

$$l = \left[ \left[ \textcolor{green}{[ ]}, \textcolor{blue}{[ [ ] ]} \right] \right]$$

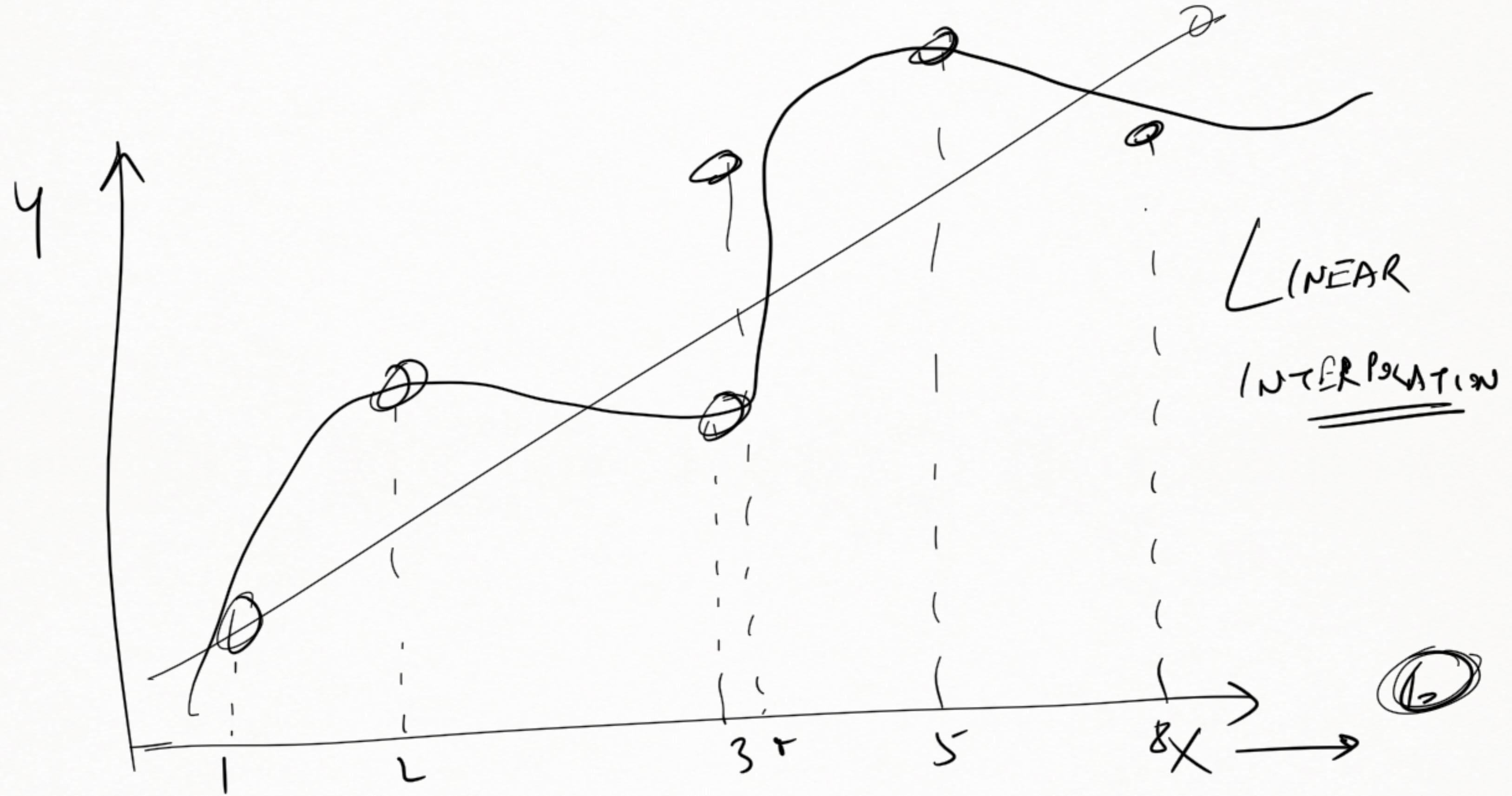
Diagram illustrating the structure of the list  $l$  (represented by a green bracket) and its elements (represented by blue brackets). The first element is a green bracket, and the second element is a blue bracket containing another blue bracket. A blue arrow points from the first element of the list to the first element of the second element's list.

