

Unit 1 Day 1 Notes - Matrices

Matrix $\begin{bmatrix} a & b & c \\ d & e & f \end{bmatrix}$ ← rows
 ← rows
 ↑ ↑ ↑
 columns

Dimensions - rows by columns
 $m \times n$

$$\begin{bmatrix} 1 & 4 \\ 6 & 8 \\ 9 & 7 \\ 2 & 0 \\ 4 & 3 \end{bmatrix}$$

5 rows
 2 columns

$$5 \times 2$$

Elements (entries) - a_{ij}
 ↑ rows ↑ columns

$$A = \begin{bmatrix} a_{11} & a_{12} & \cdots & a_{1n} \\ a_{21} & a_{22} & \cdots & a_{2n} \\ \vdots & \vdots & & \vdots \\ a_{m1} & a_{m2} & \cdots & a_{mn} \end{bmatrix}$$