

## Cantor: Assignment #1

Consider the following two counting problems.

**Problem 1.** There is a meeting of 31 people. How many ways can one choose a team of two people from those attending the meeting?

**Problem 2.** There is a meeting of 31 people. How many ways can one choose a team of 29 people from those attending the meeting?

By now, you may know ways to solve each of these problems by counting. The point of this assignment is to show that we *only need to know how solve one of them*, then we get the answer to the other for free.

**In one written page, explain how you can see that these two problems have the same number of solutions. Please avoid actually counting how many solutions there are to either problem.**

## Specifications for Grading

To earn credit, this assignment must

- be typed, of no more than one page in length;
- address the prompt above;
- conform to reasonable standards for grammar, spelling, and usage of the English language with minimal errors. (You may consider seeking help on writing from the Writing Center in the Academic Learning Center. <http://www.uni.edu/unialc/writing-center>);
- be turned in by 3pm on Friday, April 8.