Properties of Trace of a Matrix

Let $A = \left[a_{ij} \right]_n$, and $B = \left[b_{ij} \right]_n$

- $Tr \,.\, (A) = Tr.\,(A')$

- $Tr.\,(kA) = k\,Tr.\,(A)$, k is scalar

- $Tr.\,(\,A \pm B\,) = Tr.\,(A) \pm Tr.\,(B)$

- $Tr.\,(\,AB\,) = Tr.\,(BA)$