**k-combination**

A set of \( k \) elements chosen from a set of \( n \) elements without *replacement*, i.e. each element can only be chosen once. In a combination, the order of elements does not matter, so the combinations \( AB \) and \( BA \) are equal. For instance, the 3-combinations of the set \( S = \{A, B, C, D\} \) would be

\[
ABC \quad ABD \quad ACD \quad BCD
\]

The number of \( k \)-combinations from an \( n \)-element set is computed by the *binomial coefficient*. See also: *k-permutation.*