

# Problem for 1999 January

Communicated by Dan Jurca

Suppose that  $n$  is a positive integer, and that  $A$  is an  $n \times n$  matrix with the following two properties:

- i.* each entry  $a_{ij}$  of  $A$  is an integer; and
- ii.* in each row and each column of  $A$  there is exactly one odd number.

Prove that  $A$  is invertible.