Background Information

The United States of America is located in North America and declared independence from England in 1776. The first president was George Washington and is broken into 50 states. In the late 1790s the Industrial Revolution made manufacturing a strong hold of the economy and made the US a leader in the global market. The US has been involved in several military operations throughout its history (from the Civil War, both World Wars, Operation Iraqi Freedom). A congress, president and court system govern the country.

POPULATION TABLE

Year	X-Value in Stats Table	Population
1900	0	76,212,168
1910	10	92,228,496
1920	20	106,021,537
1930	30	123,202,624
1940	40	142,164,569
1950	50	161,325,798
1960	60	189,323,175
1970	70	213,302,031
1980	80	236,542,199
1990	90	258,709,873
2000	100	291,421,906

USA Population

Model Quarter 3 Project
Made By: Ms. Coyne
Period 4
March 10, 2017

Exponential Regression Equation:

$$Y = 81203934.64 \, (1.013383023)^x$$

R-Value: 0.9965728063

Since the r-value is so close to 1 (.997 would round to 1), this equation is a nearly 100% perfect fit to model the population!

Predictions:
Population in 2020:
P(120) = 400,334,153 people

Population in 1850:
P(-50) = 41,772,591
Actual Population: 23,191,876

As stated above, the Industrial Revolution changed the US economy and in turn the rate of population growth in the late 1800s and early 1900s .

Population will Double:
In year 2048 the population will double

Using the graph, I let Y1 = my regression equation and let Y2 = the doubled population (291,421,906 *2) = 582,843,812 and found the point of intersection

Window: [0, 150] by [0, 1,000,000,000]

Graph of USA Population from 1900 to 2000