F

23. A computer programing team has 25 members: 15 of the members are women and 10 of the members are men. How many ways can a group of 7 be chosen to work on a project if at most 3 women are in the group?

$$\binom{15}{3}\binom{10}{4} + \binom{15}{2}\binom{10}{5} + \binom{15}{1}\binom{10}{6} + \binom{15}{0}\binom{10}{7}$$

Pick 3 women | Pick 4 men | 2 women | 5 men | 1 women | 6 men | No women | 7 seven

24. How many ways can the letters of the word DESIGN be arranged in a row?

$6!$

25. Let $A = \{x, y, z, w\}$ and $B = \{a, b\}$. List the elements of $B \times A$.

(a, x) (b, x)
(a, y) (b, y)
(a, z) (b, z)
(a, w) (b, w)