



$$(a+b)^4=(a+b)*(a+b)*(a+b)*(a+b)$$

$$a a a b = a^3b$$

$$a b a a = a^3b \quad C(4,3)=4*3*2 / 3! = C(4,1)$$

$$C(4,0)=4!/4!*0!=1$$

$$(a+b)^{107}= C(107,4)a^{103}b^4$$

$$(a+b+c+\dots+d)^k=P(k_1,k_2,\dots,k_t)^*$$