Total Fat (x)	0	9	13	21	30	36	42
Total Calories (y)	0	260	320	425	452	463	550
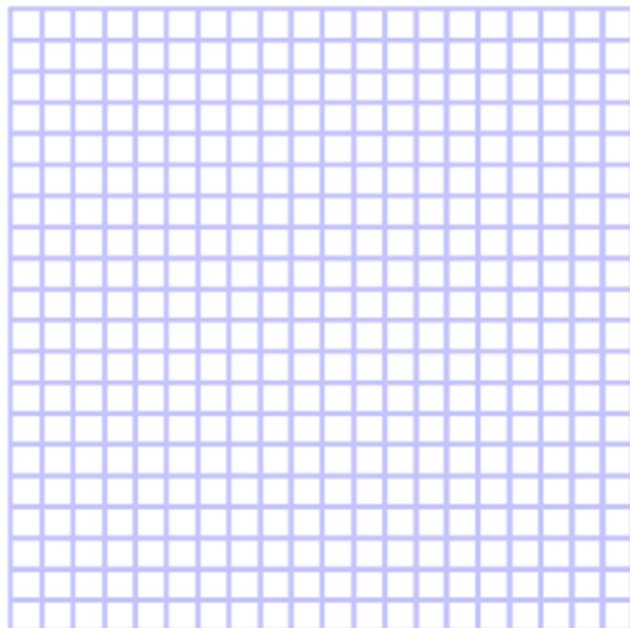
1. Draw the scatterplot.
2. Identify the correlation.

Correlation:_____

3. Draw the line of best fit.
Y-intercept =   Slope =

Y = _____
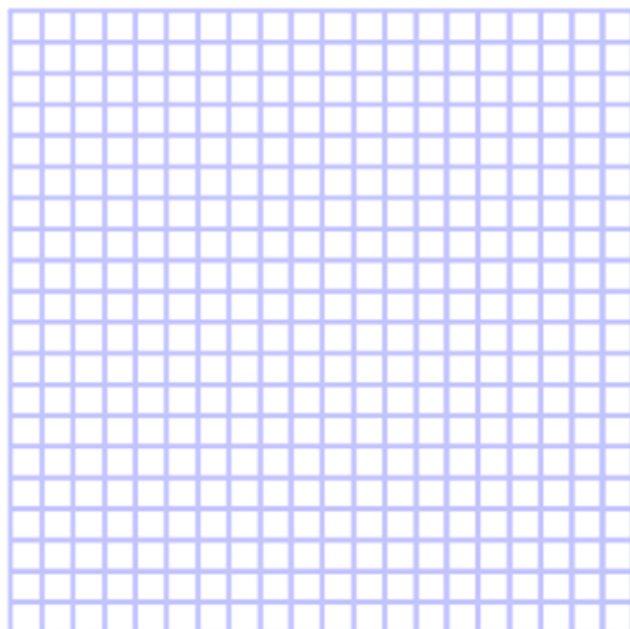
4. Use the line to answer these questions.

400 Calories = _____ Fat

_____ Calories = 25 grams of Fat

4. *Wind Speed and Wind Chill Temperature*

Wind Speed (x)	0	6	9	12	17	20	22
Temperature (y)	32	28	22	18	16	10	3

1. Draw the scatterplot.
2. Identify the correlation.

         Correlation:_____

3. Draw the line of best fit.
         Y-intercept =   Slope =

         Y = _____

4. Use the line to answer these questions.

(Temp) 5 degrees = _____ Wind Speed

Temp of _____ = 15 mpr (Wind Speed)

