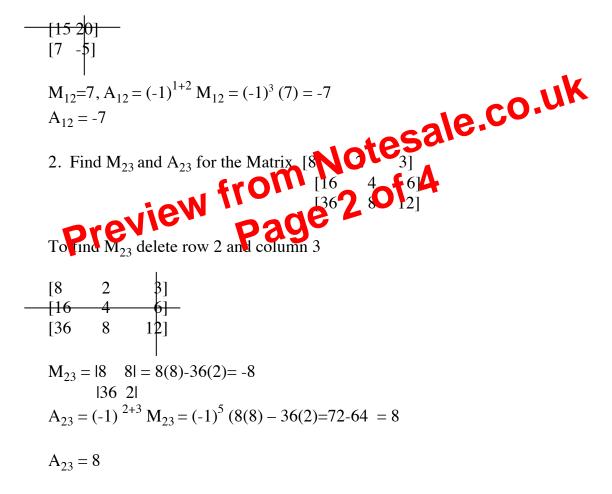
The minor (M_{ij}) of a_{ij} is the determinant of the matrix (n - 1)(n - 1) and is found by canceling row *i* and column *j* from a_{ij} .

Cofactor A_{ij} of a_{ij} is $A_{ij} = (-1)^{i+j} M_{ij}$

Examples of Minors and Cofactors

1. Find M_{12} and A_{12} for the Matrix [15 20] [7 -5]

To find M_{12} and A_{12} delete row 1 and column 2



Determinant of a 3 x 3 Matrix

The determinant of a 3 x 3 matrix is found by multiplying each value in row 1 by its cofactor then adding the sums. This is referred to as "*expanding by the first row*".