Find the equation of the line of best fit and then find the correlation coefficient, r, using a calculator.

1) Below are the values of various fast food meals fat grams (x) and the total calories (y).

Fat Grams (x)	5	9	13	20	21	25	28	30	31	31	34
Total Calories (y)	300	260	320	440	420	500	560	530	560	550	590

Equation: _____ r: ____

2) Using the data from #1, predict amount of total calories based on 22 grams of fat.

3) Select track members are preparing for an upcoming marathon. Below are the recorded times.

Average Speed (mph)	8.5	7.5	6.5	6.0	5.5	5.0	4.0	3.5
Time (hours)	2.5	3.75	4.5	5.0	5.5	6.25	6.75	8.75

Equation: _____ r: ____

4) Using the data from #3, predict the time it would take to run the marathon if the runners average speed were 4.5mph.

5) Autumn recorded the amount of money she received when babysitting various families for the summer.

Hours worked (x)	1	2	2.5	3	4	4.5	5	6	8
Money Paid (y)	12	18	16	30	26	45	40	50	70

Equation: _____ r: ____

6) Using the data from #5, predict the amount of money Autumn would make if she babysat for 10 hours.

Find the linear regression line from the graphs provided.





