E-Stat Activity – CANSIM

Name: _____ Date: _____

Using Primary Sources of Data for Analysis

E-Stat is a sector of statistics Canada which collects and stores important information about all different aspects of Canada. The information is stored in massive databases and can be retrieved by the general public. This method of finding data is going to be very useful for your culminating project.

Tasks:

1. Analyze information about Ontario's population changes from 1986 to 2007. Is Ontario's population changing? Describe how it is changing and the reliability of the rate of change (r and r^2). Estimate Canada's population in 1950. Estimate Ontario's population in 2018. Are these estimates reliable? Why?

2. Analyze information about Canada's Homicide rates per 100,000 people from 1977 to 1997. Describe how it is changing and the reliability of the rate of change (r and r^2). Estimate Canada's homicide rate in 1950. Estimate Canada's Homicide rate in 2018. Are these estimates reliable? Why?

Your analysis should include scatter plots and the two measures of correlations that we have learned in class. Discuss your results clearly in a paragraph and display your work using a word processor (e.g. Word). Include a header with the course code, your name, the data and page numbers. Titles and formatting must be clear.

How to Access the *Population Data*:

Step 1: Getting the data

1. Go to: http://www.statcan.gc.ca/eng/start
2. Click the **Data** tab in the menu
3. Use the main navigation: Browse by subject and select: **Population and demography**
4. Select **Population estimates** checkbox
5. Select **Tables** tab
6. Keywords **051-0036** – type in the search bar on the left
7. Click on Estimates of population, by sex and age group, census divisions and census metropolitan areas, 2001 Census boundaries, annual
8. Click the **Add/Remove Data** tab
9. Under *Geography* select **Ontario** from the selection box.
10. Under *Sex tab* select **Both Sexes**

11. Under *Age Group* select **All Ages**
12. Under *Reference Period* select **1986-2007**.
13. Under *Customize Layout* select **All options as Column** and **Reference Period by row**.
14. Select Apply. You will now see the table with the data. We will now download this data to use it.
15. Click the Download Options button; Select CSV Download as Displayed
16. You can know open it in a spreadsheet (upload it to your drive)

Step 2: Analysis of Data

Open **Google Sheets** and enter the data; **create a scatter plot** and create the **line of best fit**. Copy and paste into a word document and answer the questions from Task 1 introduction at the top of this assignment page.

How to Access the *Crime Rate Data*:

Step 1: Getting the data

1. Go to: http://www.statcan.gc.ca/eng/start
2. Use the main navigation: Browse by subject and select: **Crime and justice**
3. Select **Crimes and offences** checkbox
4. Select **Tables** tab
5. Keywords **252-0013** – type search
6. Scroll down to Crime statistics, by detailed offences, annually
7. Click the **Add/Remove Data** tab
8. Under *Geography* select **Canada** from the selection box. It's the first one.
9. Under *Offences* select **Total, homicide**
10. Under *Statistics* select **Rate per 100,000 population**
11. Under *Reference Period* select **1977-1997**.
12. Under *Customize Layout* select **All options as Column** and **Reference Period by row**.
13. Select Apply. You will now see the table with the data. We will now download this data to use it. (or copy and paste the data)
14. Click the Download Options button; Select CSV Download as Displayed
15. You can know open it in a spreadsheet (upload it to your drive)

Step 2: Analysis of Data

Open **Google Sheets** and enter the data; **create a scatter plot** and create the **line of best fit**. Copy and paste into a word document and answer the questions from Task 2 introduction at the top of this assignment page.