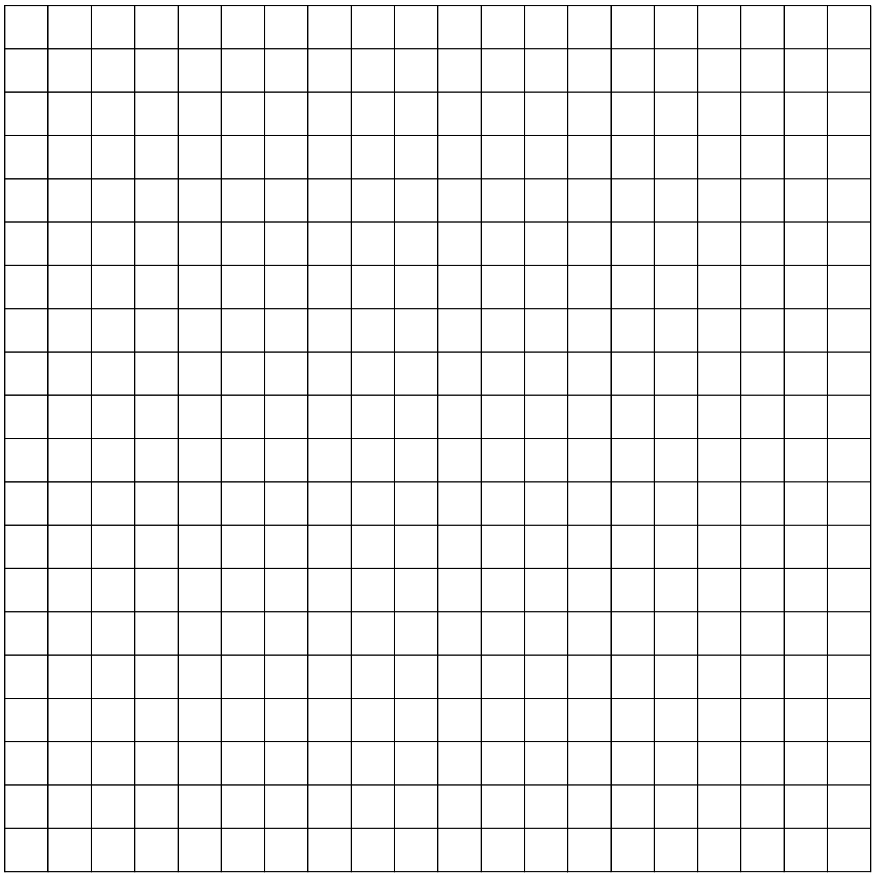
Population of the Earth = f(time)

Here is the data for the Earth since 1500. Model Earth's population using the method you believe is most accurate. Use your model to predict the Earth's population in 2010, 2030, and 2050. Use the inverse function to predict when the population will be 12 billion. What do you think will really happen to the Earth's population? Explain what your model does and does not take into account that affects its accuracy. What assumptions are you making or are implied by your model?

Time (years)	Population (Millions)
1500	460
1600	579
1700	679
1750	770
1800	954
1900	1633
1920	1862
1940	2295
1960	3019
1980	4450
2000	6000



Doubling Time. One way to express the rate of change is to tell how long it is before the population doubles. Use your graph to predict the time it took Earth's population to double in 1500 and the current length of time for Earth's population to double. If the doubling time is shorter today than in the past, what does this indicate about the rate of population growth? Explain.

Be sure to include all elements of the rubric. You may use the back of this paper.