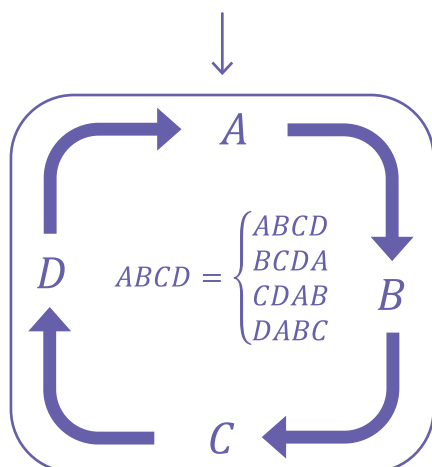


n!

MAPA MENTAL

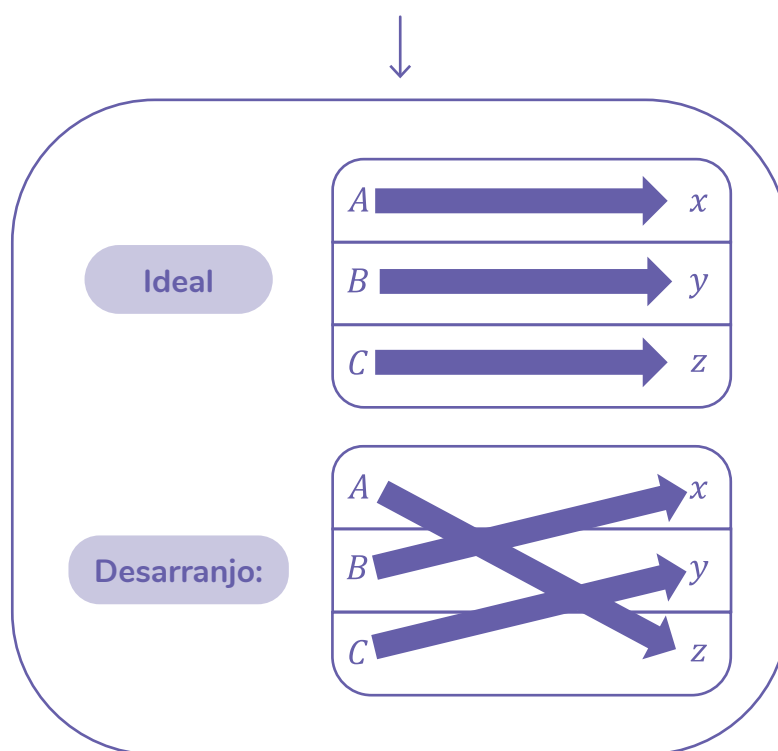
PERMUTAÇÃO CIRCULAR E CAÓTICA

PERMUTAÇÃO CIRCULAR



$$PC_n = \frac{n!}{n} = (n - 1)!$$

PERMUTAÇÃO CAÓTICA (DESARRANJO)



$$D_n = n! \cdot \left[\frac{1}{0!} - \frac{1}{1!} + \frac{1}{2!} + \dots + \frac{(-1)^n}{n!} \right]$$