

# [Studies](https://assignbuster.com/studies/)

Exercises in Sample design The purpose of this assignment is to make recommendations as to the type of sample to be used, the method of selecting the sample and the sample size based on situational information. The format that this paper will utilize is to first identify the sample number than provide an answer to each of the sample criterion. In situation number #1 it is my belief that the type of sample that should be used is systematic sampling. The reasoning as to why I would choose this method is because we do not need to go beyond the people who are entering the store. An effective means of choosing the sample would be through selecting a sample between 1 and “ N” insofar as every nth person should be selected. From this perspective the sample should be dependant on the quantity of people entering the store but if we were to select one out of every five people that would represent twenty percent of overall entrants into the store. The method of determining information from the customers would be an in person survey with close ended questions. In situation #2 it is my recommendation that the airline should use a convenience sampling method. The means by which we should select the sample would have to be proportionally representative insofar as we and not only looking for people who would typically fly in airplanes but they must also be university students. Finally the sample size should be restricted by the overall budget. If the cost is $75 per student we would need to determine how many people we can interview based on the overall budget is $7, 500 than the number of interviewees would be 100. However the number should ensure that the confidence level is larger than 95%. In situation #3 the type of sample that should be utilized is a systematic sampling method in which every nth person is chosen at a predetermined point in the city. The method of choosing the sample should be along the lines of every fourth or fifth tourist that they encounter. The size of the sample was already predetermined at 500 people per month In situation #4 the best type of sample to be used would be quota sampling. The populations could be stratified based on homeowner location. Secondly, the method of selecting the sample can be selected at random but some sort of financial incentive should be given to ensure that respondents spend an hour during the interview process. The sample size was already predetermined to be 3000 respondents.