Two-Way Frequency Tables

Big Ideas

Two way tables are useful when analyzing bivariate data*.

*bivariate is a fancy math word for two pieces of data

**Relative frequency - a ratio comparing two quantities (usually expressed as a fraction and/or percentage)

Example:

	study a foreign language	do not study a foreign language
enrolled in 1 or more honors classes	31	11
not enrolled in one or more honors classes	8	22

★72 total students

1. What is the relative frequency of students taking honors courses & studying a foreign language?

$$\frac{31}{72} = 0.4305 = 43.05\% \approx 43\%$$

2. What is the relative frequency of students who do not study a foreign language, but do take honors courses?

$$\frac{11}{72} = 0.1527 = 15.27\% \approx 15\%$$

3. What is the relative frequency of students who do not study a foreign language, and do not take honors courses?

$$\frac{22}{72} = 0.3056 = 30.56\% \approx 31\%$$

4. What is the relative frequency of students that are not enrolled in one or more honors classes that do study a foreign language?

$$\frac{8}{72} = 0.1111 = 11.11\% \approx 11\%$$