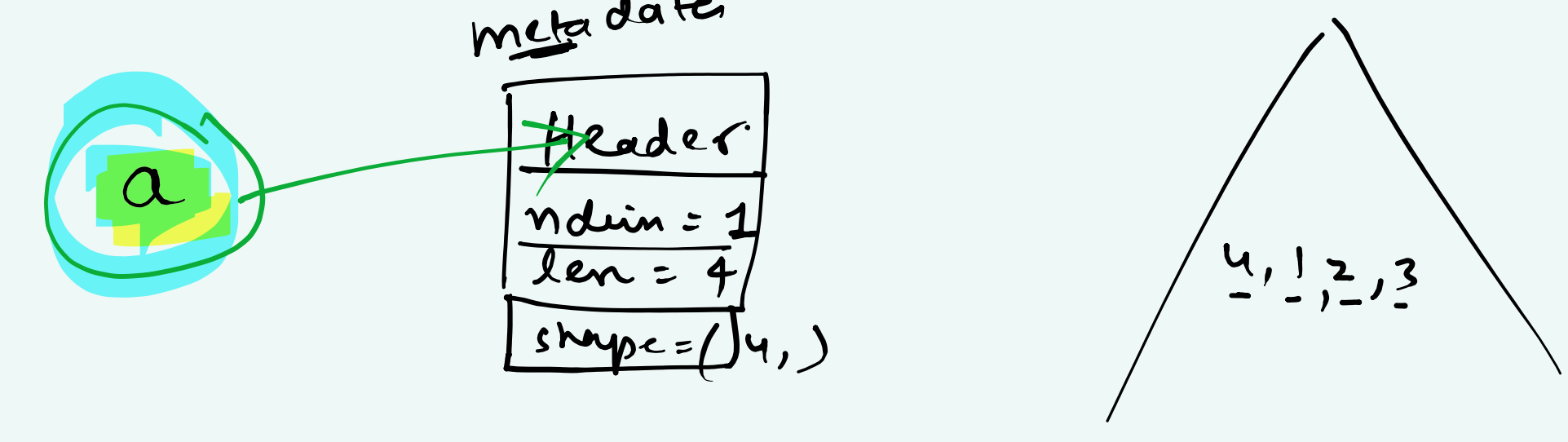
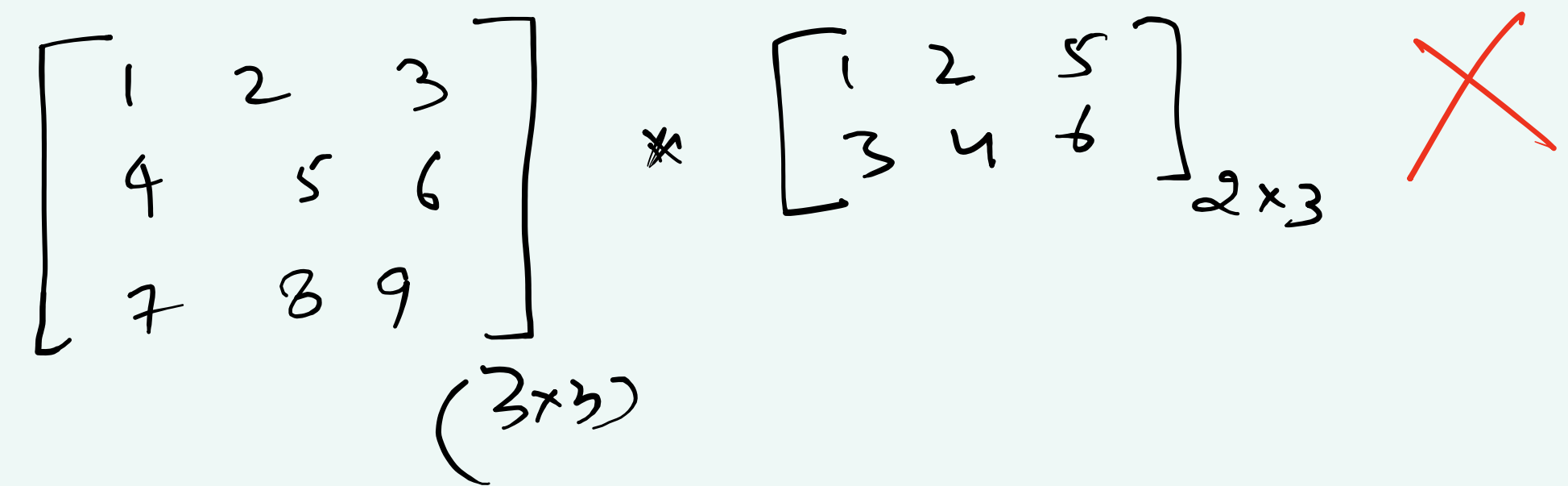
