Data Handling Revision Mat

Averages

1) Here are fifteen numbers.
10 12 13 15 15 17 19 20 20 20 21 25 25 25 25

a) Find the mode.

b) Find the median.

c) Work out the range.

2) A rugby team played 7 games. Here is the number of points they scored in each game.
3 5 8 9 12 12 16

a) Find the median.

The rugby team played another game. They scored 11 points.

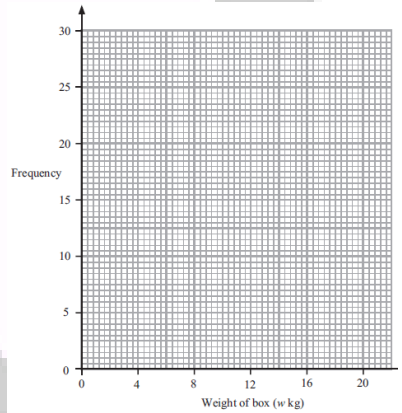
b) Find the median number of points scored in these 8 games.

3) The mean of eight numbers is 41
The mean of two of the numbers is 29
What is the mean of the other six numbers?

Frequency Polygons

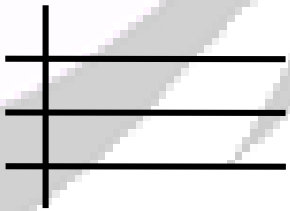
The table shows some information about the weights, in kg, of 100 boxes. Draw a frequency polygon to show this information.

Weight of box (w kg)	Frequency
$0 < w \leq 4$	10
$4 < w \leq 8$	17
$8 < w \leq 12$	28
$12 < w \leq 16$	25
$16 < w \leq 20$	20



Stem and Leaf

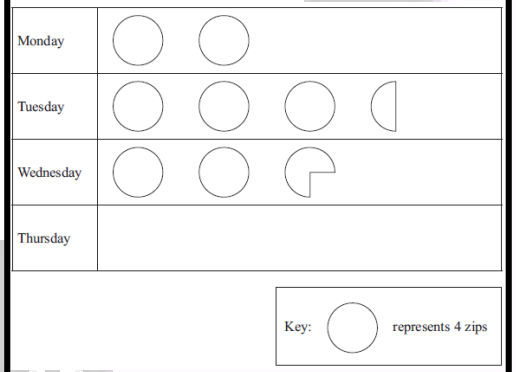
Here are the ages, in years, of 15 students.
19 18 20 25 37
33 21 17 29 20
42 18 23 37 22
Show this information in an ordered stem and leaf diagram.



Key:

Pictograms

The pictogram shows the numbers of zips sold in a shop on Monday, on Tuesday and on Wednesday.

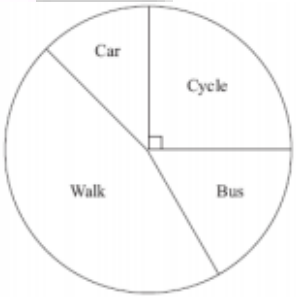


Write down the number of zips sold on Wednesday.

9 zips were sold on Thursday.
Complete the pictogram.

Pie Charts

Harry asked each student in his class how they travelled to school that day. He used the results to draw this pie chart.



How did most of the students travel to school?

Harry asked a total of 24 students. Work out the number of students who cycled to school.

Averages from Frequency Tables

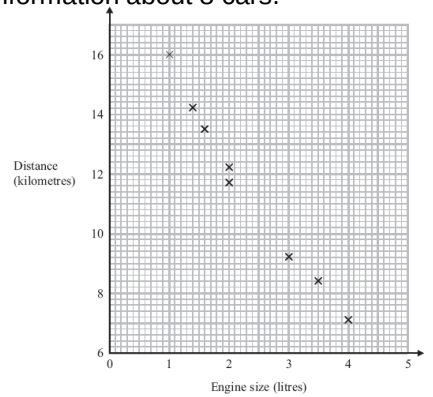
Bob asked each of 40 friends how many minutes they took to get to work. The table shows some information about his results.

Time taken (m minutes)	Frequency
$0 < w \leq 10$	3
$10 < w \leq 20$	8
$20 < w \leq 30$	11
$30 < w \leq 40$	9
$40 < w \leq 50$	9

Work out an estimate for the mean time taken.

Scatter Graphs

The scatter graph shows some information about 8 cars.



What type of correlation does the scatter graph show?

A car has an engine size of 2.5 litres. Estimate the distance travelled on one litre.