

10.3 Modeling Linear Association Day 3

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

Relative Frequencies-

There are two ways of converting these data into relative frequencies.

		Late		Total
		Yes	No	
Gender	Male	140	575	715
	Female	183	1,086	1,269
	Total	323	1,661	1,984

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Example 9 Convert data to relative frequencies in a two-way table.

From Example 7, the two-way table below shows the results of a poll of 100 adults about their favorite sport.

		Favorite Sport				Total
		Basketball	Baseball	Tennis	Swimming	
Gender	Men	16	27	5	12	60
	Women	2	6	16	16	40
	Total	18	33	21	28	100

- a) Find the relative frequencies to compare and describe the distribution of the genders within each sport. Round your answer to the nearest hundredth when you can.
- b) Find the relative frequencies to compare and describe the distribution of favorite sports within each gender. Round your answer to the nearest hundredth when you can.