= AT + BT . Finally , (AT) T =
A.

= = = Matrix multiplication = = =

Multiplication of two matrices is defined if and only if the number of columns of the left matrix is the same as the number of rows of the right matrix . If A is an m @-@ by @-@ n matrix and B is an n @-@ by @-@ p matrix , then their matrix product AB is the m @-@ by @-@ p matrix whose entries are given by dot product of the corresponding row of A and the corresponding column of B :
<formula> ,