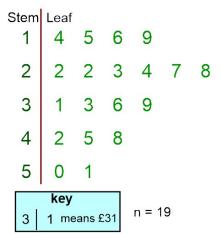
## Stem and Leaf Diagrams

- 1. The stem and leaf to the right shows how much different shoppers spent to the nearest pound.
  - (a) Write down the people who spent Between £20 and £30.
  - (b) What was the lowest amount spent?
  - (c) What was the median value?
  - (d) What is the modal value?
  - (e) What is the range in spending?



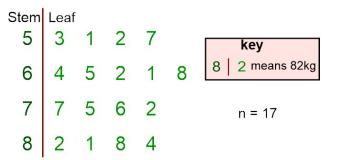
2. The results of a Science experiment were recorded on a Stem and Leaf diagram as shown.



key		40
13	1 means 13.1	n = 16

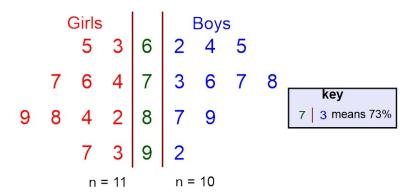
- (a) Write down all the values from the Stem and Leaf diagram.
- (b) What is the modal value?
- (c) What is the median value?
- (d) Calculate the range.

- 3. The Stem and Leaf diagram below shows the weights of a sample of different people. Unfortunately the numbers are not in the correct order!
  - (a) Draw the stem and leaf with the numbers arranged correctly.
  - (b) What is the median weight?
  - (c) What is the range of weights?
  - (d) What is the mean weight?



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4. The back to back stem and leaf diagram shows the test results of a Physics class.



- (a) What can you say about the girls score compared to the boys scores?
- (b) What was the median score for each group?
- (c) What was the mean score for each group?
- (d) There was a boy absent from the class who sat the test at a later date. When his result was added, the boys mean score decreased to 70%. What did he score?
- 5. Construct your own Stem and Leaf diagrams using the data shown below. Remember your key and "n" value.
  - (a) 20, 24, 27, 30, 31, 33, 38, 41, 41, 43, 46, 49, 50, 54, 55, 56.
  - (b) £121, £125, £127, £128, £133, £136, £138, £139, £145, £145, £147, £149, £150, £152.
  - (c) 8.5, 11.1, 9.2, 9.5, 8.9, 10.3, 13.2, 11.5, 12.3, 12.6, 11.8, 9.1, 10.7.
- 6. (a) Draw a back to back Stem and Leaf diagram to represent the times for a 400m run comparing male and female runners.

Male: 41.3, 42.7, 41.8, 43.9, 42.5, 41.6, 45.7, 46.8 Female: 44.8, 45.1, 45.7, 44.9, 45.0, 46.1, 46.3, 45.2

(b) Make two valid comparisons about the runners.