

Combinatorics HW 2.1

Student ID:

Name:

Score:

1. How many different permutations for word "Combinatorics"? (Case sensitive)
2. The coefficient number of $a^2b^2c^2$ in the expanded equation of $(2a+b+c)^6$ is _____. 【Please calculate the exact number】
3. For the case of giving fruits to 3 kids, in total there are 12 identical apples, each child may at least have one apple, how many different ways to give apples to 3 kids?
4. What is the number of integral solutions of the equation $x_1+x_2+x_3=30$, in which $x_1 \geq 5$, $x_2 \geq -8$, $x_3 \geq 5$.