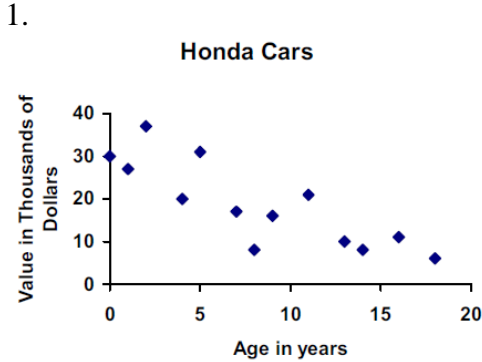
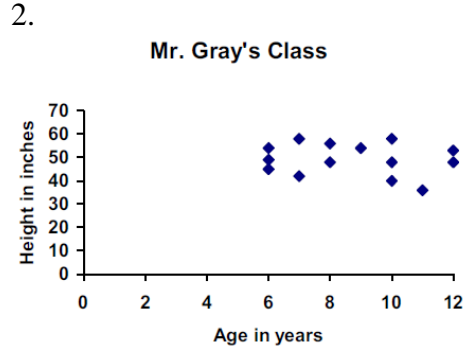


Corrective Assignment

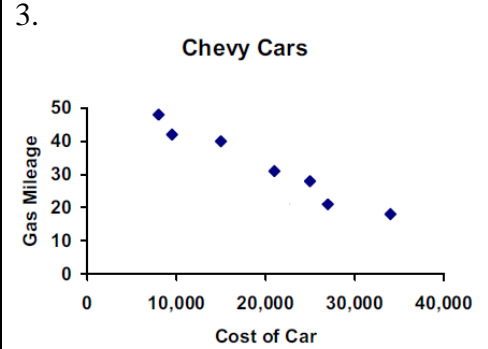
Analyze the scatter plots below to determine which best describes the relationship between the variables?



- (A) Strong positive correlation
- (B) Strong negative correlation
- (C) Weak positive correlation
- (D) Weak negative correlation
- (E) No correlation



- (A) Strong positive correlation
- (B) Strong negative correlation
- (C) Weak positive correlation
- (D) Weak negative correlation
- (E) No correlation



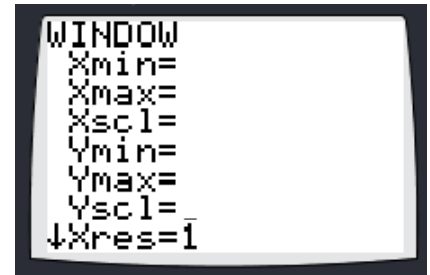
- (A) Strong positive correlation
- (B) Strong negative correlation
- (C) Weak positive correlation
- (D) Weak negative correlation
- (E) No correlation

Construct a scatter plot on your graphing calculator. State the window used to view the graph and describe the relationship of the two variables.

4.

Fat (grams)	0	9	13	21	30	36	42
Energy (calories)	0	260	320	425	452	463	550

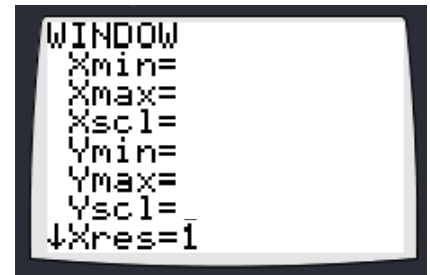
Describe the relationship between the fat and potential energy.



5. A basketball is dropped. The table shows the height of the ball after each bounce.

Bounce (#)	1	2	3	4	5	6	7
Height (feet)	12	7	4	2.5	1.5	1	0.5

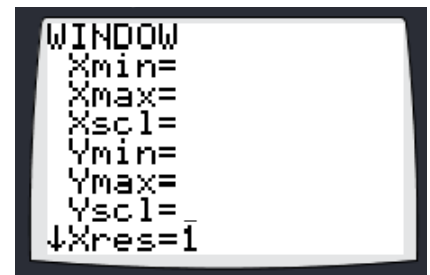
Describe the relationship between the bounce and height of the ball.



