



Properties of Multiplication

In general, AB + BA

If AB = BA, then A & B are said to be commute.

If AB = -BA, then A & B are said to be anti – commute.

- AO = OA = O, whenever defined.
- Let $A = \left[a_{ij}\right]_{m \times n}$. Then $AI_n = A \& I_m A = A$, where $I_m \& I_n$ are identity matrices of order m & n respectively.
- If k is a scalar and product of matrices A & B is defined, then

$$(kA)B = A(kB) = k(AB)$$