



# 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       |

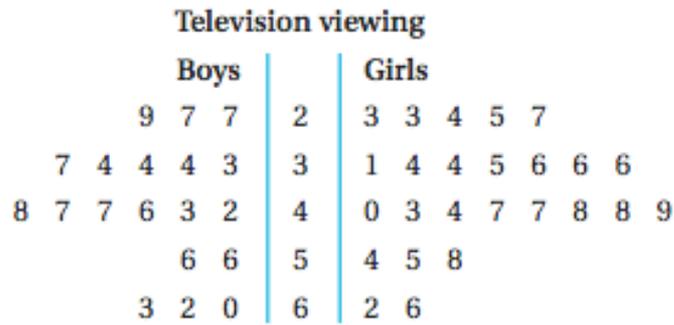
- 4 This stem-and-leaf plot shows the ages of a choir

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 11<sup>th</sup> boy
  - ii) the 13<sup>th</sup> 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