Combinatorics HW 2.1

Student ID: Name: Score:

1. How many different permutations for word“Combinatorics”? (Case sensitive)
2. The coefficient number of *a*2*b*2*c*2 in the expanded equation of（2*a*+*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≥5, *x*2≥-8, *x*3≥5.