$$l[0] = \left[ \textcolor{green}{[ ]}, \textcolor{blue}{[ [ ] ]} \right]$$

$$l[0][1] = \left[ \textcolor{blue}{[ ]} \right]$$

Multilevel Indexing

$$l[0][1][0] = \underline{\underline{[ ]}}$$



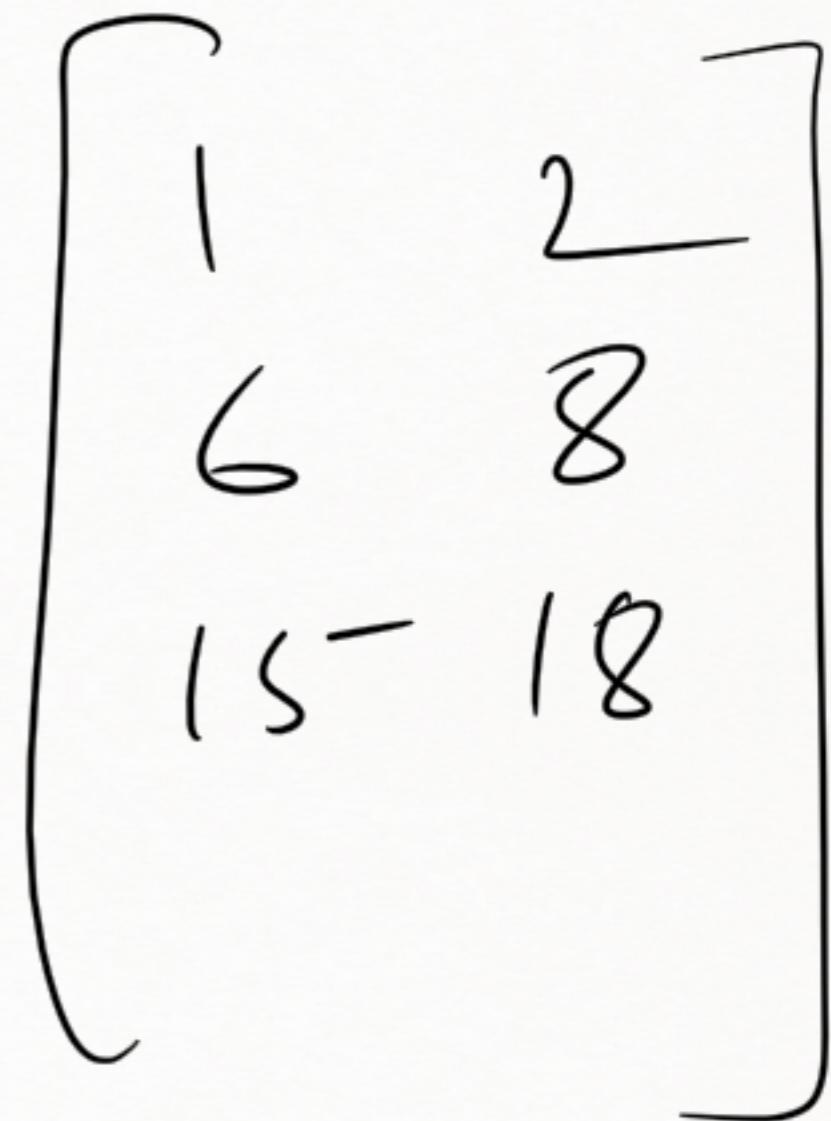
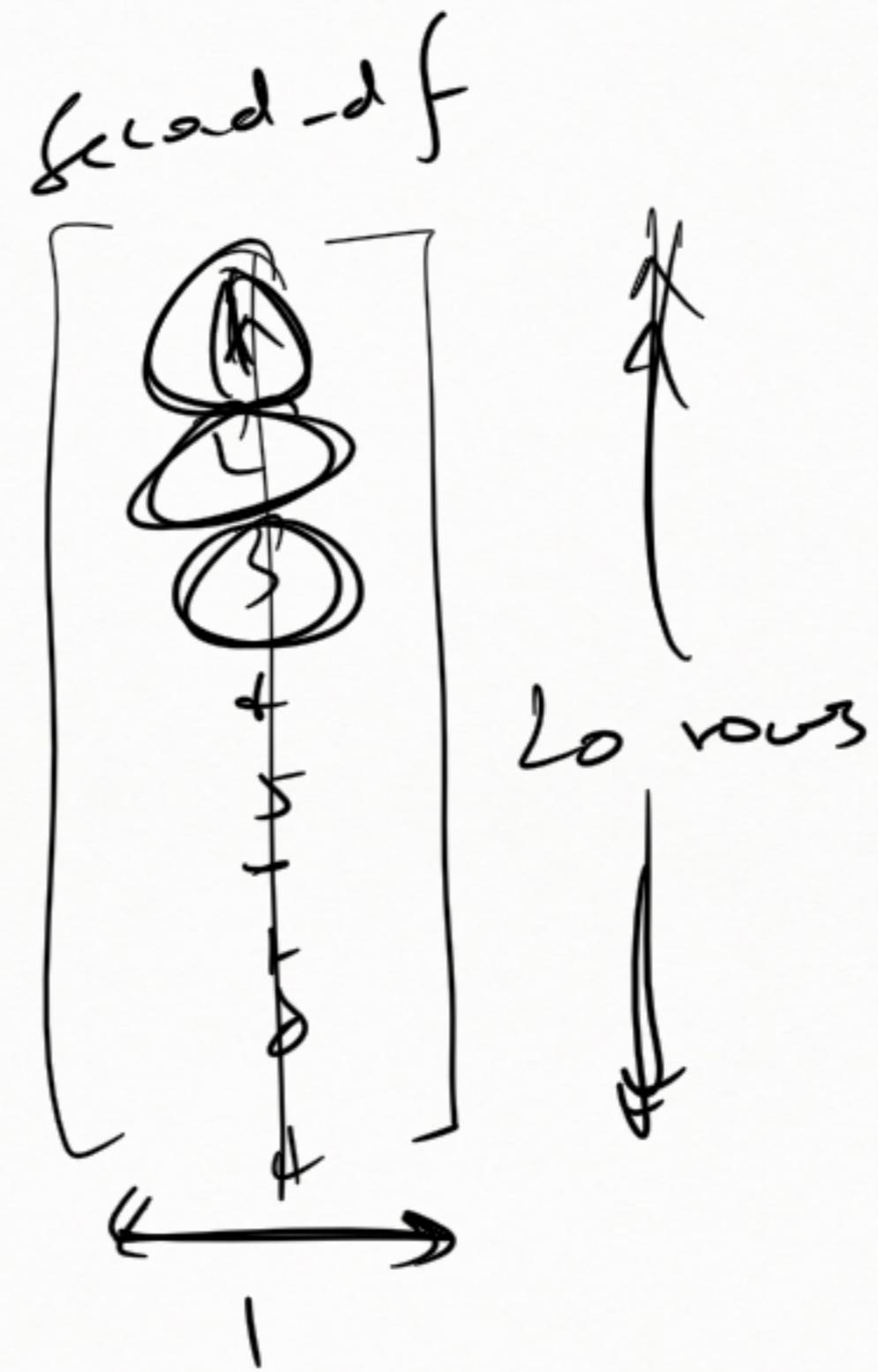
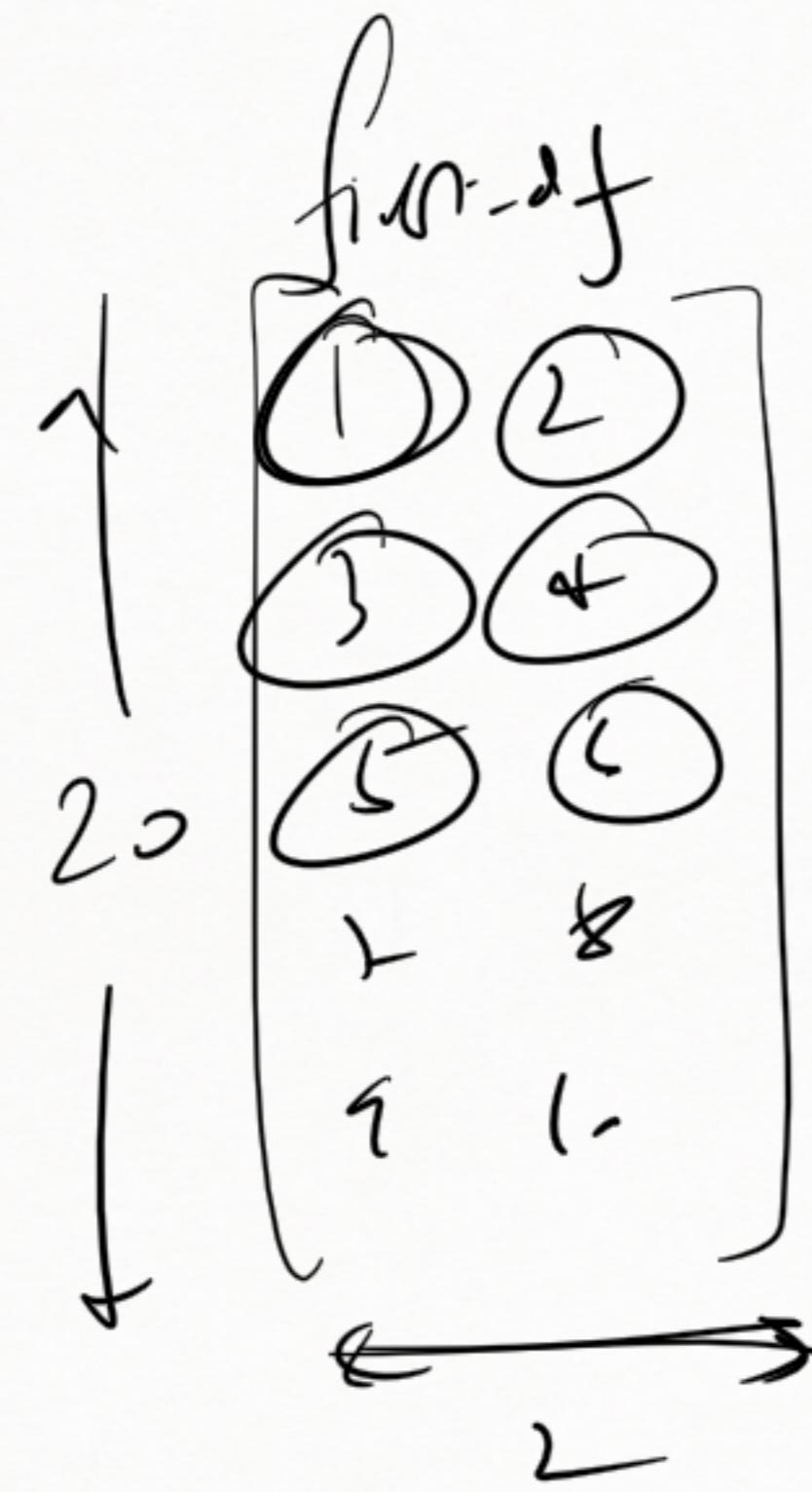
