Key Takeaways



Transpose of a Matrix:

The matrix obtained by interchanging rows and columns of a matrix A is called Transpose of matrix A.

Let $A = \begin{bmatrix} a_{ij} \end{bmatrix}_{m \times n}$, then its transpose is denoted by A' or $A^T = \begin{bmatrix} b_{ij} \end{bmatrix}_{n \times m}$, where $b_{ij} = a_{ji}$, $\forall i \& j$

Example:

$$A = \begin{pmatrix} z & a & x \\ c & e & f \end{pmatrix}_{2 \times 3}$$

Its transpose is:
$$A' = \begin{pmatrix} z & c \\ a & e \\ x & f \end{pmatrix}_{3 \times 2}$$