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 seven students: four men (Dwayne, Eric, Frank, Gus) and three women (Harriet, Isabel, Julia).

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. You do not need to list ED as a separate outcome.)

5. Assuming that all outcomes are equally likely, determine the probability that two women are chosen.