

Activity 2

Name _____

Pretend you are interested in finding the proportion of CSU students who live on campus. In order to do this, you use the campus telephone directory and look for phone numbers with the 495 prefix.

1. What is the variable of interest? Is it a categorical or measurement variable?
2. Is using the phone directory to determine this constitute a valid measurement? Explain.
3. What is the sampling frame? Is it the same as the population of interest? Explain.
4. Decide on a sampling scheme. Use one of the four schemes discussed in class or a combination of them. Specifically describe how you will take your sample. Be sure to make things easy on yourself! What will be your approximate sample size?
5. Conduct for survey by looking at each unit in the sample and recording whether or not their phone prefix is 495. How many numbers had a 495 prefix? How many numbers did you sample?
6. Determine the sample proportion.
7. Calculate the margin of error for your survey.
8. What is the approximate range of numbers that is almost sure to capture the true population proportion ($\hat{p} \pm ME$)?