Application exercise:
1.1 Sampling methods

You have 10 MINUTES to complete this application exercise. Submit your responses on Sakai, under the appropriate assignment. One team will be randomly selected and their responses will be discussed on the screen.

1. Come up with one sentence summarizing the key difference between stratified and cluster sampling as if you were teaching this concept to a student who is just starting off in a statistics course.

2. Suppose you are going to be conducting a study on Duke students, asking for their opinion on an issue of interest to you (could be related to the university, or a wider societal issue). First, formulate your research question. Then, describe how you would carry out the sampling of students using the following methods:

   (a) simple random sampling

   (b) stratified sampling

   (c) cluster sampling

   Think about what attributes of the Duke student population make sense to stratify vs. cluster on with respect to your research question.