but a frequency polygon uses line segments instead of bars. We construct a frequency polygon from a frequency distribution as shown in Example 10.

Example 10 **Frequency Polygon: IQ Scores of Low Lead Group**

See Figure 2-14 for the frequency polygon corresponding to the IQ scores of the low lead group summarized in the frequency distribution of Table 2-2 on page 45. The heights of the points correspond to the class frequencies, and the line segments are extended to the right and left so that the graph begins and ends on the horizontal axis. Just as it is easy to construct a histogram from a frequency distribution table, it is also easy to construct a frequency polygon from a frequency distribution table.

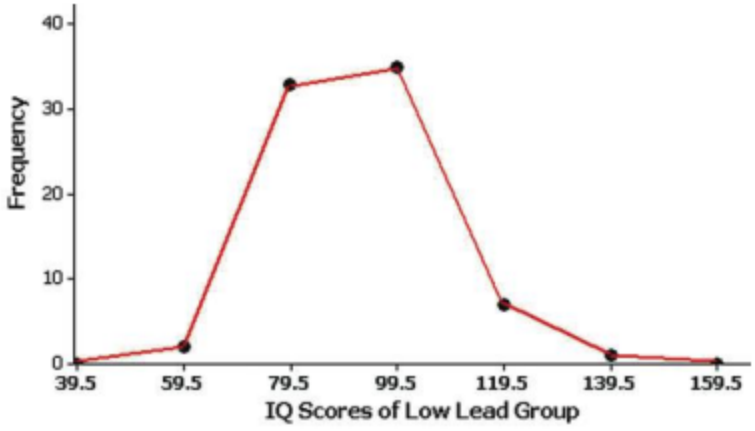

Figure 2-14 **Frequency Polygon: IQ Scores of Low Lead Group**

A variation of the basic frequency polygon is the **relative frequency polygon,** which uses relative frequencies (proportions or percentages) for the vertical scale. When one is trying to compare two data sets, it is often very helpful to graph two relative frequency polygons on the same axes.

Example 11 **Relative Frequency Polygon: IQ Scores of Lead Groups**

See Figure 2-15, which shows the relative frequency polygons for the IQ scores of the low lead group and the high lead group as listed in Table 2-1 given with the Chapter Problem at the beginning of this chapter. Figure 2-15 shows that the high lead group generally has lower (farther left) IQ scores than the low lead group.

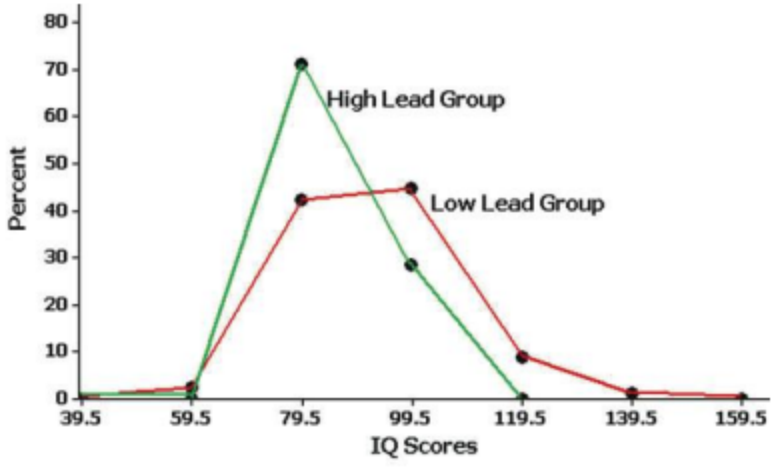

Figure 2-15 **Relative Frequency Polygons: IQ Scores**