

Sampling Methods Examples for Project 1

The Average Rental Price of a 2 Bedroom, 2 Bath Apartment in Santa Clara County

We first used the simple random sampling technique. From the internet we received a list of all cities in Santa Clara County, and numbered them 1 – 15, then randomly selected 4 cities out of the 15 cities listed using the calculator. The cities were Milpitas, Mountain View, Morgan Hill, and Cupertino. Next we used the stratified sampling method. The 4 cities selected were classified as strata. A list of all apartments in each city stratum was obtained using the internet and phonebook. Each apartment complex from each city stratum was numbered. In each city, a simple random sample of 8 apartment complexes was generated using the calculator. Each apartment complex was contacted and we received rental prices for a 2 bedroom, 2 bathroom apartment.

Sample Survey of Cigarette Prices in Cupertino

Our goal is to study the price, before tax, of Marlboro Brand cigarettes at 30 different retail venues. Information will be randomly selected at 15 Liquor stores, 15 gas stations, and 15 grocery stores in the Cupertino area. We are interested in each venue's price of Marlboro Brand cigarettes. After looking at a phonebook, we listed the liquor stores, grocery stores and gas stations and numbered them in order starting with 1 at the top of the page until the bottom for each respectively. After that, we used our calculator and the number generator until we had 15 pieces of data for each type of venue. Once we were done, we traveled to each venue to see what their prices were on the product. Our sample technique is the stratified method, since we divided our population into subgroups by venue type.

Number of Vehicles in Households of Students at De Anza College

We collected our data using the Systematic Sampling Method. From the population of approximately 30,000 De Anza College students, we chose a sample of 60 students with each group member surveying 15 students. Next we numbered various areas on a De Anza Campus map from 1 – 7 and used the “RandInt” function of the calculator to choose 3 areas to conduct our survey. The results were the MQ quad, the L quad and the Campus Center. We each stood in one of the above areas and asked every 5th person who passed by the question “How many vehicles are in your household?”. We then randomly selected a starting place in our list and chose every other piece of data to get the 30 pieces required.

Amusement Park Admission Tickets

Our study consisted of determining the price of general admission tickets to amusement parks in the U. S. We collected the data from the World Wide Web. The URL is <http://members.aol.com/parklinks/parks.htm>

Our sample technique was simple random. We numbered all the parks and then with the calculator, randomly selected 30 of them.