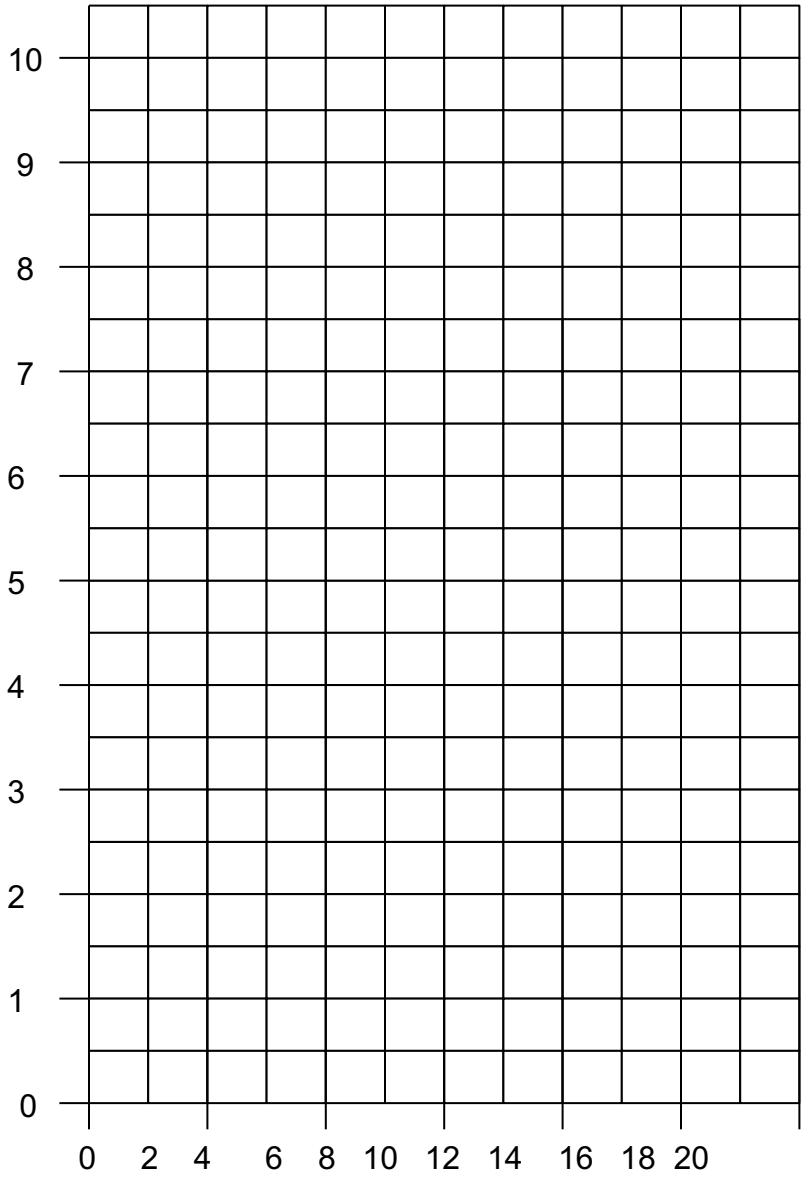
More Fun with Bivariate Data **Name:**

Let's look at some more bivariate data (i.e. two-variable data)!

1) Is there a relationship between education and prejudice? With increased education, does a person's level of prejudice tend to decrease? Notice that we are interested in two quantities – years of education and level of prejudice.

Respondent	**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**J**
Years of Education (x)	12	5	14	13	8	10	16	11	12	4
Score on prejudice test (y)	1	7	2	3	5	4	1	2	3	10

Construct a scatter plot on the grid below using the data from the table. Then put the data in your calculator and compare the scatter plot you drew to the scatter plot in the calculator. Then answer the questions below.



1) Is there a correlation between the data?

2) Is the correlation positive or negative?

3) Can we conclude that education causes someone to get a particular score on the test?

4) Use your calculator to find the equation of the line of best fit. Round to nearest tenth.

5) Use your calculator to predict the score of someone with 3 years of education.

2) Is there a relationship between the fat grams and the total calories in fast food?

Sandwich	Total Fat (g)	Total Calories
Hamburger	9	260
Cheeseburger	13	320
Quarter Pounder	21	420
Quarter Pounder with Cheese	30	530
Big Mac	31	560
Arch Sandwich Special	31	550
Arch Special with Bacon	34	590
Crispy Chicken	25	500
Fish Fillet	28	560
Grilled Chicken	20	440
Grilled Chicken Light	5	300

Find the equation of the line of best fit. Round to nearest whole number: _____

a) Using the equation of the line of best fit, predict how many calories would be in a food with 50g of fat.

b) Using the equation of the line of best fit, predict how many grams of fat would be in a food containing 500 calories.

c) According to the table of fast foods, is this the same number of grams of fat as the Crispy Chicken? Why or why not?