

Worksheet: Matrices

NIOS · Class 12 · Mathematics · 3 questions · 12 marks

Name: _____

Date: _____

Score: _____ / 12

Q1. If $A = \begin{bmatrix} 2 & 3 \\ 1 & 1 \end{bmatrix}$ and $B = \begin{bmatrix} 1 & 0 \\ 2 & 1 \end{bmatrix}$, find AB and BA . Comment on commutativity. *[3 marks]*

Q2. Express $A = \begin{bmatrix} 3 & 2 & 1 \\ 4 & 0 & 5 \\ 1 & 2 & 3 \end{bmatrix}$ as the sum of a symmetric and a skew-symmetric matrix. *[3 marks]*

Q3. Using elementary row operations, find the inverse of $A = \begin{bmatrix} 1 & 2 & 3 \\ 2 & 5 & 7 \\ 2 & 4 & 5 \end{bmatrix}$. *[6 marks]*
