Unimodular matrix

Def

A matrix unimodular matrix iff

= or

For matrix A whose is a real number, it is equivalent to

=

Property

1. Matrix product of two unimodular matrix gets also an unimodular matrix (if one can).

Proof:

Given two unimodular matrix and ,

By definition of unimodular matrix, we have that

= or

and also for

= = or

Thus,is also an unimodular matrix.

Ref

[Unimodular matrix - Wikipedia](https://en.wikipedia.org/wiki/Unimodular_matrix)