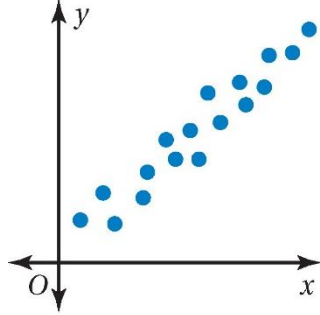


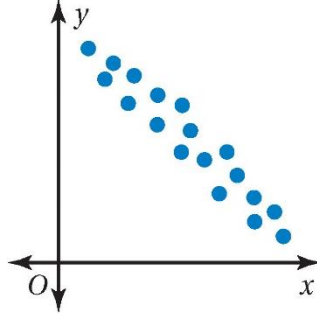
Chapter 9

Final Review

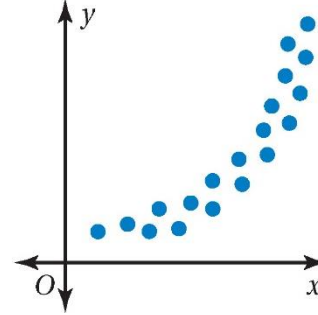
Kinds of Scatter Plots



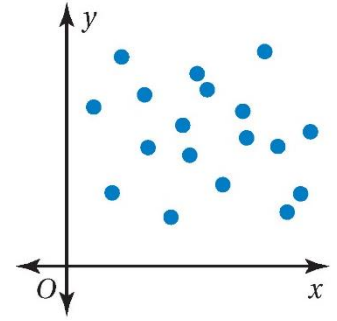
The points lie close to a line. As x increases, y increases.



The points lie close to a line. As x increases, y decreases.



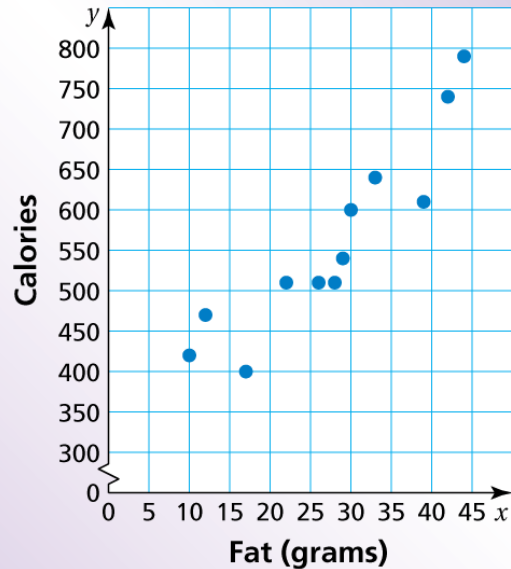
The points lie in the shape of a curve.



The points show no pattern.



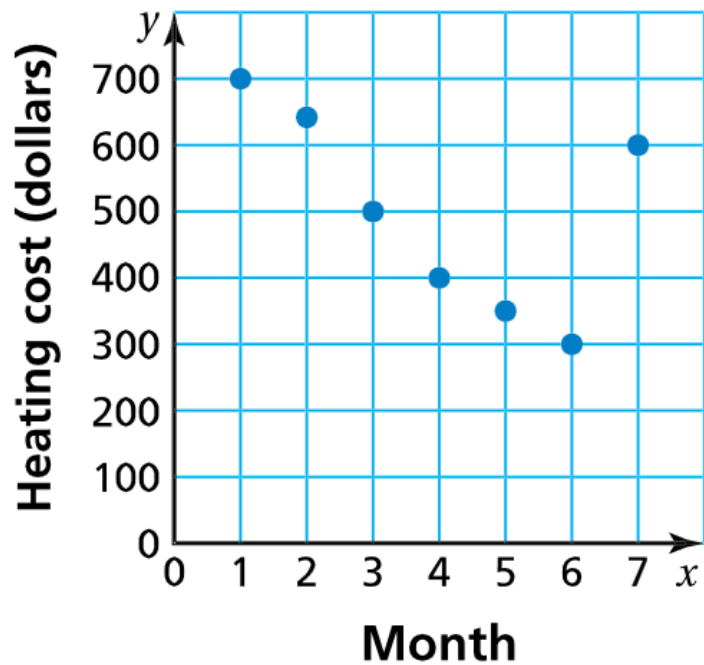
Restaurant Sandwiches



The scatter plot at the left shows the amounts of fat (in grams) and the numbers of calories in 12 restaurant sandwiches.

