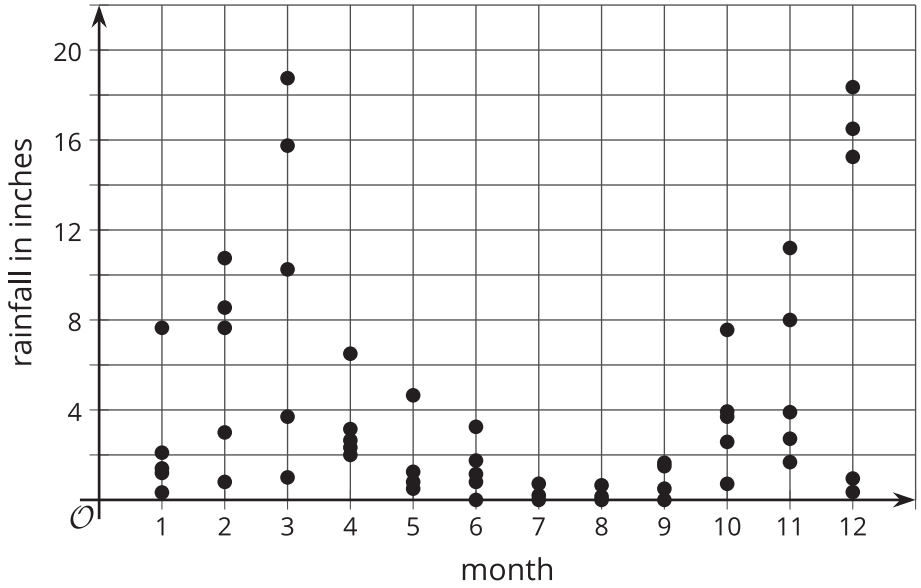
Unit 9, Lesson 11

Plotting the Temperature

Let's construct a model.

11.1 Notice and Wonder: California Rain

What do you notice? What do you wonder?



11.2 Data Snooping

The table shows the average high temperature in September for cities with different latitudes. Examine the data in the table.

city	latitude (degrees north)	temperature (degrees Fahrenheit)
Atlanta, GA	33.75	84
Belmopan, BZ	17.31	87
Boston, MA	42.36	73
Chinandega, NI	12.36	91
Dallas, TX	32.78	87
Denver, CO	39.74	81
Edmonton, AB	53.55	62
Fairbanks, AK	64.84	55
Juneau, AK	58.34	56
Kansas City, MO	39.10	80
Lincoln, NE	40.81	80
Miami, FL	25.76	89
Minneapolis, MN	44.98	73
New York City, NY	40.71	76
Orlando, FL	28.54	92
Philadelphia, PA	39.95	79
Portland, ME	43.66	71
Puerto Morelos, MX	20.89	89
San Antonio, TX	29.42	90
San Francisco, CA	37.78	70
Seattle, WA	47.61	72
Tampa, FL	27.95	89
Tucson, AZ	32.25	96
Yellowknife, NT	62.45	50

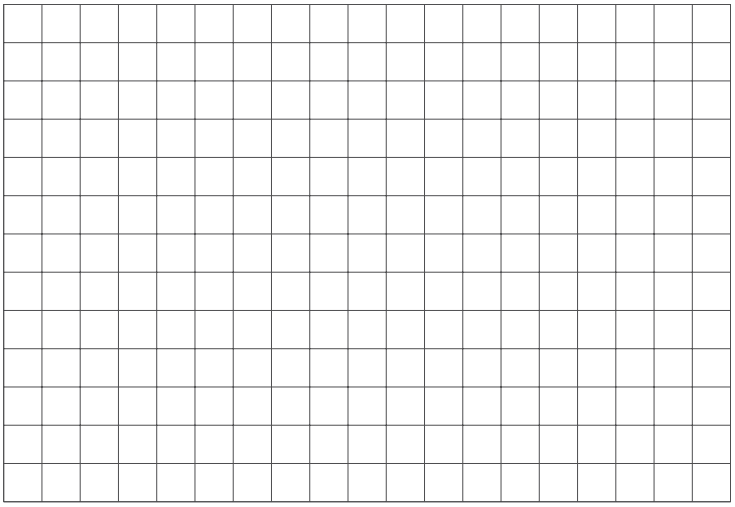
1. What information does each row hold?

2. What is the range for each variable?

3. Do you see an association between the two variables? If so, describe the association.

11.3 Temperature vs. Latitude

1. Make a scatter plot of the data.



2. Describe any patterns of association that you notice.

3. Draw a line that fits the data. Write an equation for this line.