Answer on Question #43927 - Math, Statistics and Probability

1.9 Explain the difference between a census and a sample.

Answer:

a sample is a portion and a census measures absolutely everyone in the whole country

A census measures absolutely everyone in the whole country. A representative sample measures a small number of people who fit a particular category of people: surveying 200 white male smokers between 20 and 40 who have had surgery for throat cancer (out of a total number of say 35,000 men who fit that profile).

Researchers define a "population" which consists of elements with defined characteristics. Example: All the matriculating students at Providence College. If the researcher studies the entire population as defined above, it is called a "census". If, on the other hand, the researcher takes a subset of the population, a sample, and studies it it will be a sample survey (or study in more general terms.)