

MAT 4017 Assignment 1

Guidelines for the population and the variable

1. Your population: Be sure to select a population that you can reasonably collect a simple random sample from. For example, your population could probably reasonably be the Hanyang University student body. But, it probably could not be the entire population of South Korea.

2. The variable (part 1): Since you will be describing distribution with numbers such as the mean/standard deviation and the five-number summary, your variable must be quantitative. In other words, averages must make sense. For example, you could not directly study the question, “What is the most popular major on campus?” because we do not have the tools for analyzing the qualitative data you would receive if you asked people their majors. However, you could study the average number of, say, Physics courses students take. Similarly, you could not study the geographical location of people’s hometowns, but you could study the average distance from Washim-ri subway station to people’s hometowns.

3. The variable (part 2): Remember that a variable measures something about each individual of the population. A variable is not the “average.” For example, if you are interested in the average size of the lawn of houses in your town, your variable is the size of the lawn of a house, not the average size of every lawn in town.

For the population of the Hanyang University student body, some other examples of possible variables include:

- The number of hours per week spend studying.
- Number of meals per week eaten on campus.
- The number of credits taken this semester.