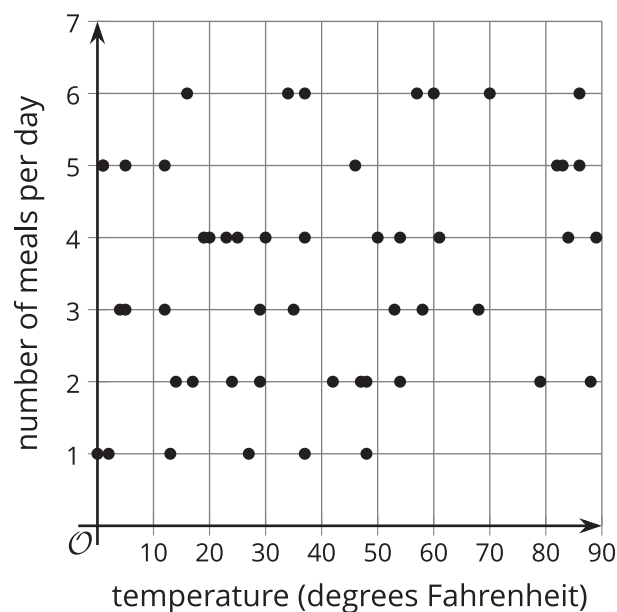
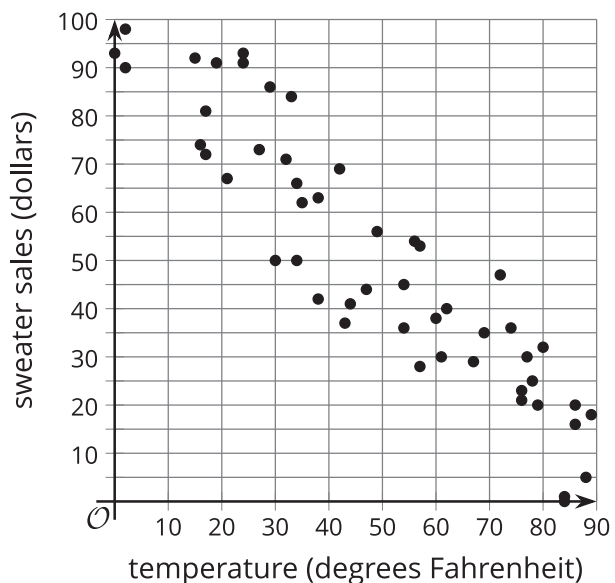
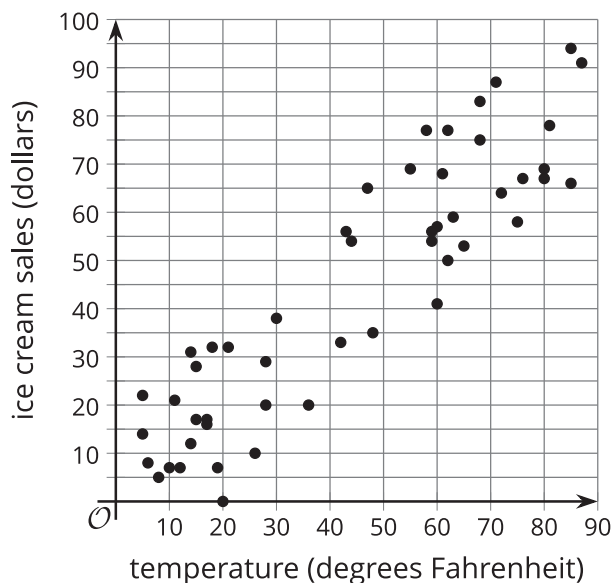


# Lesson 8: Correlations

- Let's explore correlations.

## 8.1: Notice and Wonder: Correlations

What do you notice? What do you wonder?