$$\left[ 2 \times \cancel{3} \right] \left[ \cancel{4} \times 3 \right] \quad \times$$

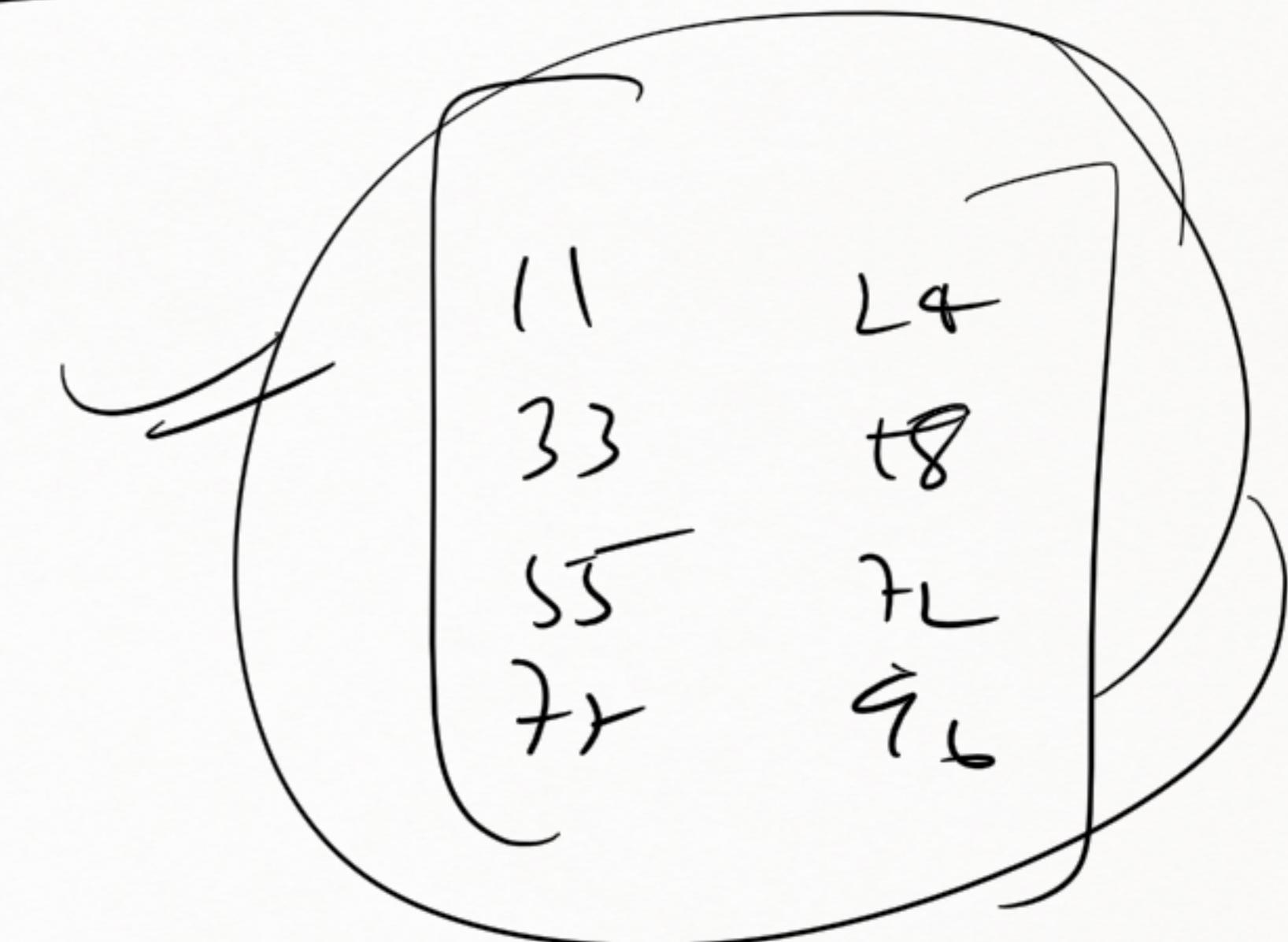
