

Class – 12<sup>th</sup>

Chapter-3

Subject Maths

Worksheet-06

Matrix

1. Given  $A = \begin{bmatrix} \sqrt{3} & 1 & -1 \\ 2 & 3 & 0 \end{bmatrix}$  and  $B = \begin{bmatrix} 2 & \sqrt{5} & 1 \\ -2 & 3 & \frac{1}{2} \end{bmatrix}$ , find  $A + B$

2. If  $A = \begin{bmatrix} 5 & 2 & 7 \\ 4 & 8 & 1 \end{bmatrix}$  and  $B = \begin{bmatrix} 2 & 1 & 3 \\ 1 & 5 & 0 \end{bmatrix}$ , then find  $2A - B$ .

3. Find A, if  $2A - \begin{bmatrix} 3 & -1 \\ 1 & 2 \\ 0 & 5 \end{bmatrix} = \begin{bmatrix} 1 & 5 \\ 3 & 2 \\ 0 & 1 \end{bmatrix}$

4. Find X and Y, if  $X + Y = \begin{bmatrix} 5 & 25 \\ 0 & 9 \end{bmatrix}$  and  $X - Y = \begin{bmatrix} 3 & 6 \\ 0 & -1 \end{bmatrix}$

5. If  $A = \begin{bmatrix} 8 & 0 \\ 4 & -2 \\ 3 & 6 \end{bmatrix}$  and  $B = \begin{bmatrix} 2 & -2 \\ 4 & 2 \\ -5 & 1 \end{bmatrix}$ , then find the matrix X, such that  $2A + 3X = 5B$ .

6. Find AB, if  $A = \begin{bmatrix} 6 & 9 \\ 2 & 3 \end{bmatrix}$  and  $B = \begin{bmatrix} 2 & 6 & 0 \\ 7 & 9 & 8 \end{bmatrix}$ .