

## Properties of transpose of a matrix:

□ For a matrix  $A = [a_{ij}]_{m \times n}$ ,  $(A')' = A$

□ Let  $k$  is a scalar and  $A$  is a matrix. Then  $(kA)' = kA'$

□  $(A_1 \pm A_2 \pm \dots \pm A_n)' = A_1' \pm A_2' \pm \dots \pm A_n'$ , for comparable matrices  $A_i$

□ Let  $A = [a_{ij}]_{m \times p}$  &  $B = [b_{ij}]_{p \times n}$ , then  $(AB)' = B'A'$