

CS 230 : Discrete Computational Structures  
Section B

**Spring Semester, 2021**

CLASS ASSIGNMENT #5

TUESDAY, APRIL 20

NAME (LAST, FIRST):

Open notes, open book.

1. [4 Pts] I want to give out cookies to my class of 85. How many cookies would I need to have to make sure at least one person gets at least five cookies?
2. [4 Pts] Given a group of 25 people, how many ways can you pick a committee of size 7 with a president, a secretary, a treasurer and four other members?
3. [4 Pts] Given a group of 10 people, find the number of 5-member committees that exclude Ann.

4. **[6 Pts]** Suppose an 8-member team will be selected from 24 CS students and 30 SE students. How many ways to form the team if

(a) there are four CS and four SE students on the team?

(b) there are at least three CS and at least three SE students on the team?