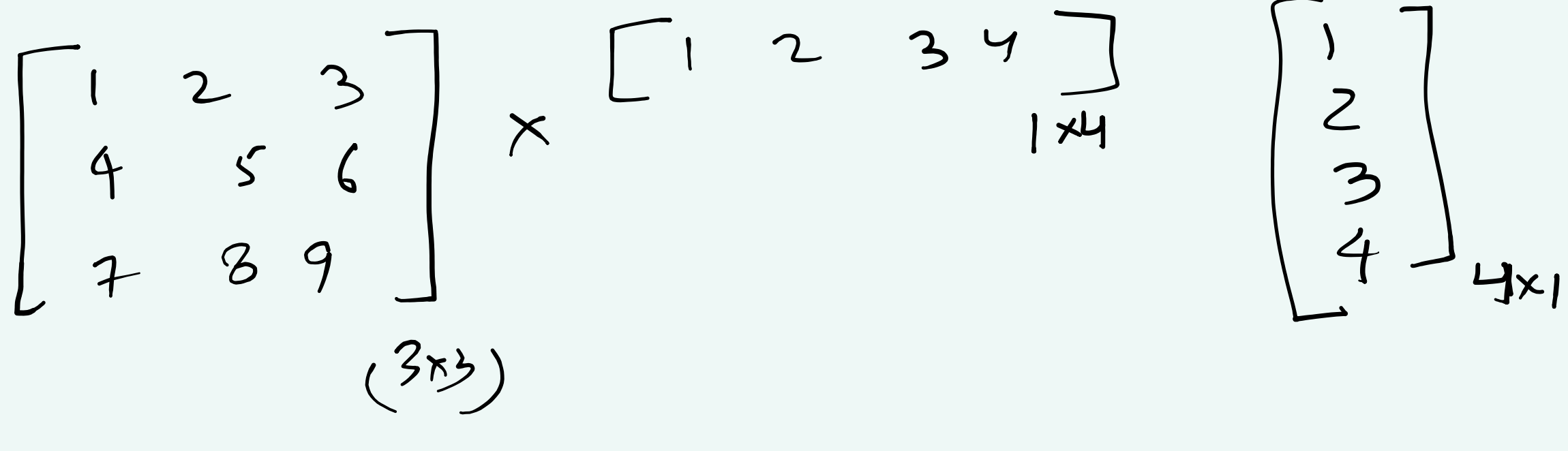
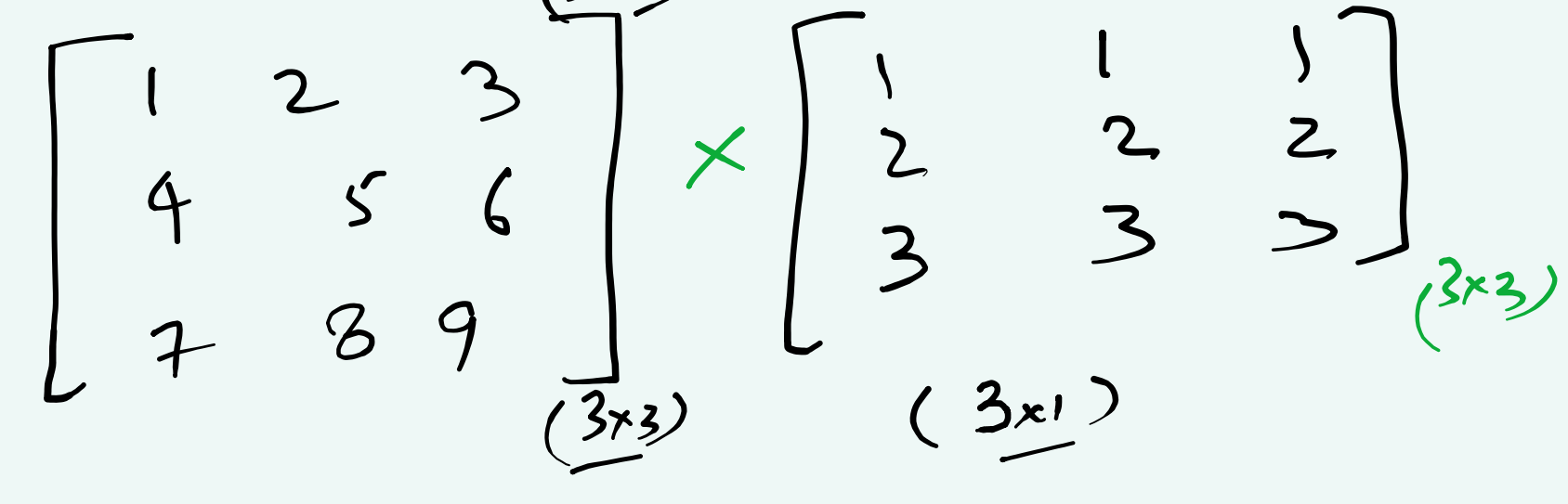
