

**Table 3.5** Absolute and Relative Frequencies of Participant Ages

Age (years)	$f$ (frequency)	$rf$ (relative frequency)
23	4	.037
22	3	.028
21	49	.454
20	6	.056
19	4	.037
18	33	.306
17	8	.074
15	1	.009
	108	1.000

2. What is the difference between a histogram and a frequency polygon?

A: A histogram is more appropriate for discrete data, whereas a frequency polygon is more appropriate for continuous data.

3. Why might frequency distribution graphs be preferable to tables as a way to display data?

A: Visual information is typically easier for people to understand quickly. Tables convey the same information, but it is often more difficult for people to digest information in tabular format than in pictorial format.

4. Figure 3.4 contains a histogram that displays the frequency of occurrence for scores on a class midterm exam (these data are for illustrative purposes only). Use this histogram to answer the following questions:

- a) How many students took this midterm exam?

A: To get this number, add the frequency for each exam score. Doing so reveals that 40 students took the midterm exam.

- b) What was the most frequently occurring score on the midterm?

A: Look for the highest point on the histogram; then see what score along the x-axis it corresponds to. Here, the most frequently occurring score is 85.

- c) How many students scored 91% on the midterm?

A: 3

(Continued)