Homework

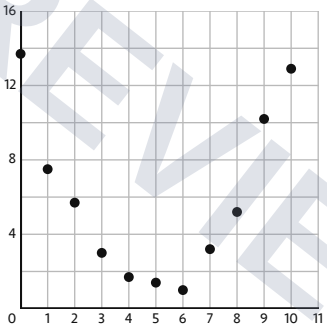
Name: _____

Average Rate of Change & Linear Regression

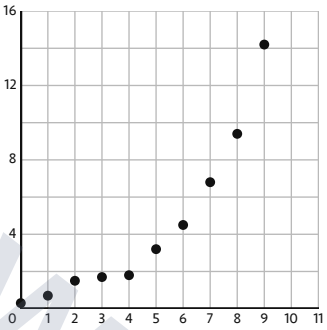
Scatter Plots & Trend Lines

1. Describe the shape of each data set: linear, quadratic (parabolic), or exponential.

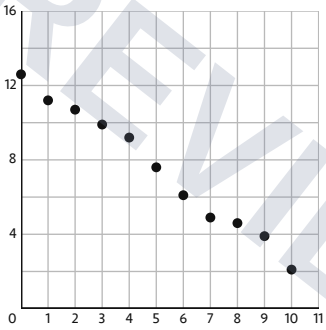
a.



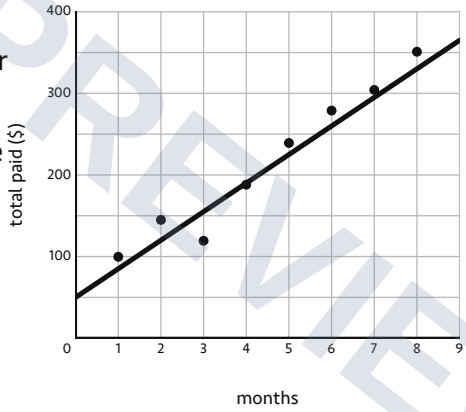
b.



c.



2. A gym charges a sign-up fee plus a monthly fee. The scatter plot shows the total amount several members had paid after x months. The trend line is $y = 35x + 50$.



   a. Using numbers and units, describe the average rate of change.

   b. What does the 50 represent in this situation?

   c. Predict the total paid after 12 months.

3. A cup of tea cools after it is poured. A trend line for its temperature, in $^\circ$C, after x minutes is $y = -4.5x + 80$.

   a. Using numbers and units, describe the average rate of change.

   b. What does the 80 represent?

   c. Predict the temperature after 6 minutes.

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Preview - the full worksheet and its answer key are at primeworksheet.com