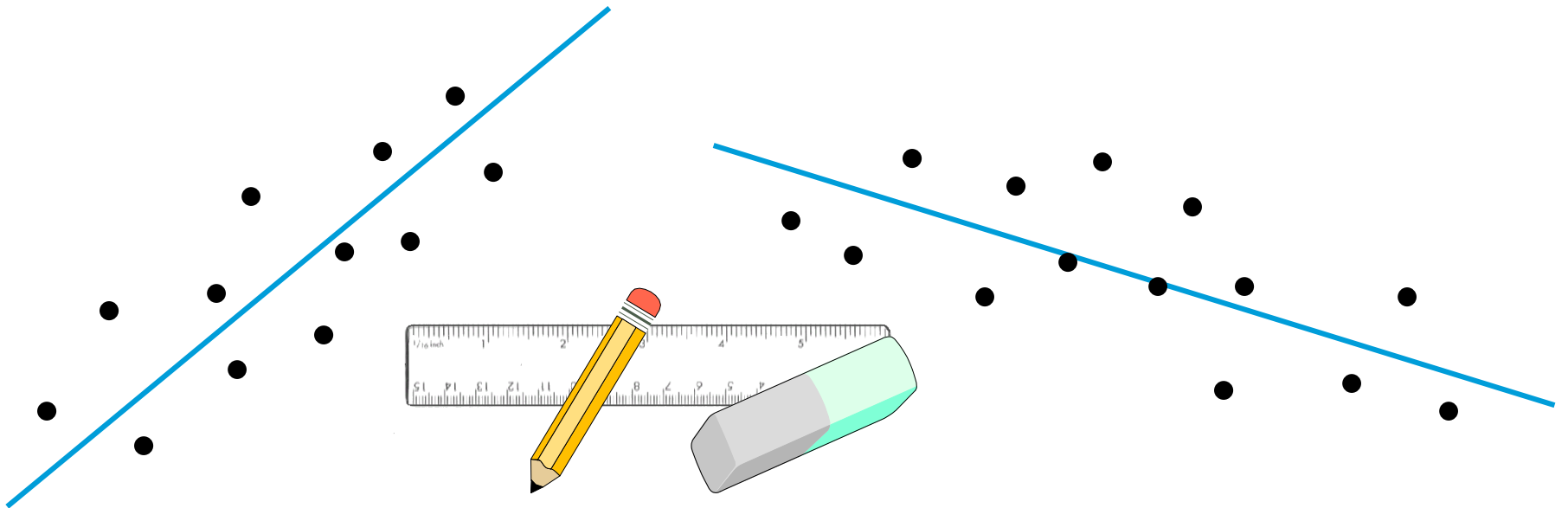
- How many calories are in the sandwich that contains 17 grams of fat?
- How many grams of fat are in the sandwich that contains 600 calories?
- What tends to happen to the number of calories as the number of grams of fat increases?

Describe the relationship between the data. Identify any outliers, gaps, or clusters.