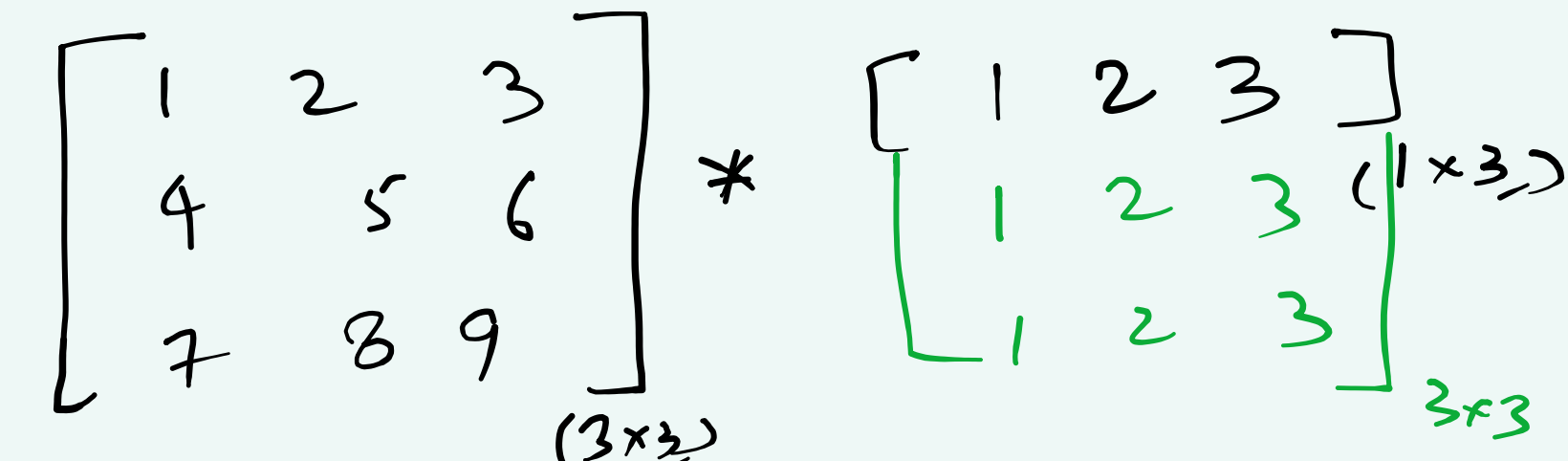
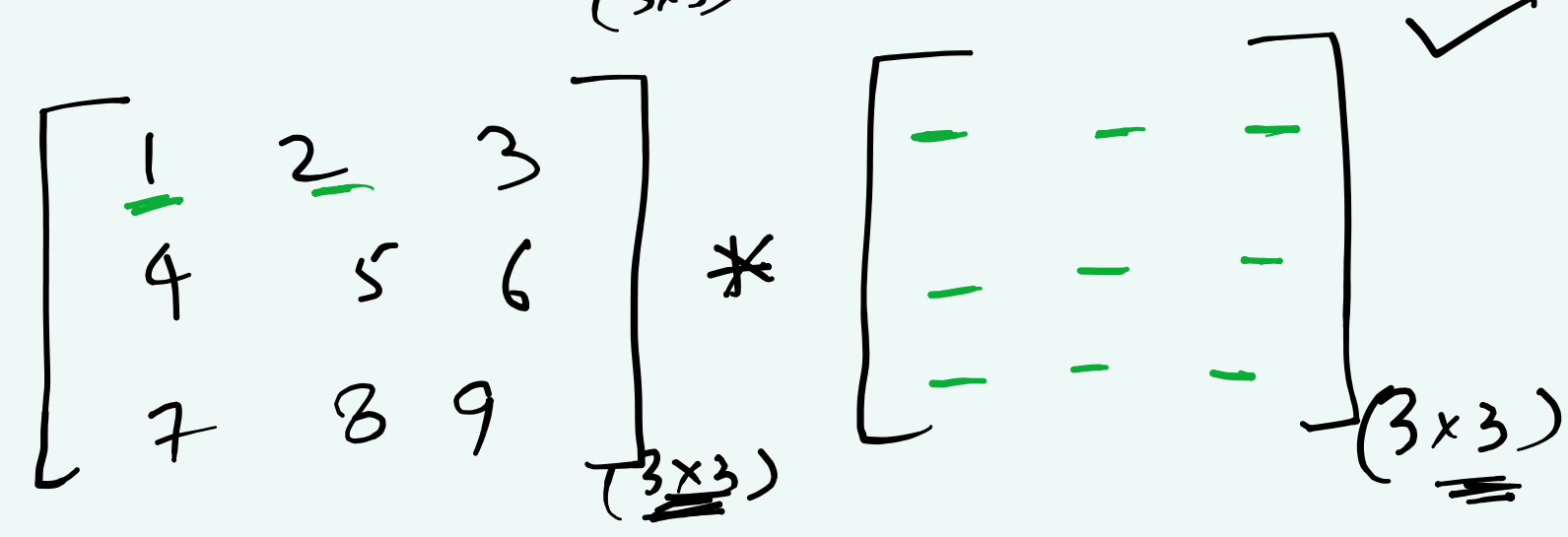
