

STAT 251 Statistical Inference for Management I Winter 2012

Quiz 10

Assigned on Mon Jan 30, due on Tues Jan 31. You may work with a group of as many as 4 students, submitting one quiz with all names, provided that you all contribute to the work. You may use your notes.

Suppose that three executives (Arnold, Bruce, Crystal) drop their cell phones in an elevator. Each then picks up a cell phone at random.

1. List all outcomes in the sample space of this random process.
2. Report the probability that *all three* people pick up the correct phone.
3. Determine the probability that *at least one* person picks up the right phone.

Now suppose that two students are to be chosen at random from a group of five students: three men (Dwayne, Eric, Frank) and two women (Ginger, Harriet).

4. List all outcomes in the sample space of this random process. (Use initials to represent the people, so DE means that Dwayne and Eric are chosen.)
5. Assuming that all outcomes are equally likely, determine the probability that one person of each sex is chosen.