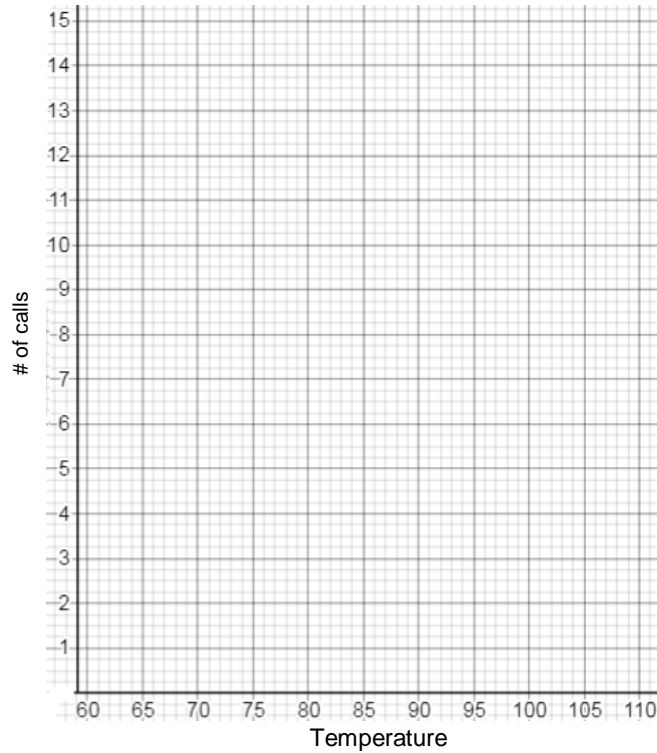


Name \_\_\_\_\_ Date \_\_\_\_\_ Period \_\_\_\_\_

1. An emergency service wishes to see whether a relationship exists between the high outside temperature on a given day and the number of emergency calls it receives. They examine data from 10 randomly selected days last year. The data is as follows:

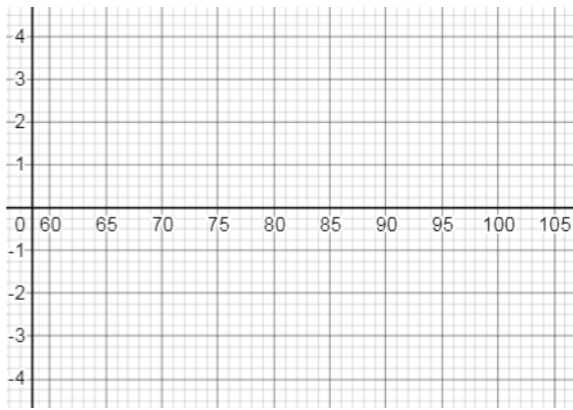
<b>Temperature</b>	74	82	88	67	93	99	101	78	85	90
<b>No. of Calls</b>	4	8	10	8	11	14	13	6	8	10

- a) Graph the data.



- a) Find the least squares regression line. \_\_\_\_\_
- b) State the correlation coefficient. \_\_\_\_\_
- c) Describe the strength of the equation. \_\_\_\_\_
- d) Interpret the slope. \_\_\_\_\_  
\_\_\_\_\_
- e) Interpret the y-intercept. \_\_\_\_\_
- f) State the domain of the data. \_\_\_\_\_
- g) Predicate the number of calls when the temperature is 80°. \_\_\_\_\_
- h) Predicate the number of calls when the temperature is 60°. \_\_\_\_\_
- i) Explain why the number of calls at 60° is not reliable. \_\_\_\_\_  
\_\_\_\_\_

j) Use your calculator to find the residuals and graph the residual plot.



k) Find and interpret the residual for  $93^\circ$ . \_\_\_\_\_

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