Question 1)

The dataset appears to be showing the change in unemployment over time. It is separated into four variables: series ID, year, period, and value.

Value is quantitative, and shows the unemployment level at the given time

Period shows the month out of the year, and is ordinal. This is ordinal because there is a specific order, but given the dataset that we have, you can’t reasonably ask to do math with specific months.

Year shows the year of the period, and is quantitative, unlike period. Since you can reasonably ask for unemployment halfway through a specific year, then it is quantitative.

Series ID is filler info, and is not necessary to understand the information

I chose a linegraph to show the change over time and give a linear perspective to how the unemployment varied. I also chose to use the scatter.smooth function to show a fitted line that will better give the viewer the ability to see the overall change in unemployment over the years, and be less distracted by the month to month drastic changes.

Question 2)

This dataset is showing the birth rates per each country in a large dataset of years. When data doesn’t exist for the country at a specific year(s), then it is replaced with no data.

Country is a catagorical attribute that shows the country for the information.

Each year is an ordinal attribute that shows the birth for each country per each year.

I chose to use a histogram to represent the data so that all of the countries can be seen on one graph and have their birth rates compared to each other.

Question 3)

The dataset appears to have all of the states and their states in crime. It shows each state’s population as well as what might be the average occurence of specific crimes, such as forcible rape, robbery, aggravated assault, burglary, etc.

The types of crimes are categorical,: assault, murder, burglary.

The States are categorical: United States, california, etc.

I chose to use a scatterplot with the population as the x axis and the murder/burglary rates as the y axis with the scatter.smooth function to show the reader that as the population of each area increases, so does the murder and burglary rates. However in both cases, as the population increased, the rate at which the murder and burglary rates increased at a decreasing rate, indicating that there is a limit to which the crime will increase.