Enter the data into Microsoft Excel and create a scatter plot for the set of data. Find the regression equation that best fits the data(R<sup>2</sup> value is closest to 1). Choose either Linear, Exponential, or Quadratic(Polynomial – Order 2).

Use your equation to estimate the population of Namibia in the years 1940, 1997, and 2005.

Print out one page that contains your scatter plot including the data. Ask Mr. Christen if you need help fitting it all on one page.

Find a regression equation for the following population data, using t = 0 to stand for 1950. Then estimate the population of Namibia in the years 1940, 1997, and 2005. Note: Population values are in thousands.

| year <i>t</i> | 0   | 5   | 10  | 15  | 20  | 25  | 30    | 35    | 40    | 45    | 50    |
|---------------|-----|-----|-----|-----|-----|-----|-------|-------|-------|-------|-------|
| рор.          | 511 | 561 | 625 | 704 | 800 | 921 | 1 018 | 1 142 | 1 409 | 1 646 | 1 894 |

To Insert a Scatter Plot:

- 1. Highlight your data
- 2. Click the Insert tab at the top.
- 3. Click on the Scatter Plot option and choose the option at the top left(only points).

To Insert the Trendline, Equation, and R<sup>2</sup> value:

- 1. Click on the + sign next to your chart.
- 2. Click the arrow to the right of Trendline and choose More Options.
- 3. Check the boxes at the bottom to insert the Equation and  $R^2$  value.
- 4. Choose the regression option that gives the R<sup>2</sup> value closest to 1.