

# Algebra - Linear Algebra

## Grade 12 | Difficulty: Easy

1. Solve for  $x$  in the matrix equation  $AX = B$ .
2. Find the determinant of the matrix:  $\begin{vmatrix} 1 & 2 \\ 3 & 4 \end{vmatrix}$ .
3. Determine whether the given set of vectors is linearly independent.
4. Calculate the eigenvalues of the matrix:  $\begin{vmatrix} 2 & 1 \\ 1 & 3 \end{vmatrix}$ .
5. Find the inverse of the matrix:  $\begin{vmatrix} 2 & -1 \\ -3 & 4 \end{vmatrix}$ .