

# Example

- What is the number of  $k$ -subsets of a set  $S = \{s_1, s_2, s_3, \dots, s_n\}$  that do include  $s_1$ ?
- Solution: same as the number of  $(k-1)$ -subsets of  $\{s_2, s_3, \dots, s_n\}$ , so  
$$(n-1)! / [(n-k)!(k-1)!]$$