Line of Best Fit

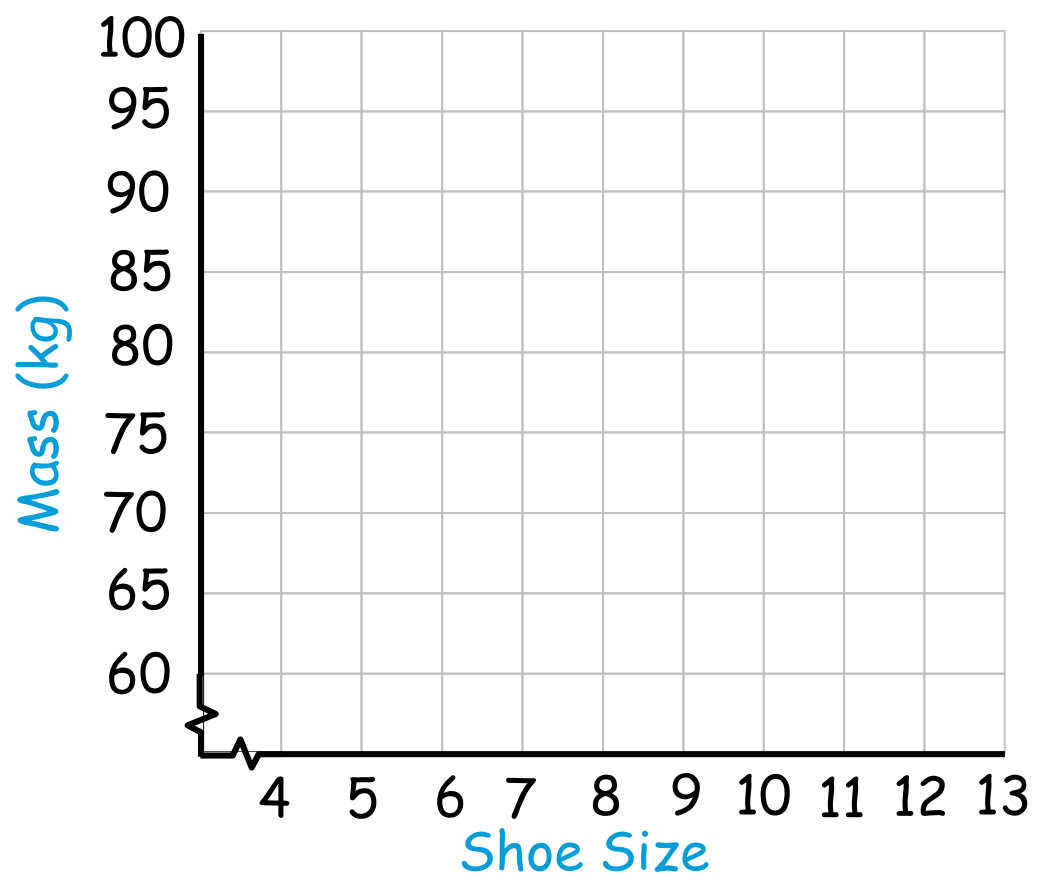
A **trend line** can be drawn to data that shows a correlation. The stronger the correlation between the data, the easier it is to draw the line. The line can be drawn **by eye** and should have **roughly** the **same number** of data points on either side.



Deriving information from a scatter plot

The table below shows the shoe size and mass of 10 men.
Plot a scatter graph for this data.

Size	5	12	7	10	10	9	8	11	6	8
Mass	65	97	68	92	78	78	76	88	74	80



For the previous scatter plot:

- 1) To the best of your ability, draw a trend line between the points.
- 2) What kind of correlation is the scatter plot?
- 3) With the help of the trend line, estimate the mass of man with a shoe size of 10.5.
- 4) With the help of the trend line, estimate the shoe size of a man with a mass of 70kg.

Two-Way Tables

A **two-way table** displays two _____ of data collected from the same source.

The following is a survey of students regarding their grades on the last test and whether they studied for the test. The two-way table shows your results.

		Student	
		Studied	Did Not Study
Grade	Passed	21	2
	Failed	1	6

Each entry in the table is called a _____.

Finding Marginal Frequencies

Marginal frequencies are basically the _____ of each column and row.

Find and interpret the marginal frequencies for the survey.

		Student	
		Studied	Did Not Study
Grade	Passed	21	2
	Failed	1	6

Practice

Use the two-way table to complete the following:

1) Find the total of each row and column.

		Fundraiser	
		No	Yes
Gender	Female	22	51
	Male	30	29

2) What are these totals called?

3) How many female students will be participating in the fundraiser?

4) How many male students will not be participating in the fundraiser?