THE SAME OPERATION ON AB GIVES $(AB)^T = B^T A^T$.

A

A^T

ℓ

m

B

B^T

m

n

AB

$B^T A^T$
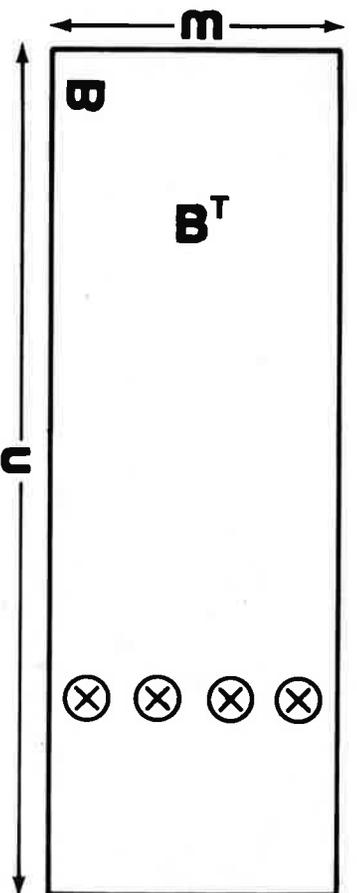
TO TRANSPOSE B, TURN THE TRANSPARENCY OVER. THE MAIN DIAGONAL FIXED.

THE TRANSPOSE KEEPS THE MAIN DIAGONAL FIXED.

B

B^T

m

n