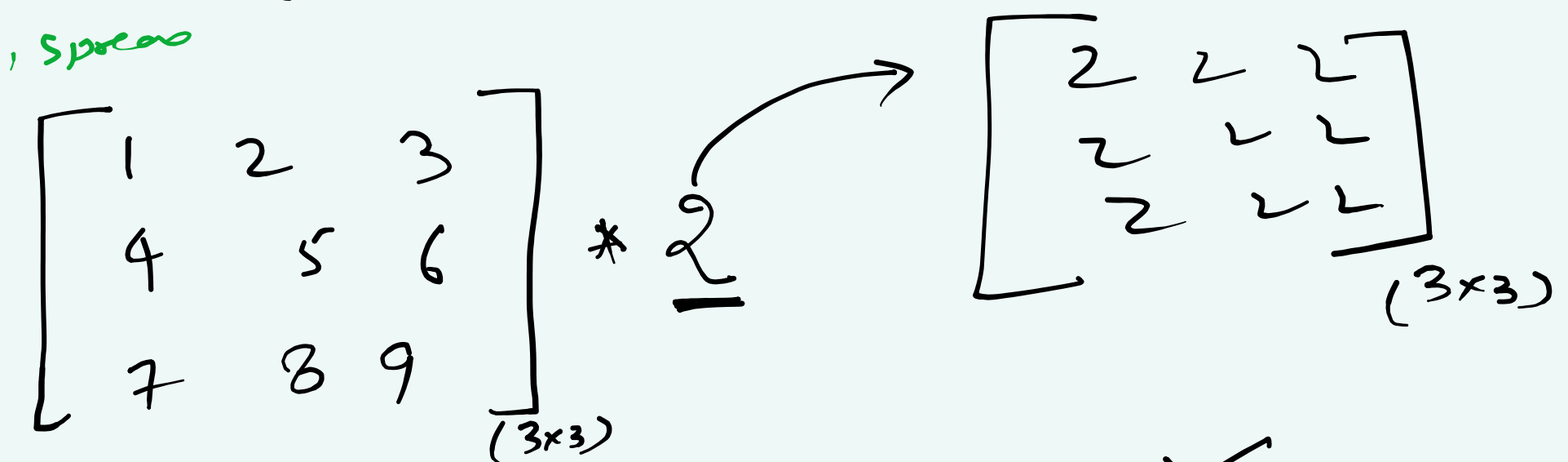
np.hstack( ) , np.vstack( ) , np.stack( )



