

**Fitting a Line to Data Homework**

Algebra I

Chapter 5.6 (by hand, no graphing calculator)

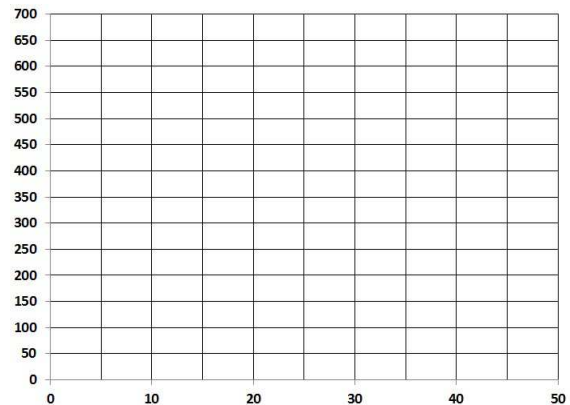
Name: \_\_\_\_\_

Date: \_\_\_\_\_ Hour: \_\_\_\_\_

- 1) Use the table below that contains data about different foods' fat and calorie content to answer the questions below:

|                |     |     |     |     |     |     |     |
|----------------|-----|-----|-----|-----|-----|-----|-----|
| Fat (g)        | 31  | 39  | 19  | 34  | 43  | 39  | 35  |
| Calories (Cal) | 580 | 680 | 410 | 590 | 660 | 640 | 570 |

- (a) Make a scatter plot of the data.  
(b) Describe the correlation. \_\_\_\_\_  
(c) Draw a line of fit.  
(d) Write the equation for the line of fit.  
(e) Use the equation to predict the number of calories in a hamburger with 28 grams of fat.



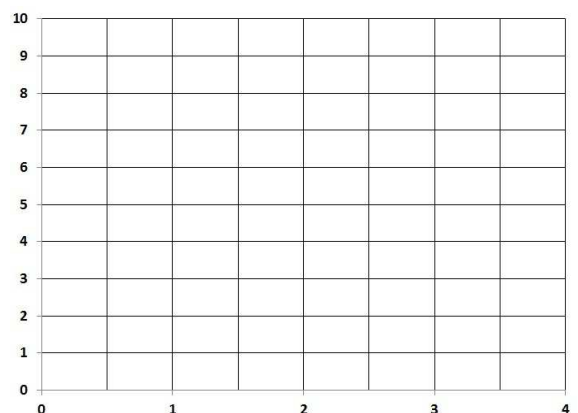
equation: \_\_\_\_\_

calories in a hamburger: \_\_\_\_\_

- 2) Use the table below to answer the questions below:

|     |   |   |   |   |   |   |   |
|-----|---|---|---|---|---|---|---|
| $x$ | 3 | 2 | 2 | 2 | 1 | 1 | 0 |
| $y$ | 9 | 8 | 6 | 3 | 4 | 2 | 0 |

- (a) Make a scatter plot of the data.  
(b) Describe the correlation. \_\_\_\_\_  
(c) Draw a line of fit.  
(d) Write the equation for the line of fit.  
(e) Use the equation to predict what  $y$  would be if  $x$  had a value of 10.



equation: \_\_\_\_\_

 $y$  when  $x = 10$ : \_\_\_\_\_