

Lesson 3 Skills Practice

Two-Way Tables

For Exercises 1 and 2, construct a two-way table summarizing each set of data.

- There are 195 male and 126 female students at McGuffey Junior High. A survey showed that 110 males and 84 females ride the bus.

	Bus	Not Bus	Total
Males	110	85	195
Females	84	42	126
Total	194	127	321

- The two-way table shows the enrollment in language classes at Carson Middle School. Find and interpret the relative frequencies of students in the survey by row. Round to the nearest hundredth if necessary.

	Spanish	Not Spanish	Total
Chinese	30; $\frac{30}{95} \approx 0.32$	65; $\frac{65}{95} \approx 0.68$	95; $\frac{95}{95} \approx 1.00$
Not Chinese	20; $\frac{20}{25} = 0.80$	5; $\frac{5}{25} = 0.20$	25; $\frac{25}{25} \approx 1.00$

Sample answer: More than twice as many students who study Chinese are not studying Spanish. One-fifth of the students who are not studying Chinese are not studying either language.

- Refer to the table in Exercise 2. Find and interpret the relative frequencies of students in the survey by column. Round to the nearest hundredth if necessary.

	Spanish	Not Spanish
Chinese	30; $\frac{30}{50} = 0.60$	65; $\frac{65}{70} \approx 0.93$
Not Chinese	20; $\frac{20}{50} = 0.40$	5; $\frac{5}{70} \approx 0.07$
Total	50; $\frac{50}{50} = 1.00$	70; $\frac{70}{70} = 1.00$

Sample answer: More than half of the students are studying Chinese and Spanish. Only 7% of students are not studying a language.