

Worksheet: Determinants

IB · Class 12 · Mathematics · 3 questions · 13 marks

Name: _____

Date: _____

Score: _____ / 13

Q1. Using properties of determinants, prove: $|a+b, a, a; a, a+b, a; a, a, a+b| = b^2(3a+b)$. [3 marks]

Q2. Find the inverse of $A = \begin{bmatrix} 1 & 2 & 1 \\ 3 & 1 & 1 \\ 2 & 0 & 1 \end{bmatrix}$ using cofactors. [4 marks]

Q3. Using the matrix method, solve the system: $x + 2y + z = 7$; $x + 3z = 11$; $2x - 3y = 1$. [6 marks]
