0.1 Kronecker delta

Consider matrix multiplication AI.

We have:

$AI_{ik} = A_{ij}I_{jk}$

We write this instead as:

$AI_{ik} = A_{ij}\delta_{jk}$

Where $\delta_{jk} = 0$ if $j \neq k$ and $\delta_{jk} = 1$ if $j = k$.