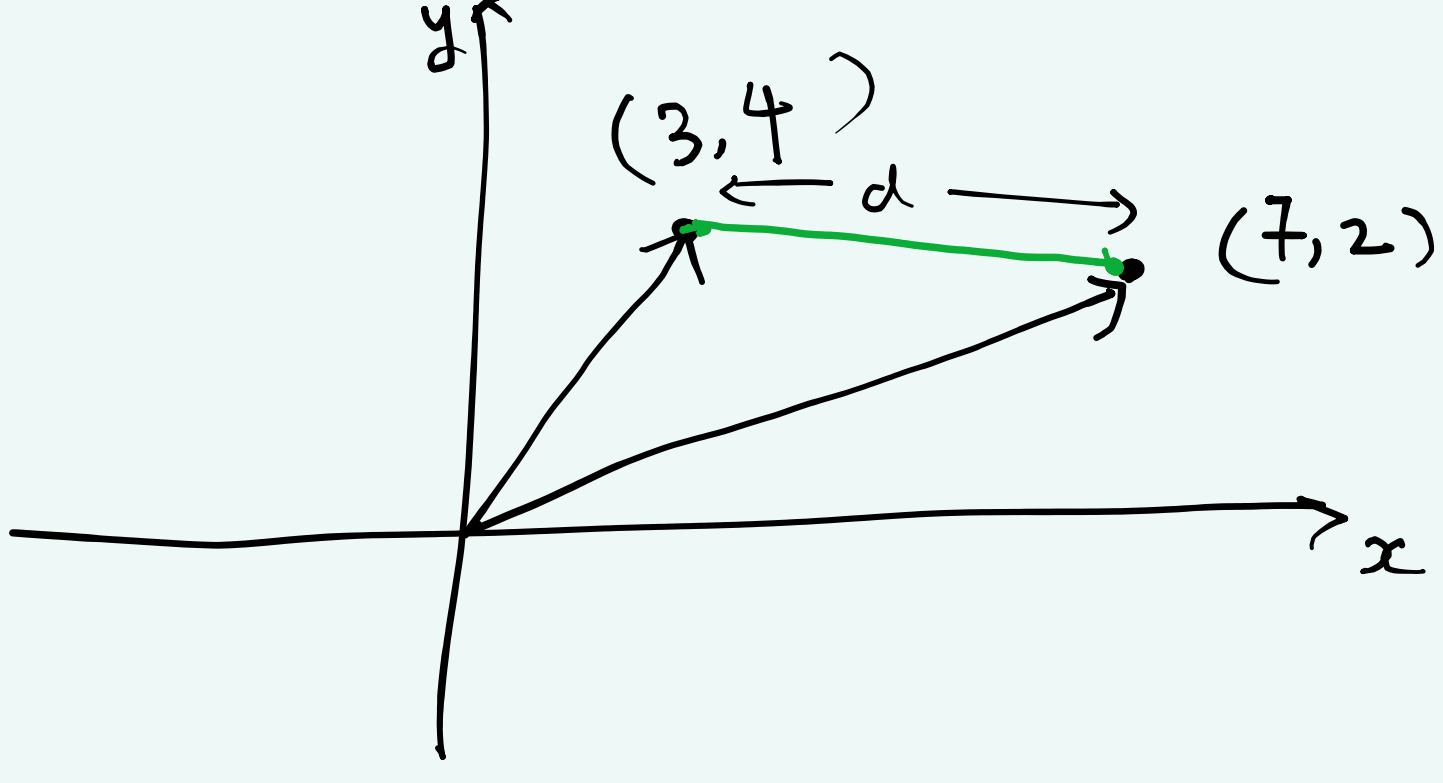
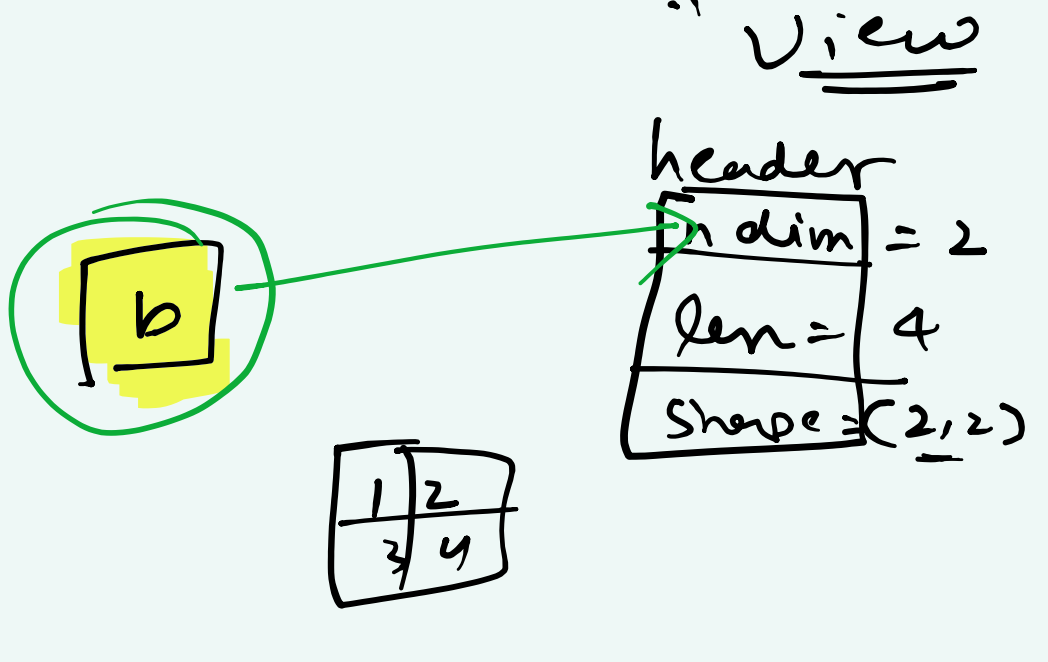
$C \rightarrow \begin{bmatrix} 2 & 3 & 10 & 20 & 50 \\ 4 & 5 & 30 & 40 & 60 \end{bmatrix}_{(2,5)}$

