Here are some questions which use the concepts developed in class today:

1. Chips Ahoy! claim to have 1000 chips in every package of 30 cookies. If I give you each a cookie from the package, what is the probability that your cookie contains 30 chips (use the Poisson approximation)?
2. Last time I taught, we had a class ice cream party, but only half of the students received invitations. There are 42 students in the class, of whom 17 were 13 's. Only three 13's were invited. What is the probability of this happening, if we assume every student is equally likely to be invited?
3. Assuming students were not discriminated against by year, what is the probability that three or fewer 13's were invited? Given this knowledge, do you think the 13's were being discriminated against? (they didn't touch the fire!)
