

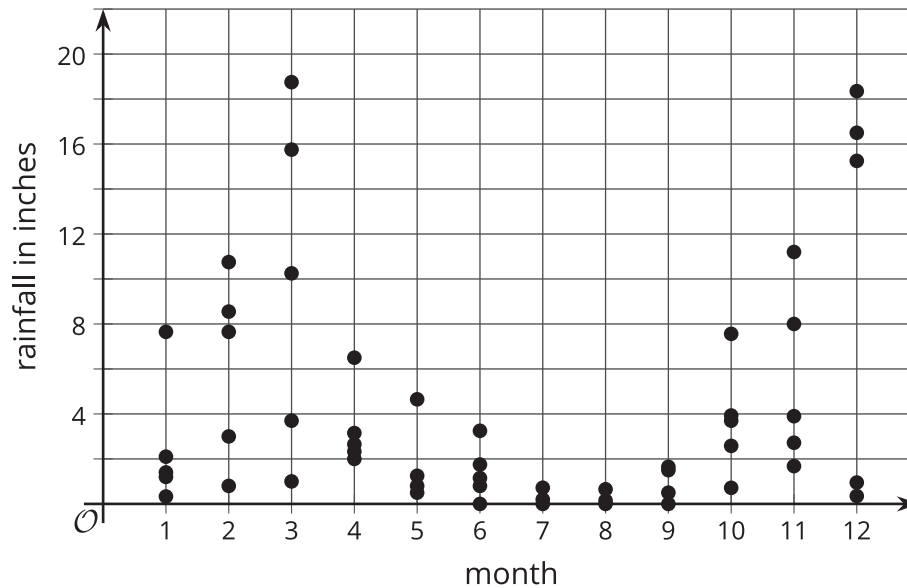
# Plotting the Temperature

Let's construct a model.

## 11.1

## Notice and Wonder: California Rain

What do you notice? What do you wonder?



## 11.2

## Data Snooping

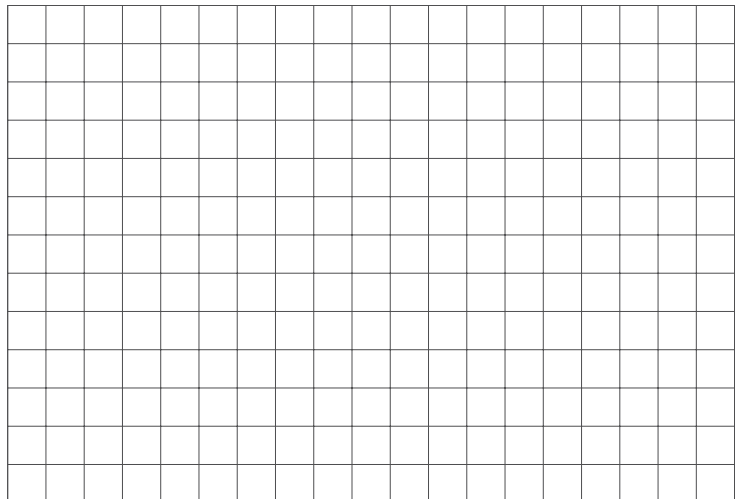
The table shows the average high temperature in September for cities with different latitudes. Examine the data in the table.

| 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.