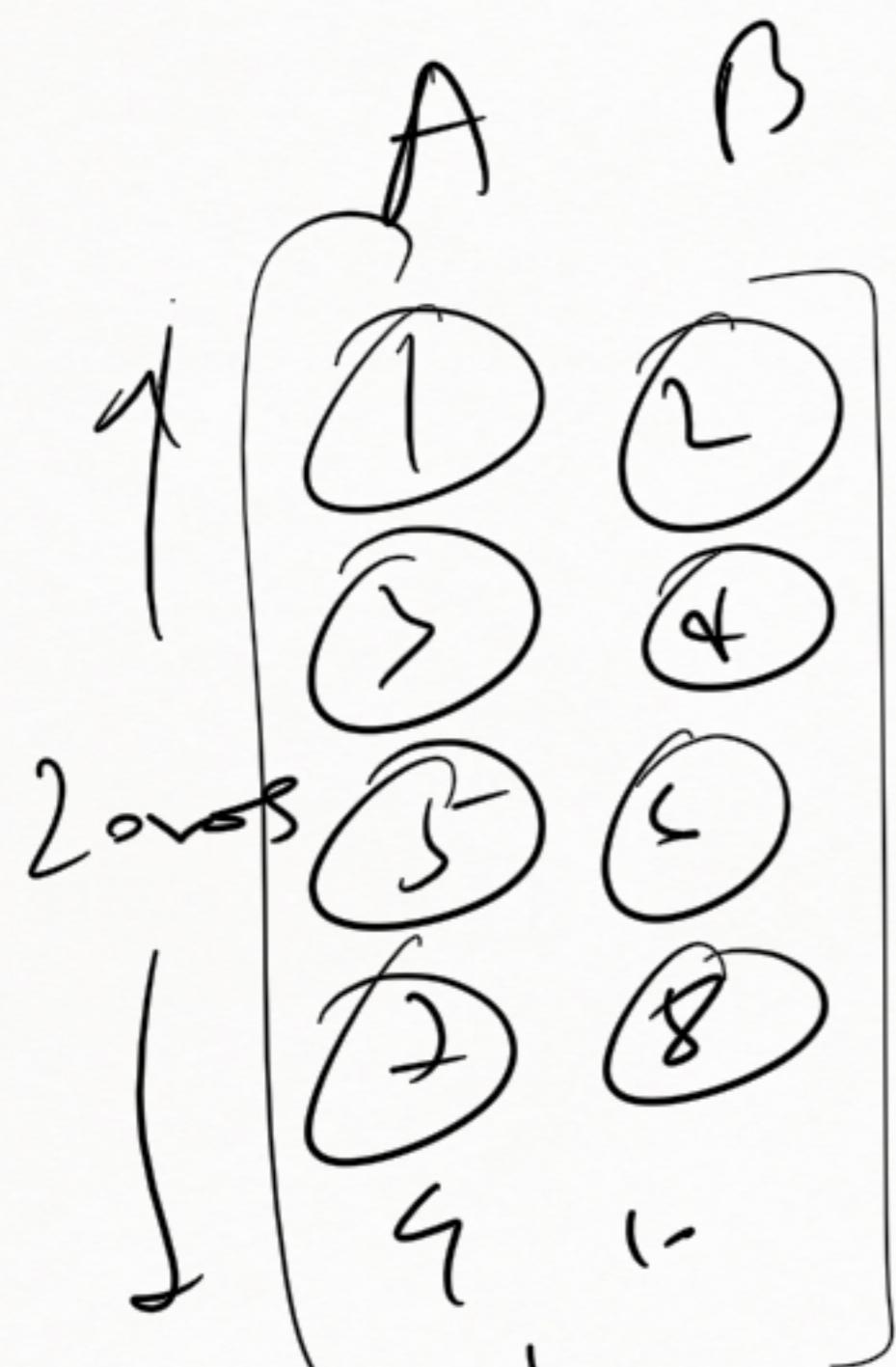
$$\left[ 2 \times 3 \right] \left[ 3 \times 4 \right] = \underline{\underline{2 \times 4}}$$

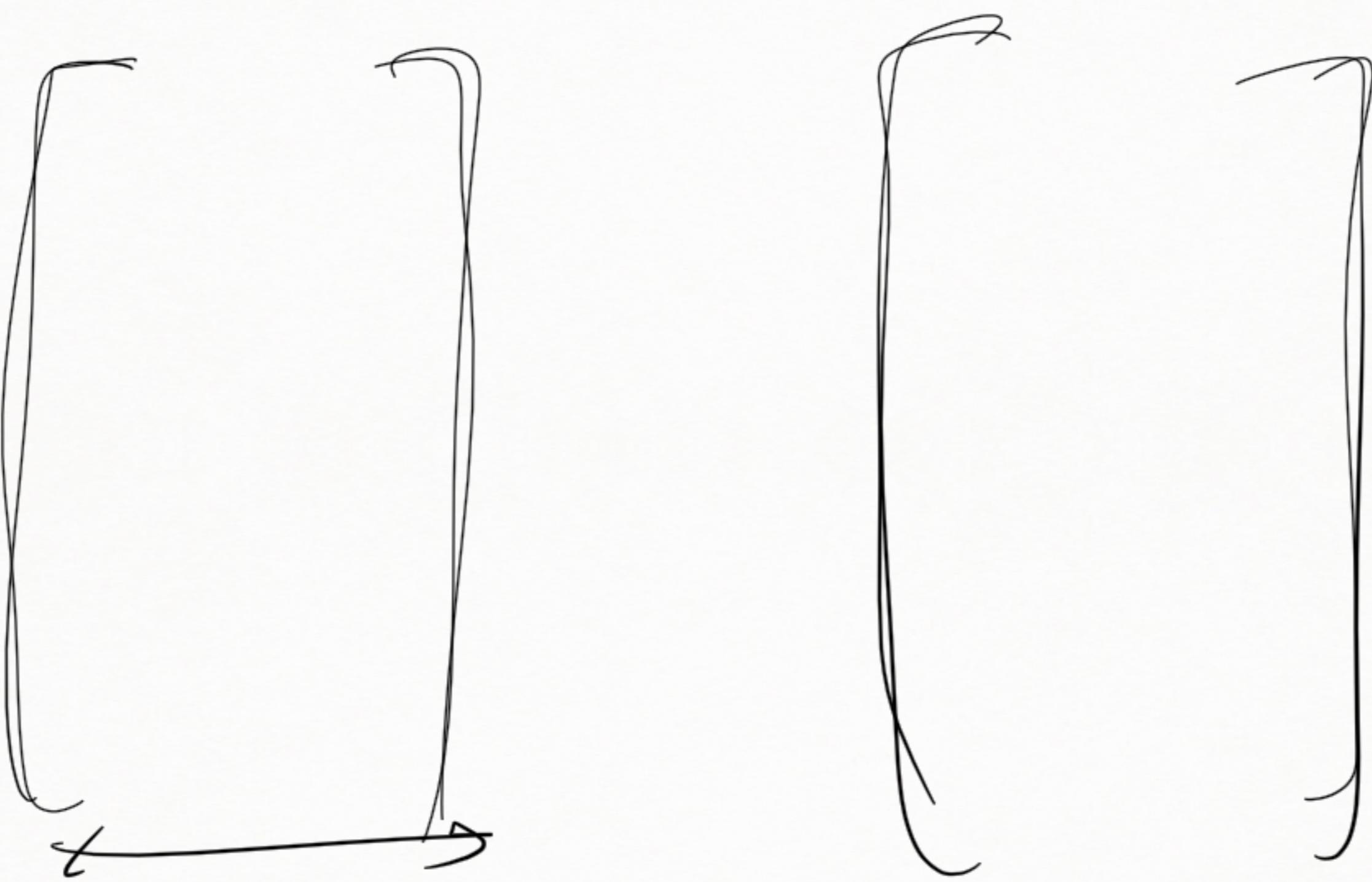
