

2 CARTE DI BASTONI

MAZZO 40 CARTE

$$C_{10,2} = \binom{10}{2} = \frac{10!}{2!8!} = \frac{10 \cdot 9 \cdot \cancel{8!}}{2! \cdot \cancel{8!}} = \frac{90}{2} = 45$$

$$n-81 \quad (a+b)^n = \sum_{k=0}^n \binom{n}{k} a^{n-k} b^k$$

$$(x^2-1)^6 = \sum_{k=0}^6 \binom{6}{k} (x^2)^{6-k} (-1)^k = \binom{6}{0} (x^2)^6 (-1)^0 +$$
$$+ \binom{6}{1} (x^2)^5 (-1)^1 + \binom{6}{2} (x^2)^4 (-1)^2 + \binom{6}{3} (x^2)^3 (-1)^3 +$$

$$\binom{6}{4} (x^2)^2 (-1)^4 + \binom{6}{5} (x^2)^1 (-1)^5 + \binom{6}{6} (x^2)^0 (-1)^6 =$$

$$= \binom{6}{0} x^{12} - \binom{6}{1} x^{10} + \binom{6}{2} x^8 - \binom{6}{3} x^6 + \binom{6}{4} x^4 - \binom{6}{5} x^2 +$$

$$\binom{6}{6}$$

n-38

4 PERSONE

4 DI 5 POSTI NUMERATI

$$P_4 = 4! = 4 \cdot 3 \cdot 2 = 24$$

$$24 \cdot 5 = 120$$

n-44