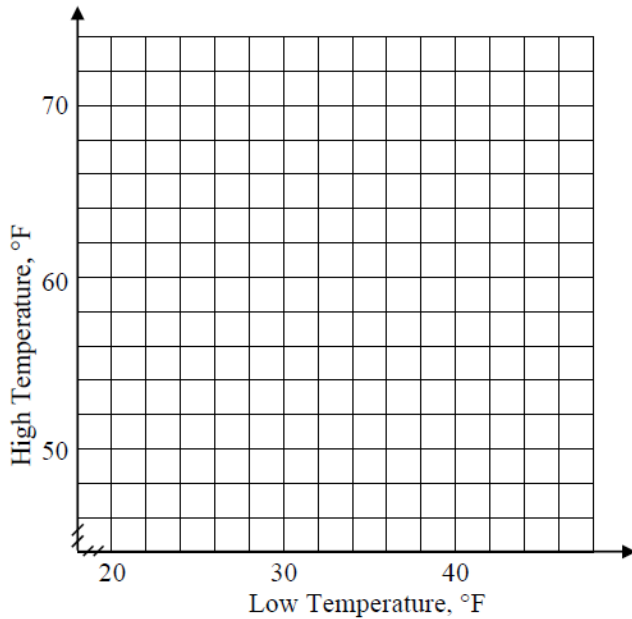


Name: _____
 Date: _____
 Class: _____

Algebra
 Unit 12
 HW 12-2

1) Listed below, are the low and high temperature for the beginning of the month of May. Create a scatter plot for the data, sketch in a line of best fit, and find the equation of this line that you drew:

Low Temperature, x	26	28	30	32	34	35	37	38	41	45
High Temperature, y	49	50	57	54	60	58	64	66	63	72



2) Using your equation for the line of best fit for the data in #1, what would the predicted high temperature be if the low for the day was 45° ?

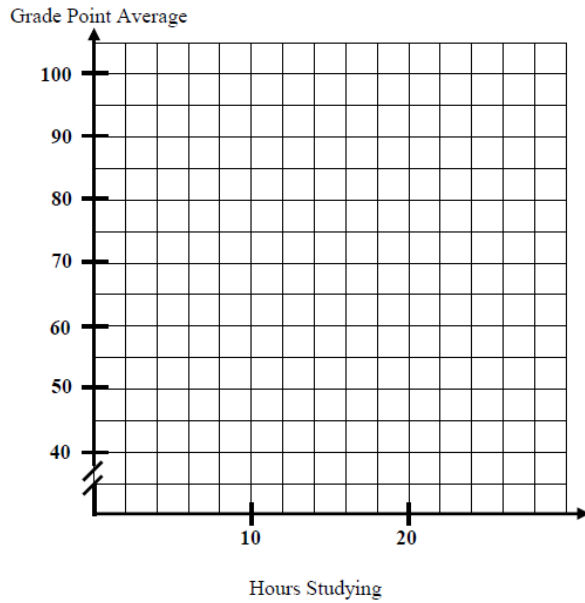
3) Create a scatter plot for the following data and determine the type of correlation that would exist:

Number of firefighters	2	3	5	8	9	12	16
Damage done by fire (in dollars)	2,932	9,750	15,575	23,190	22,900	35,400	52,900

4) In #3, is the number of firefighters a causal relationship with the damage done (meaning does the number of firefighters cause the damage cost to rise)?

5) Create a scatter plot and state the type of correlation that exists in this data:

Study time (Hours per week)	2	4	5	7	10	12	14	17	19	20
GPA (out of 100)	64	71	69	74	81	86	84	94	91	96



6) Sketch and find the equation of the line of best fit for problem #5

7) Is the relationship in #5 causal? If so which variable causes the other?

8) What type of regression would be best used for each of these scatter plots?

