1 Here are the heights, in centimetres, of 15 plants.

15	20	25	33	17	22	25	18
22	19	32	35	24	28	19	

Draw a stem and leaf diagram for these heights.

Tens column Ones column

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

needs to be in correct order (smallest to largest)

(2)

Correct unit stated

Key: 1 | 5 = 15 cm

(1)

(Total for Question 1 is 3 marks)

2 Here are the ages, in years, of 15 people.

19	28	29	33	27
27	37	25	27	37
17	45	47	25	26

Show this information in a stem and leaf diagram.

Notes:
Items in the same row should be ordered
(e.g. 1|79 NOT 1|97)

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

(2)

Key: e.g. 2|5 = 25 years

(1)

(Total for Question 2 is 3 marks)

3 Hetvi asked her friends how many stickers they each have in their collection.
Here are her results.

77	86	94	87	71	98
74	103	71	85	82	84
97	91	88	89	75	

(a) Show this information in a stem and leaf diagram.

7	1 1 4 5 7
8	2 4 5 6 7 8 9
9	1 4 7 8
10	3

Key: eg 10 | 3 represents 103

(3)

(b) Find the median number of stickers.

Number of terms = 17

Median = $\frac{17+1}{2}$ = 9th term

∴ 86

median for odd total of numbers: $\frac{n+1}{2}$

86

(2)

(Total for Question 3 is 5 marks)

4 Tessa recorded the times that 15 adults took to complete a run.
She showed her results in a stem and leaf diagram.

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

Key:
4 | 5 represents 45 minutes

(a) Find the median.

median for odd data sets :
$\frac{n+1}{2}$ th term
from stem and leaf diagram
Median = $\frac{15+1}{2}$ = 8th term
= 64 (1)

64 minutes
(1)

(b) Find the range.

range : largest data - smallest data
= 81 - 45 (1)
= 36 (1)

$\begin{array}{r} 7\not{8}1 \\ -\ 45 \\ \hline 36 \end{array}$

36 minutes
(2)

Tessa also recorded the times that 15 children took to complete the run.

For the children, the median was 75 minutes.

(c) Compare the times that the adults took with the times that the children took.

The adults were faster because they have smaller median. (1)

(1)

(Total for Question 4 is 4 marks)