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Combinatorics



Combinatorics is the branch of mathematics studying the enumeration, combination, and permutation of sets of elements and the mathematical relations that characterize their properties.

Mathematicians sometimes use the term "combinatorics" to refer to a larger subset of *discrete mathematics* that includes *graph theory*. In that case, what is commonly called combinatorics is then referred to as "enumeration."

The Season 1 episode "Noisy Edge" (2005) of the television crime drama *NUMB3RS* mentions combinatorics.

SEE ALSO:

Algebraic Combinatorics, Antichain, Chain, Concrete Mathematics, Dilworth's Lemma, Dirichlet's Box Principle, Discrete Mathematics, Diversity Condition, Enumeration Problem, Erdős-Szekeres Theorem, Inclusion-Exclusion Principle, Kirkman's Schoolgirl Problem, Kirkman Triple System, Partial Order, Partial Order Length, Partial Order Width, Ramsey's Theorem, Schröder-Bernstein Theorem, Schur's Lemma, Sperner's Theorem, Total Order, Umbral Calculus, van der Waerden's Theorem

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