

## STA321 HW1 Solutions

1. Descriptive statistics: Summarizing the information in a collection of data.  
Inferential statistics: Using information from a sample to make conclusions/predictions about the population.
2. (a)  
Population: total set of all subjects of interest or the entire group of people, animal or things about which we want information.  
Sample: Subset of the population from which the study actually collects information and is used to draw conclusions about the whole population.  
Parameter: numerical characteristic of the population and is calculated using the whole population.  
Statistic: numerical characteristic of the sample and is calculated using the sample.  
(b)  
Population: Adult Americans.  
Sample: The 1010 interviewed adults.  
Parameter: True percentage of all Americans that would tell their Congress representative to vote for the bill.  
Statistic: Percentage of people interviewed that would tell their Congress representative to vote for the bill. Here the numerical value is 35%.