

Stem Leaf Diagrams

Exercise (1)

1. 15 students took a maths test. Construct a stem leaf diagram to represent their scores:

| | | | | |
|----|----|----|----|----|
| 43 | 37 | 59 | 45 | 56 |
| 62 | 45 | 65 | 51 | 50 |
| 32 | 58 | 45 | 62 | 43 |

From your diagram find:

- The modal score
 - The median score
 - The range
2. 20 adults were weighed with their weights recorded in kg. Represent their weights on a stem leaf diagram:

| | | | | |
|----|----|----|----|----|
| 83 | 77 | 69 | 65 | 76 |
| 61 | 72 | 65 | 65 | 80 |
| 95 | 82 | 75 | 62 | 73 |
| 91 | 88 | 82 | 66 | 65 |

From your diagram find:

- The modal weight
- The median weight
- The range

3. 18 adults were measured with their heights recorded in cm.
Represent their heights on a stem leaf diagram:

| | | | | |
|-----|-----|-----|-----|-----|
| 183 | 157 | 169 | 156 | 176 |
| 181 | 176 | 165 | 169 | 180 |
| 175 | 182 | 175 | 152 | 177 |
| 181 | 174 | 176 | | |

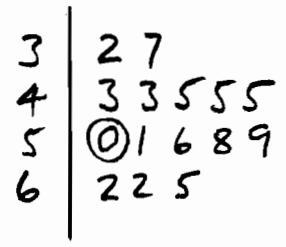
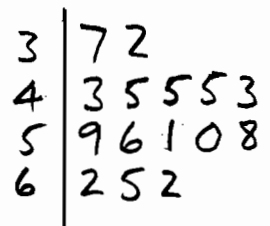
From your diagram find:

- d. The modal height
- e. The median height
- f. The range

STEM LEAF DIAGRAMS

EXERCISE

- 1) 43 37 59 45 56
- 62 45 65 51 50
- 32 58 45 62 43



Key 4/8 = 48

Mode = 45

Median 15 items $15 + 1 = 16$ $16 \div 2 = 8 \Rightarrow 8^{th}$ item

Median = 50

Range = Highest - Lowest
 = 65 - 32
 = 33

STEM LEAF DIAGRAMSEXERCISE

2) Weights in kg

83 77 69 65 76

61 72 65 65 80

95 82 75 62 73

91 88 82 66 65

| | |
|---|-----------------|
| 6 | 9 5 1 5 5 2 6 5 |
| 7 | 7 6 2 5 3 |
| 8 | 3 0 2 8 2 |
| 9 | 5 1 |

| | |
|---|------------------|
| 6 | 1 2 5 5 5 5 6 9 |
| 7 | 2 <u>3 5</u> 6 7 |
| 8 | 0 2 2 3 8 |
| 9 | 1 5 |

key $7/3 = 73 \text{ kg}$

Mode = 65 kg (occurs 4 times)

Median 20 items $20+1=21$ $21 \div 2 = 10.5$ item 10.5

Median = 74 kg

Range = Highest - Lowest

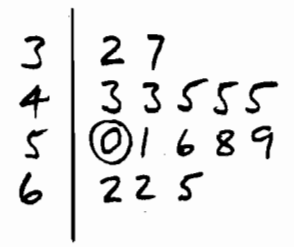
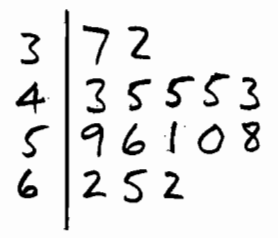
= 95 - 61

= 34 kg

STEM LEAF DIAGRAMS

EXERCISE

- 1) 43 37 59 45 56
 62 45 65 51 50
 32 58 45 62 43



Key 4 | 8 = 48

Mode = 45

Median 15 items $15 + 1 = 16$ $16 \div 2 = 8 \Rightarrow 8^{th}$ item

Median = 50

Range = Highest - Lowest
 = 65 - 32
 = 33
