



Stem-and-Leaf Plots

- 1 The following data give the number of fruit that have formed on each of 40 trees in an orchard:

29, 37, 25, 62, 73, 41, 58, 62, 73, 67, 47, 21, 33, 71, 92, 41, 62, 54, 31, 82, 93, 28, 31, 67, 29, 53, 62, 21, 78, 81, 51, 25, 93, 68, 72, 46, 53, 39, 28, 40.

Prepare an ordered stem-and-leaf plot which displays the data.

- 2 Prepare an ordered stem-and-leaf plot for each of the following sets of data:

a) 207, 205, 255, 190, 248, 248, 248, 237, 225, 239, 208, 244

b) 2.8, 2.7, 5.2, 6.2, 6.6, 2.9, 1.8, 5.7, 3.5, 2.5, 4.1

- 3 Find (a) the range (b) the mode, (c) the median, and (d) the mean of the following data sets shown as stem-and-leaf plots. Write the answers correct to two decimal places, where necessary.

a)

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

b)

Stem	Leaf
7	5 5 5 5 8
8	1 4 4 4
8	6 6 7 8 9
9	1 3 4 4
9	5 6

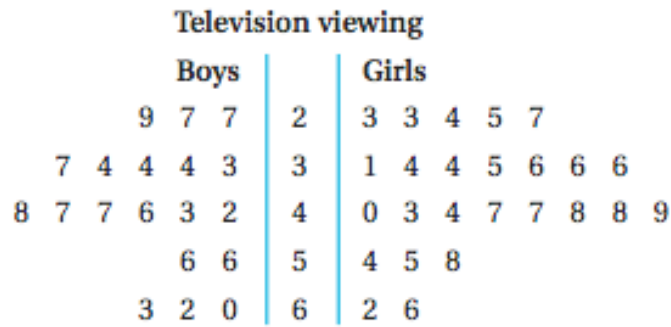
- 4 This stem-and-leaf plot shows the ages of a choir

Ages

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

- a) How many people were in the choir?
- b) What is the age of i) the youngest member? ii) the oldest member
- c) What was the most common age?
- d) How many members were i) over 40? ii) between 25 and 35
- e) What percentage of the group was i) 16 years old ii) under 25

5 This back-to-back stem-and-leaf plot shows the results of a survey about the number of hours of television watched in January



- a) Of those surveyed how many were
 - i) boys
 - ii) girls
- b) What was the highest number of hours watched by:
 - i) boys
 - ii) girls
- c) What was the most common number of hours watched by:
 - i) boys
 - ii) girls
- d) How many hours were watched by:
 - i) the 11th boy
 - ii) the 13th girl
- e) What fraction of students watched over 50 hours of television?
- f) What conclusion can be drawn between the television watching habits of boys versus girls?

ANSWERS