Definição de Matriz

$m \times n \rightarrow$ # columns

$\rightarrow$ # rows

$2 \times 2 : A = \begin{pmatrix} a & b \\ d & c \end{pmatrix}$

$3 \times 2 : B = \begin{pmatrix} a & b \\ c & d \\ e & f \end{pmatrix}$

$2 \times 3 : C = \begin{pmatrix} a & b & c \\ d & e & f \end{pmatrix}$

Column Vectors:

$m \times 1 : X = \begin{pmatrix} a \\ b \\ \vdots \\ m \end{pmatrix}$

row vector:

$1 \times m = (1 \ldots . m)$

$m \times m : A = \begin{pmatrix} a_{11} & a_{12} & \cdots & a_{1m} \\ \vdots & & \vdots & \vdots \\ a_{m1} & \cdots & \cdots & a_{mm} \end{pmatrix}$