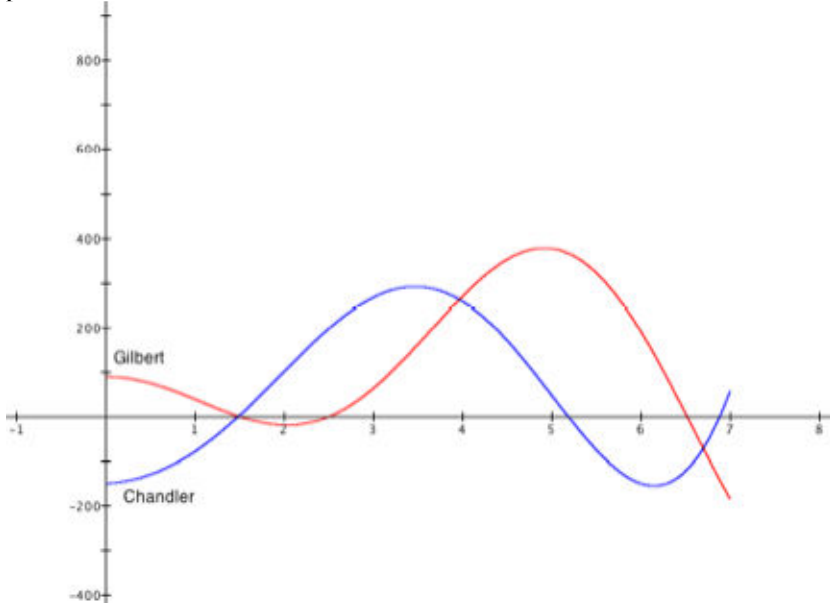


The cities of Gilbert and Chandler each keep track how much their populations change each day of every month. The blue graph shows an approximation of the change in Chandler's population each day in the first 6 months of 2006. The red graph shows an approximation of the change in Gilbert's population each day in the first 6 months of 2006.

The cities' councils are considering merging the two communities into one. They asked their planning commissions for a graph that shows how their combined populations would have changed over this same period of time.



- a. What does the point (3,270) represent on the Chandler graph? What does the point (2,-20) represent on the Gilbert graph? What does 3.2 on the x-axis represent?

(3,270) represents _____

(2,-20) represents _____

3.2 on the x-axis represents _____

- b. You are a member of the planning commission. Produce (on the above coordinate system) an approximate graph of the combined population's daily change over the first 6 months of 2006.
 c. During what periods would the combined population have decreased? Increased?

- d. Could you use your new graph to estimate how much the combined population grew during the first 6 months of 2006? How?