

Name

M.5/

No.



Matrix

1. Match the following :

Matrix

Dimension

1) $\begin{bmatrix} 10 \\ -12 \end{bmatrix}$



● 1×2

2) $\begin{bmatrix} 1 & 0 \\ -3 & 2 \\ 6 & -4 \end{bmatrix}$



● 2×2

3) $[1 \quad -2]$



● 2×3

4) $\begin{bmatrix} 1 & 3 & 2 \\ 6 & -2 & 5 \end{bmatrix}$



● 2×1

5) $\begin{bmatrix} 2 & 0 \\ 3 & 1 \end{bmatrix}$



● 3×2

2. Determine type of the following matrix

Square Matrix

Diagonal Matrix

Zero Matrix

Identity Matrix

Row Matrix

Column Matrix

Upper triangle
MatrixLower triangle
Matrix

1) $\begin{bmatrix} 9 & 2 \\ 0 & 1 \end{bmatrix}$

2) $\begin{bmatrix} 1 & 0 \\ 0 & 1 \end{bmatrix}$

3) $[1 \quad -2 \quad 9]$

4) $\begin{bmatrix} 0 & 0 & 0 \\ 0 & 0 & 0 \end{bmatrix}$

5) $\begin{bmatrix} 1 & 0 & 0 \\ 0 & 2 & 0 \\ 0 & 0 & 3 \end{bmatrix}$

6) $\begin{bmatrix} 1 & 0 & 0 \\ 6 & -2 & 0 \\ 4 & 5 & 4 \end{bmatrix}$

7) $\begin{bmatrix} 9 \\ 8 \\ -3 \end{bmatrix}$

8) $\begin{bmatrix} 1 & 2 & 3 \\ 6 & -2 & 0 \\ 5 & 0 & 4 \end{bmatrix}$



3. Given $A = \begin{bmatrix} 2 & 0 & 3 \\ -1 & 4 & 6 \end{bmatrix}$ find:

1) $a_{23} =$ 2) $a_{12} =$

3) $a_{21} =$

4) $3 \cdot a_{22} - a_{11} =$

5) $a_{13} + 2 \cdot a_{21} =$



4. Construct matrix $A = [a_{ij}]_{3 \times 3}$ whose elements are given by

$$a_{ij} = |i - 2j|$$

$$A = \begin{bmatrix} \square & \square & \square \\ \square & \square & \square \\ \square & \square & \square \end{bmatrix}$$

