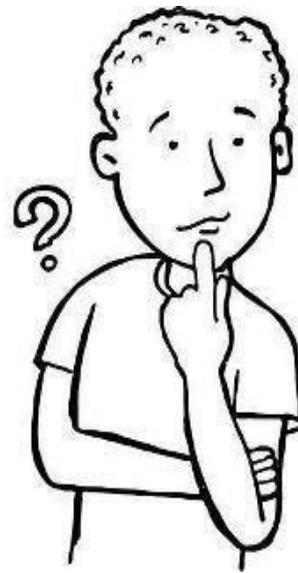


Matrix

By the end of this session you will:

- 1) Be introduced to the tutor and introduce yourself.
- 2) Be able to explore Matrix.





CAN YOU TELL ME?

What occurs
twice in a week,
once in a year
but never in a
day?

What are matrices?

It's the mode of representing data.

For example: Consider three people sunny, Ravi, Geeta . Now Sunny has 3 books & 2 pens, Ravi has 4 books ,8 pencils & 9 pens, Geeta has 1 book, 6 pencils, 4 pens.

We can represent this data as:.

Matrix example:

			
	3	0	2
	4	8	9
	1	6	4

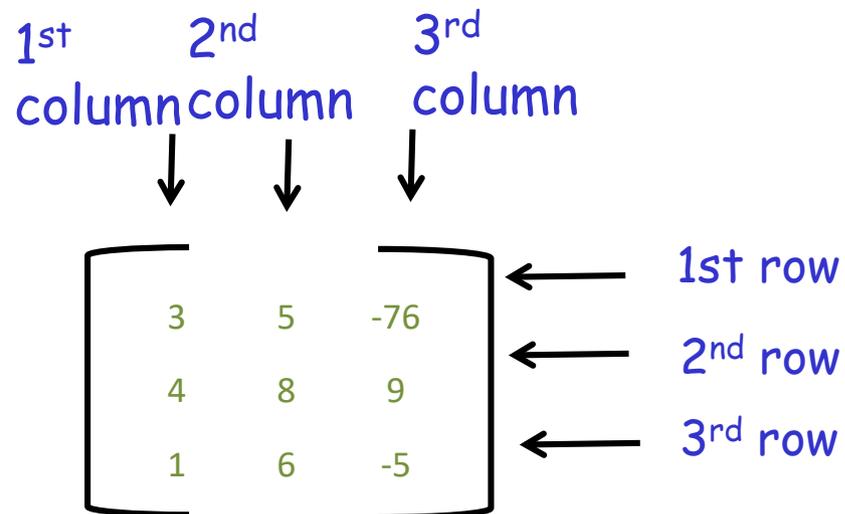
Matrices

- ❖ a **matrix** (plural **matrices**) is a rectangular array of numbers, symbols, or expressions, arranged in *rows* and *columns*.

$$\begin{bmatrix} 3 & 5 & -76 \\ 4 & 8 & 9 \\ 1 & 6 & -5 \end{bmatrix}$$

Notation of matrix

- A matrix is written within between () or [].
- Size of matrix is written: rows x column.



Order of Matrix

- Dimension of a matrix : no. of rows x no. of columns

$$\begin{bmatrix} 3 & 5 & -76 \\ 4 & 8 & 9 \\ 1 & 6 & -5 \end{bmatrix}$$

3x3 matrix or square matrix

$$\begin{bmatrix} 3 & 5 & -76 \\ 4 & 8 & 9 \end{bmatrix}$$

2x3 matrix

$$\begin{bmatrix} 3 \\ 4 \\ 1 \\ 1 \\ -9 \end{bmatrix}$$

5x1 matrix or row matrix





Learning Objectives Revisited

By the end of the session you are:

(a) Introduced to the tutor and have introduce yourself.

(b) Be able to explore matrix.