TSW
- Read data from a two-way table
- Construct and interpret a two-way table
- Convert data to relative frequencies in a two-way table

8SP 4- Understand that patterns of association can also be seen in bivariate categorical data by displaying frequencies and relative frequencies in a two-way table.

Vocabulary

Qualitative (Categorical) data-

Example:

Give another real life example of **Qualitative data-**
Two Way Table-

Glasses

Gender		Yes	No	Total
	Boy	8	7	15
	Girl	9	16	25
	Total	17	23	40

Example 7   **Read a two-way table.**

The results of a poll of 100 adults about their favorite sport are shown in the two-way table below. Some information is missing from the table.

Favorite Sport

Gender		Basketball	Baseball	Tennis	Swimming	Total
	Men	16	27	5	12	60
	Women	2	6	16	?	?
	Total	?	?	?	?	?

a) Find the total number of women.

b) Find the number of women who chose swimming as their favorite sport.

c) Complete the table with the total number of men and women who chose each sport.

Guided Practice

Solve.

1 A survey asked 1,000 gym members what type of exercises they do when they visit the gym. The results are recorded in a two-way table as shown.

Exercise Type

		Cardio	Weights	Both	Total
Gender	**Male**	125	279	?	?
	Female	295	68	118	481
	Total	?	347	233	1,000

a) Find the total number of male gym members surveyed.

b) Find the number of male gym members who chose both types of exercises.

c) Find the total number of gym members who chose cardio exercises.