

Take home Quiz

Quiz 4 Name:.....

Elementary Statistics

Due on Monday, Sep. 19

- 1 Among the 14 candidates for 4 internship positions in a company 9 are males and 5 are females. In how many different ways can the 4 interns be chosen so that 2 are males, and 2 are females? **Simplify the answer.**
- 2 The police chief of a city knows that the probabilities for 0, 1, 2, 3, 4, or 5 car thefts on any given day are, respectively, 0.20, 0.40, 0.25, 0.10, 0.03, and 0.02. How many car thefts can he expect per day?

First question is about multiplication of choices and  $nCr$  or  $nPr$ .

Second question is about mathematical expectation. For 8.00 am class, I will cover it in class on Friday. For noon class I covered it on Wednesday.

$$E = a_1p_1 + a_2p_2 + \dots + a_kp_k$$