Lesson 1-3

Example 1

The stem-and-leaf plot shows the ages of 27 people who attended a family reunion.

Find the following.

a. least and greatest values
b. outliers
c. clusters
d. gaps

0	1 3 7
1	2 2 6 8
2	0 1 4
3	3 5 7 9 9
4	2 3
5	1 6 8 8
6	4 5 7
7	2 6
8	
9	5

3 | 7 represents 37 years old.

Solution

a. The youngest person at the reunion was 1 year old, and the oldest was 95 years old.

b. There are no outliers.

c. There are several clusters of values: those in the late teens to early 20s, those in the late 30s to early 40s, and those in the late 50s.

d. The greatest gaps are between 24 and 33, between 43 and 51, and between 76 and 95. Of these, the greatest gap is between 76 and 95.

Example 2

Organize these children's weights (in pounds) into a stem-and-leaf plot.

79	55	42	36	64	78	61	58	47
87	54	70	95	73	68	82	102	53

Solution

Step1 Identify the least and greatest values of the data (36 and 102).

Step 2 Write the stems (3, 4, 5, 6, 7, 8, 9, 10) in a column.

Step 3 Draw a vertical line to the right of the stems.

Step 4 Write the leaves to the right of their stems.

Step 5 Rewrite the data in order from least to greatest on a second plot.

Step 6 Write a key for the data.

Stems	Leaves	
3	6	**Least weight is 36 pounds.**
4	2 7	
5	3 4 5 8	
6	1 4 8	
7	0 3 8 9	
8	2 7	
9	5	
10	2	**Greatest weight is 102 pounds.**

6 | 4 represents a weight of 64 pounds