$$\begin{bmatrix} 2 \times 3 \end{bmatrix} \begin{bmatrix} 0 \times 3 \end{bmatrix} \rightarrow \begin{bmatrix} 0 \times 3 \end{bmatrix} \begin{bmatrix} 0 \end{bmatrix}$$

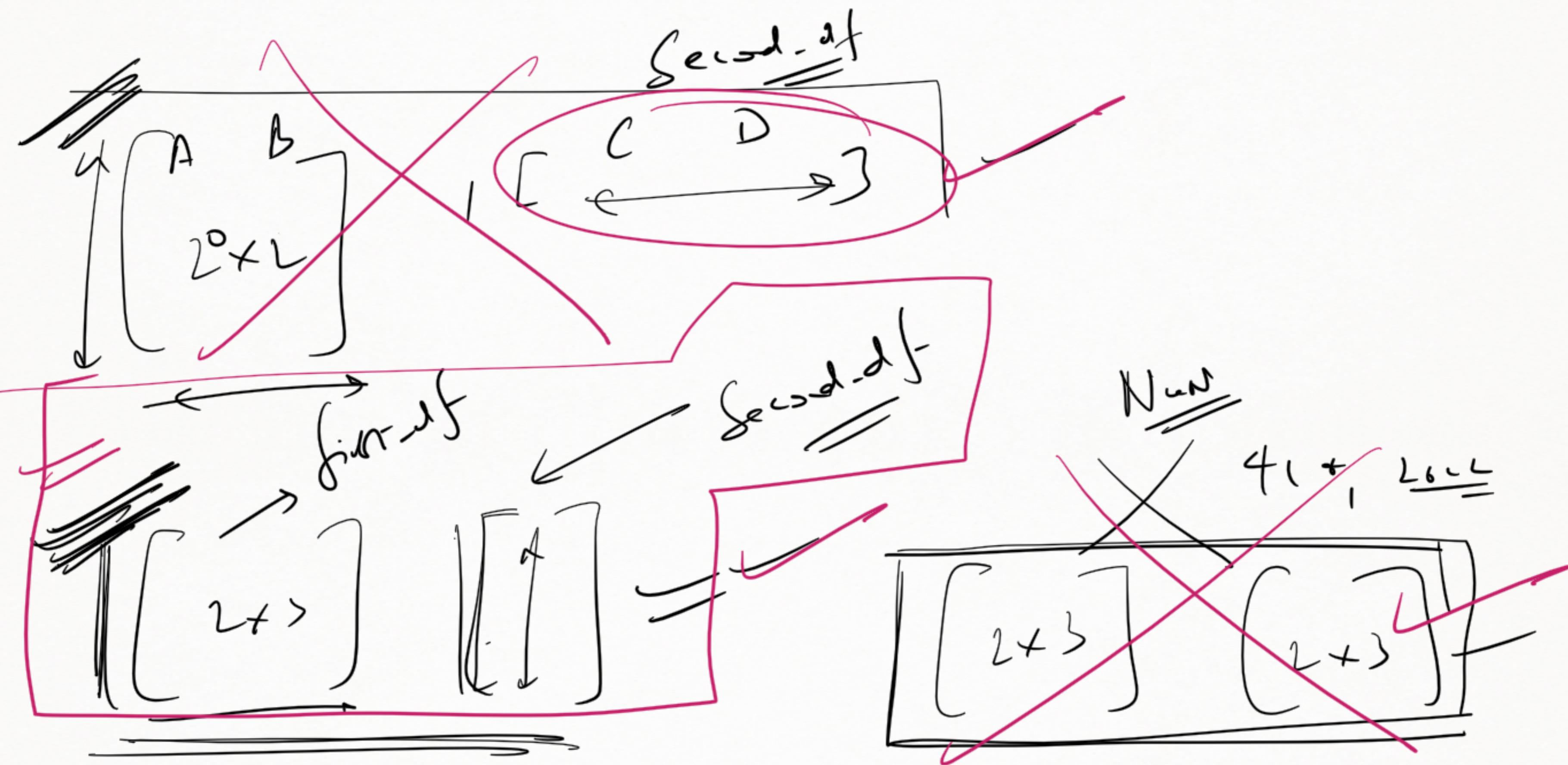
~~= Matrix Multiplication~~  
~~= Element by element Multiplication~~

