14-3

Practice

Measures of Variability

Find the interquartile range and the semi-interquartile range of each set of data. Then draw a box-and-whisker plot.

1. 43, 26, 92, 11, 8, 49, 52, 126, 86, 42, 63, 78, 91, 79, 86

2. 1.6, 9.8, 4.5, 6.2, 8.7, 5.6, 3.9, 6.8, 9.7, 1.1, 4.7, 3.8, 7.5, 2.8, 0.1

Find the mean deviation and the standard deviation of each set of data.

3. 146, 289, 121, 146, 212, 98, 86, 153, 128, 136, 181, 142

4. 1592, 1486, 1479, 1682, 1720, 1104, 1486, 1895, 1890, 2687, 2450

5. ***Sociology*** The frequency distribution at the right shows the average life expectancy for males and females in 15 European Union countries in 1994.

a. Find the mean of the female life expectancy.

b. Find the mean of the male life expectancy.

c. What is the standard deviation of the female life expectancy?

d. What is the standard deviation of the male life expectancy?

Life Expectancy (years)	Frequency	
	Male	Female
71.5–73.0	3	0
73.0–74.5	9	0
74.5–76.0	2	0
76.0–77.5	1	0
77.5–79.0	0	3
79.0–80.5	0	8
80.5–82.0	0	4

Source: Department of Health and Children, Ireland