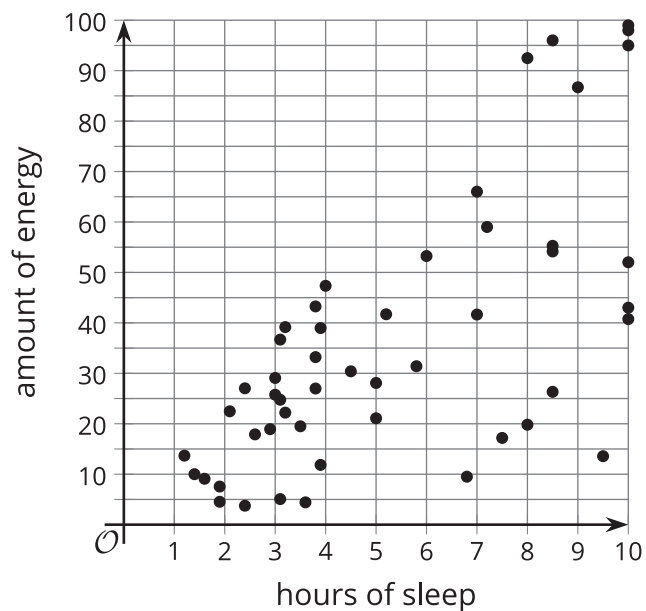


## 8.2: Variable Relationships

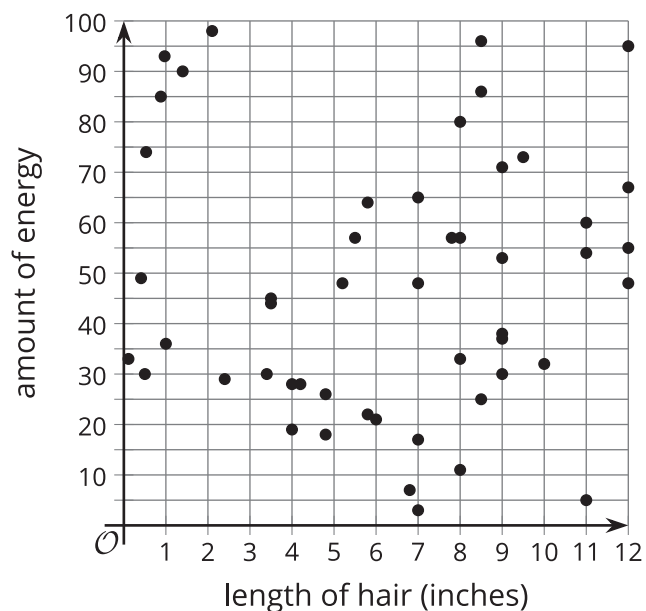


1. For each pair of variables, do you expect there to be a relationship? That is, do you think a change in one variable is accompanied by a change in the other variable? How do you expect the second variable to change if the first variable is increased?
  - a. hours of sleep and energy level
  - b. length of hair and energy level
  - c. number of school events each week and time spent watching videos online each week
  - d. temperature and watermelon sales

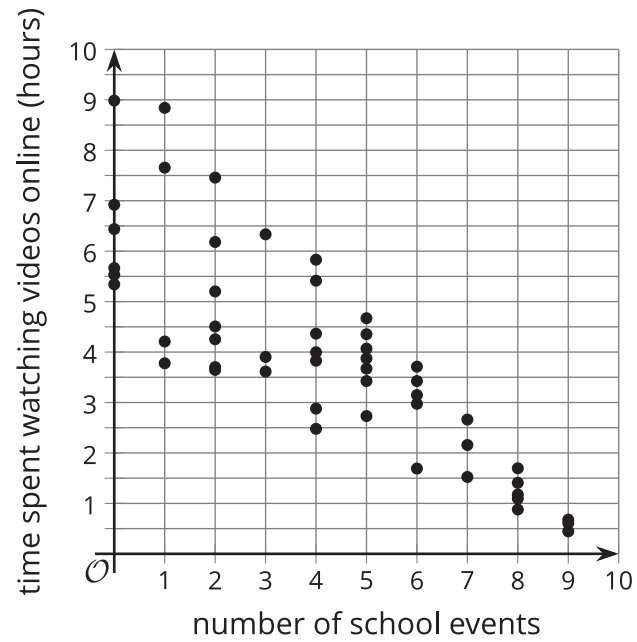
2. Some data is collected for each pair of variables listed and represented by a scatter plot. For each pair of variables, how do the scatter plots support or contradict your answers from the previous question?



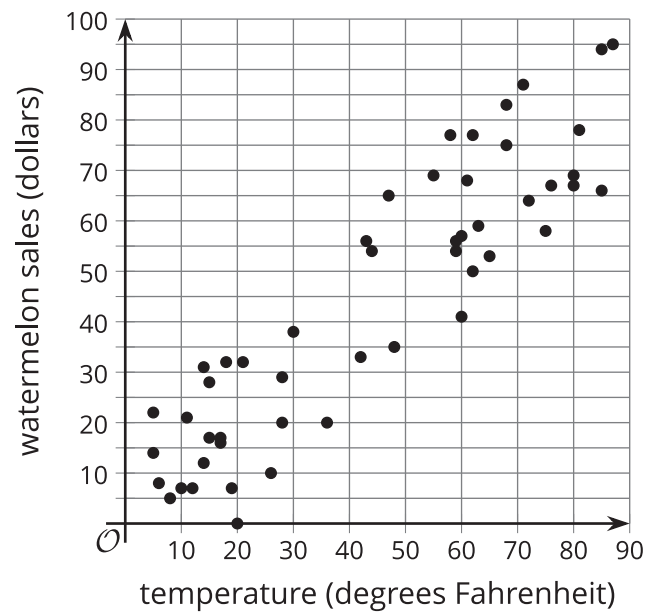
a.



b.



c.



d.

### 8.3: Card Sort: Correlations

Your teacher will give you a set of cards. Match each scatter plot with a pair of variables. Be prepared to explain your reasoning.