# Broadcasting

Repeat, Squeeze



a.reshape(2,2)



$P1 = \begin{bmatrix} 3 \\ 4 \\ 2 \end{bmatrix} \quad P2 = \begin{bmatrix} 7 \\ 2 \\ 5 \end{bmatrix}$

$\sqrt{(3-7)^2 + (4-2)^2}$

$\Rightarrow \sqrt{4^2 + 2^2}$

$P1 = \begin{bmatrix} 3 \\ 4 \end{bmatrix} - \begin{bmatrix} 7 \\ 2 \end{bmatrix}$

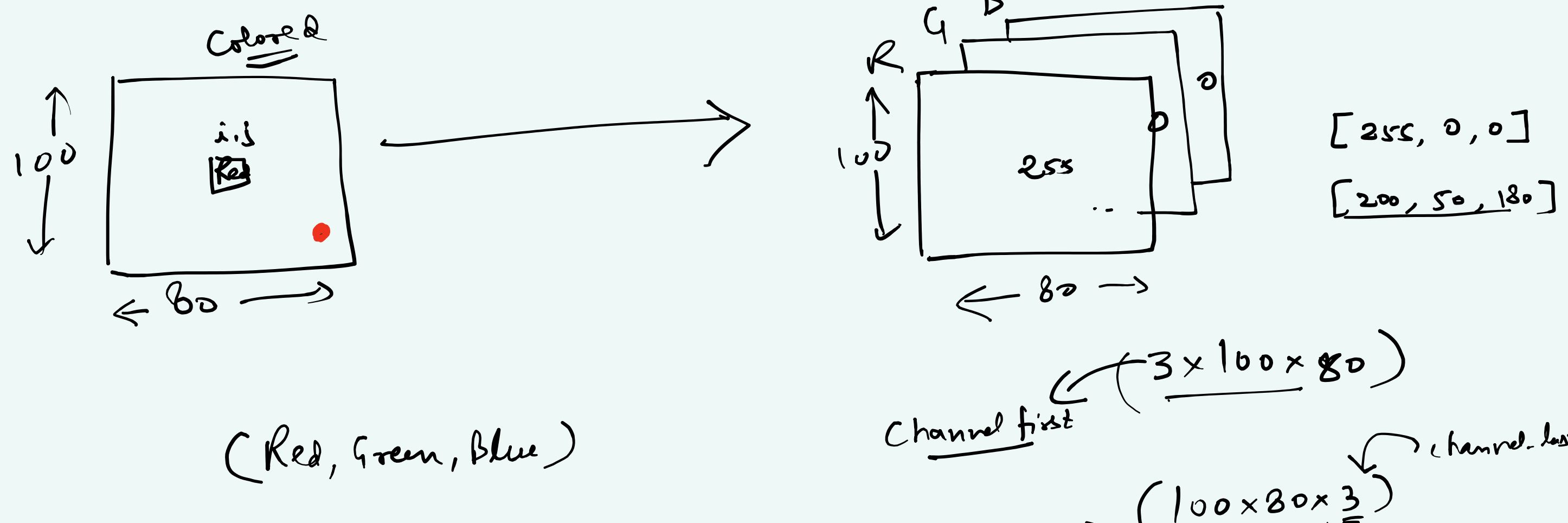
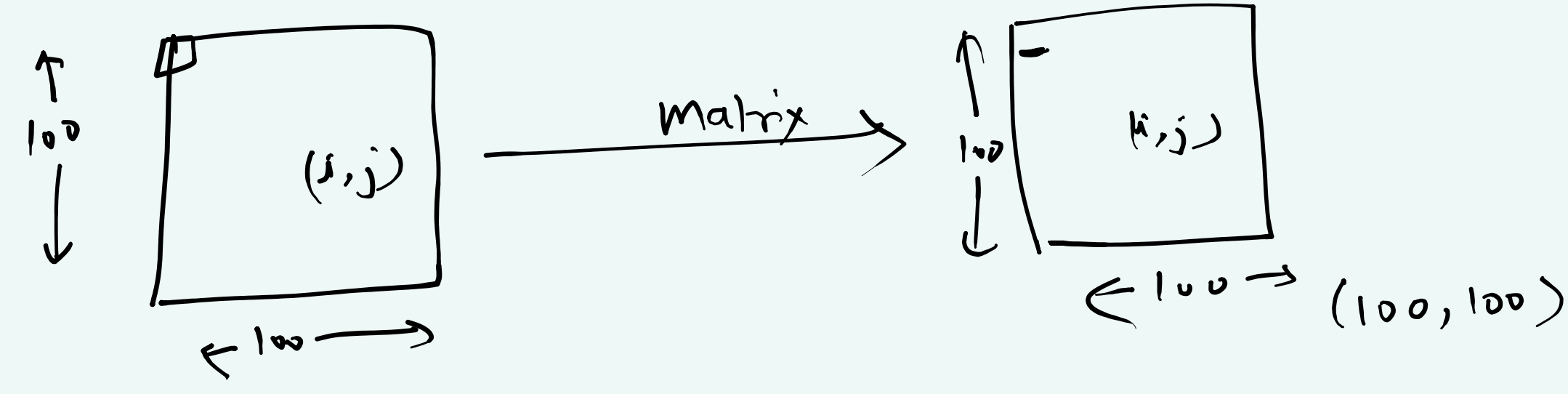
$\Rightarrow \begin{bmatrix} -4 \\ 2 \end{bmatrix}_{2 \times 2}$

$\Rightarrow \sqrt{16+4} \Rightarrow \sqrt{20} = 4.47$

$\Rightarrow \text{np.sum} \begin{bmatrix} 16 \\ 4 \end{bmatrix}$

$\Rightarrow 20$

0 - 255



(0,1)

0 255 1

255 255