

Suggested reading: [OpenIntro Statistics, 3rd edition](#), Chapter 1, Sections 1.7 - 1.8

LO 1. Use frequency tables and bar plots to describe the distribution of one categorical variable.

LO 2. Use contingency tables and segmented bar plots or mosaic plots to assess the relationship between two categorical variables.

LO 3. Use side-by-side box plots for assessing the relationship between a numerical and a categorical variable.

Test yourself:

1. *Interpret the plot in Figure 1.40 of OpenIntro Statistics (page 39).*
2. *You collect data on 100 classmates, 70 females and 30 males. 10% of the class are smokers, and smoking is independent of gender. Calculate how many males and females would be expected to be smokers. Sketch a mosaic plot of this scenario.*