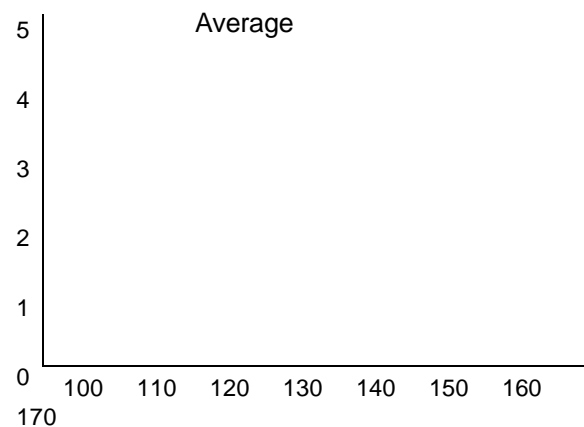


**Correlation**

This program demonstrates the use of scatterplots and clarifies the meaning of the correlation coefficient computed from them.

- Suppose that, for each of six different dormitories, you measure two variables: a) room size in square feet, and b) student satisfaction with dorm life. Using this example, explain the difference between the three possible outcomes: a positive correlation, a negative correlation, or no correlation between the two variables.
- Suppose that the results of your study were as follows: Plot these results on the graph below. (Rating of 5 - high satisfaction, 1 = low satisfaction)

Dorm	Room Size	Average Satisfaction Rating
U	120	3
V	140	5
W	150	4
X	110	2
Y	160	5
Z	130	3



- Does the graph show a positive correlation, a negative correlation, or no correlation? Do these results prove that room size causes a change in student satisfaction with dorm life? Why or why not?

- Plot the information given for this study on the graph below.