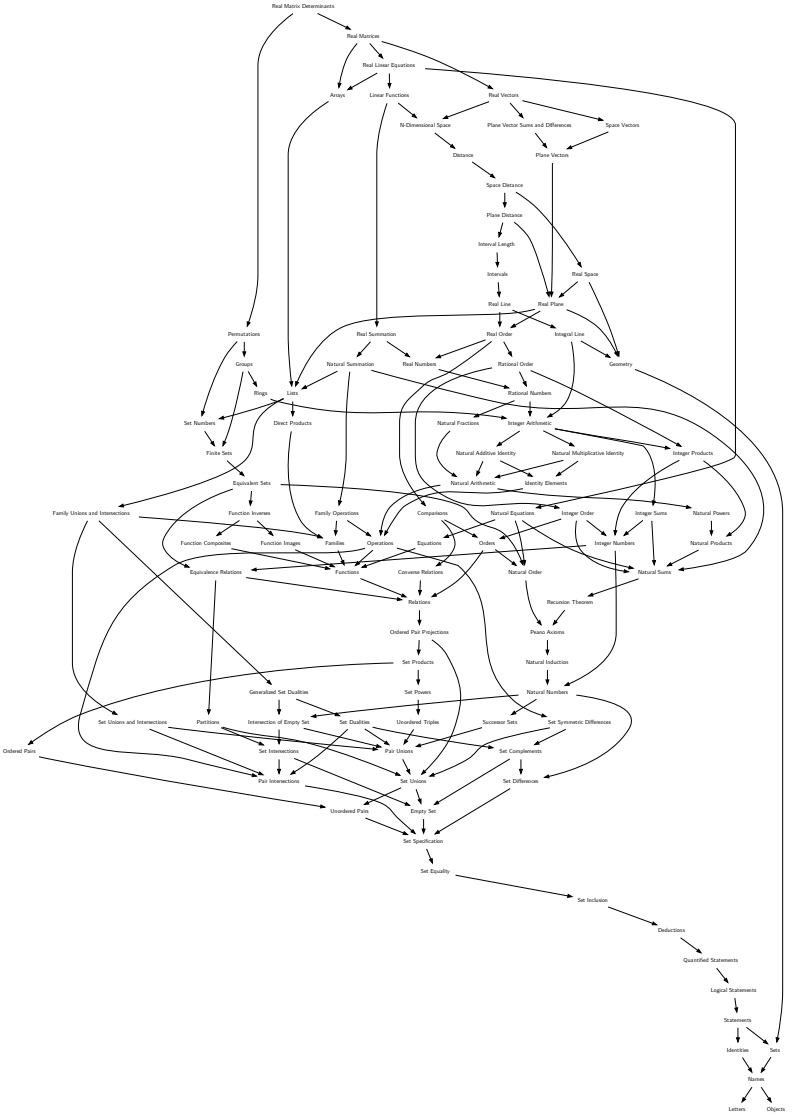
Definition

Given a square matrix $A \in \mathbf{R}^{n \times n}$.

$$\sum_{\sigma \in S_n} \left(\operatorname{sgn}(\sigma) \prod_{i=1}^{n} a_{i,\sigma_i} \right)$$

We denote the determinant of A by $\det A$.


Real Matrix Determinants
Real Matrices
Real Linear Equations
Arrays
Linear Functions
Real Vectors
N-Dimensional Space
Plane Vector Sums and Differences
Space Vectors
Distance
Plane Vectors
Space Distance
Plane Distance
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Family Unions and Intersections
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Function Composites
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Recursion Theorem
Ordered Pair Projections
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Natural Induction
Generalized Set Dualities
Set Powers
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Set Unions and Intersections
Partitions
Intersection of Empty Set
Set Dualities
Unordered Triples
Successor Sets
Set Symmetric Differences
Ordered Pairs
Set Intersections
Pair Unions
Set Complements
Pair Intersections
Set Unions
Set Differences
Unordered Pairs
Empty Set
Set Specification
Set Equality
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Statements
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