1. (5 points) Identify each data set’s level of measurement:
   (nominal, ordinal, interval or ratio)

   (a) the annual salaries of all the teachers at the U: Ratio

   (b) the ratings (G,PG,...) of the movies from 2015: Ordinal

   (c) all the zip codes in the state of Utah: Nominal

   (d) the noon temperatures of the major US cities: Interval

   (e) the prices of SUVs from all major carmakers: Ratio

2. (5 points) Describe the method of data collection you would use:
   (observational study, experiment, simulation or survey)

   (a) to determine whether a new sleep drug is effective: Experiment

   (b) to see whether your candidate is leading in the polls: Survey

   (c) to find the price of a hip operation: Observational Study

   (d) to see how fast a forest fire spreads: Simulation

   (e) to determine the favorite ice cream flavors in each state: Survey
3. (10 points) Identify the sampling technique that is being used:
(random, cluster, stratified, convenience or systematic)

(a) Nielson randomly selects 100 families from each major city in the U.S. and records their viewing habits:

Stratified

(b) All customers from a single McDonald’s franchise are asked what they think about the all day breakfast menu:

Cluster

(c) The students attending a basketball game are asked if they own their own cars.

Convenience

(d) The first person on each page of the telephone book is chosen to participate in a survey on various candy bars

Systematic

(e) The names of all students at the U are put into a hat, 100 are chosen at random and their heights and weights are measured.

Random