$$\begin{bmatrix} 2 \times 3 \end{bmatrix} \begin{bmatrix} 2 \times 3 \end{bmatrix}$$

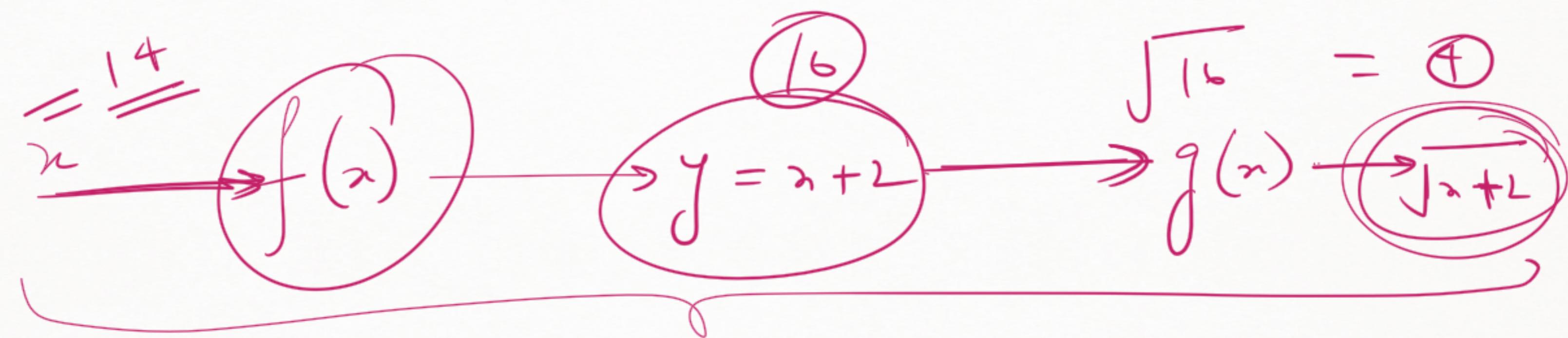








$$\sqrt{h+L}$$



Chaining of functions