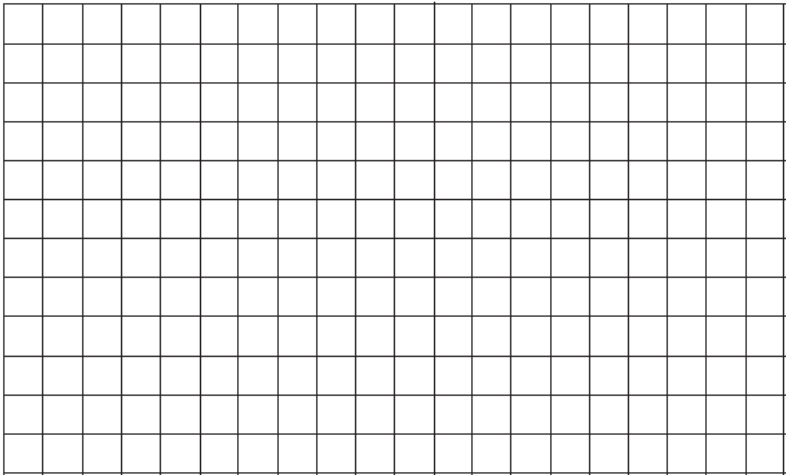HOW MUCH IS THAT CAR?

Nate's Data from Car Ads

Odometer Reading (thousands of mi)	Price (thousands of $)
35	$38
55	$16
6	$50
28	$30
50	$26
31	$35
15	$28
99	$10
99	$13

Nate and Nick were discussing cars. Nate claimed that cars with lower odometer readings were more expensive than cars with higher odometer readings. His evidence was that his car with 23,000 miles was worth more than Nick's car with 31,000 miles. To investigate Nate's claim, the boys researched several car ads and found the information in the table at right.

To make it easier to see, make a scatterplot from the data.

Identify the correlation.

Correlation:_____

Draw the line of best fit.

Y-intercept =

Slope =

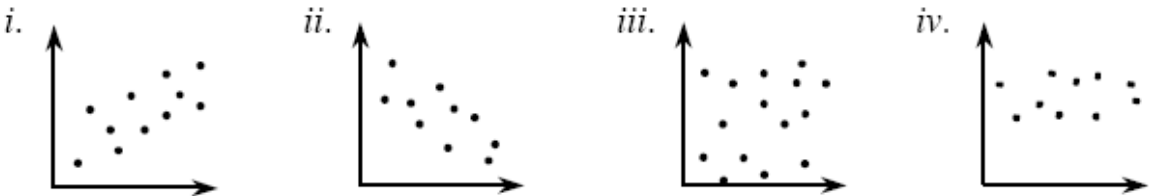Y = _____

A car has 80,000 miles on it. Estimate what the price should be.

Nate has $20,000 to spend on a car. Estimate how many miles it will have on it.

E.   For each scatterplot, classify it as positive, negative or no correlation.

i.

ii.

iii.

iv.

For your data set:

      a) Create a scatterplot (using DESMOS.COM)
      b) Identify the correlation
      c) Draw in a line of best fit (using DESMOS.COM)
      d) Answer the questions and explain how you answered the questions using DESMOS.COM

Team 1: Does the amount of fertilizer affect the plant height?

Amount of fertilizer over 3 week period (ml)	5	10	15	20	25
Height of plant (cm)	9	12	18	24	30

Correlation:

Y = _____

If the amount of fertilizer was 30 (ml), predict the height of the plant.

If the height of the plant was 20 cm, predict the amount of fertilizer used.

Team 2: Does the depth of seed in each pot affect the plant height?

Depth of seed in pot (cm)	3	6	9	12	15
Height of plant (cm)	24	21	18	12	6

Correlation:

Y = _____

If the depth of the seed in the pot was 20 cm, predict the height of the plant.

If the height of the plant was 15 cm, predict the depth of the seed in the pot.

Team 5: Do the hours of sunlight per day affect the plant height?

Amount of light per day (hours)	1	3	5	7	9
Height of plant (cm)	3	9	12	24	27

Correlation:

Y = _____

If the amount of light per day was 12 hours, predict the height of the plant.

If the height of the plant was 20 cm, predict the amount of light per day.