

12.2 Combinations

COMBINATIONS OF n OBJECTS TAKEN r AT A TIME

The number of combinations of r objects taken from a group of n distinct objects is denoted by ${}_n C_r$ and is given by:

$${}_n C_r = \frac{n!}{(n-r)! \cdot r!}$$

For instance, the number of combinations of 2 objects taken from a group of 5 objects is ${}_5 C_2 = \frac{5!}{3! \cdot 2!} = 10$.