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Kronecker delta

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The *Kronecker delta* δ_{ij} is defined as having value 1 when $i = j$ and 0 otherwise (i and j are integers). It may also be written as δ^{ij} or δ^i_j. It is a special case of the generalized Kronecker delta symbol.

The delta symbol was first used in print by Kronecker in 1868[**?**].

Example.

The $n \times n$ identity matrix I can be written in terms of the Kronecker delta as simply the matrix of the delta, $I_{ij} = \delta_{ij}$, or simply $I = (\delta_{ij})$.

References

[1] N. Higham, Handbook of writing for the mathematical sciences, Society for Industrial and Applied Mathematics, 1998.