6.

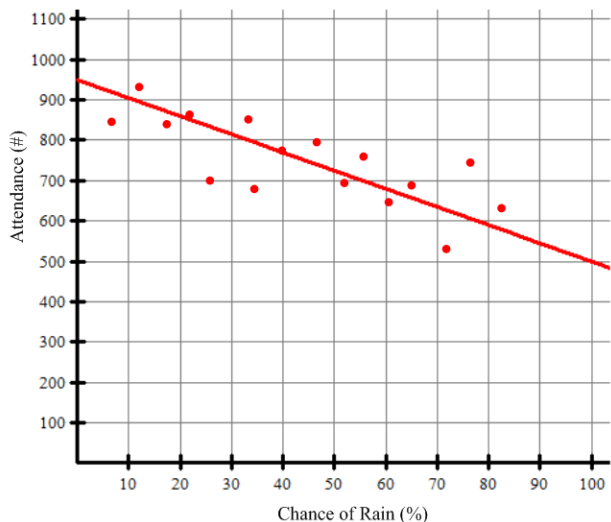
Month (#)	1	2	4	6	8	10	12
Mean Temperature (°F)	38	41	59	72	85	68	32

Describe the relationship between the month and the mean temperature.



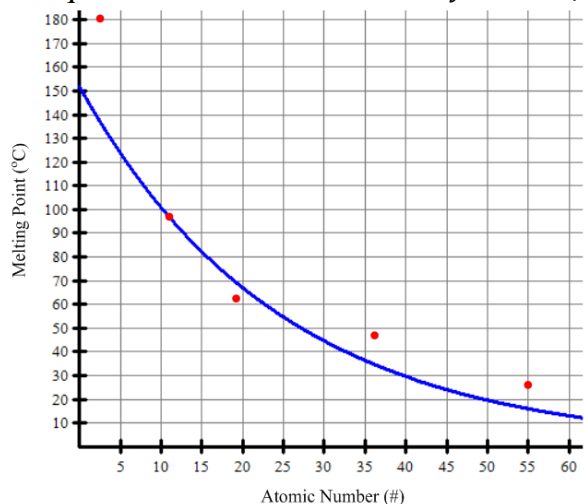
Use the scatterplot and equation for the best fit line/curve to answer the following.

7. The scatterplot shows the percent chance of rain and the attendance at a Six Flags amusement park. The equation of the best fit line is $y = -4.5x + 950$ and is shown graphed below.



- Use the equation of best fit to predict the attendance if there is a 50% chance of rain.
- Use the equation of best fit to predict the chance of rain if there are 600 people in the park.
- Describe the relationship between the elevation of a city and the mean number of clear day per year.

8. The scatterplot shows the atomic number of an Alkali metal and its melting point in degrees Celsius. The equation of the best fit curve is $y = 152(0.96)^x$ and is shown graphed below.



- Use the equation of best fit to predict the melting point of an Alkali metal with atomic number of 30. (Round to hundredths)
- The actual melting point of Potassium whose atomic number is 19 is 63.7°C. How far off is the model's prediction for Potassium? (round to hundredths)
- Explain why predicting the melting point of an Alkali metal with atomic number 45 is NOT extrapolation of the data.

Answers to Corrective Assignment 5.2

1. D	4. Xmin=0 Xmax=50 Xscl=5	Ymin=0 Ymax=600 Yscl=50	5. Xmin=0 Xmax=8 Xscl=1	Ymin=0 Ymax=15 Yscl=1	6. Xmin=0 Xmax=12 Xscl=1	Ymin=0 Ymax=100 Yscl=10
2. E	Linear, positive correlation		Non-Linear, height decreases as bounces increase (exponential)		Non-Linear, temperature increase over time and then decreases again (quadratic)	
3. B						
7. a. 725 people b. 77.7% c. linear, negative correlation			7. a. 44.67°C b. 6.28°C c. 45 is within the data set, data is from 3-55			