Handling Data worksheet

1 a. Draw a pie chart to represent the following data for a group of adults

Hair Colour	Frequency
Brown	8
Auburn	4
Blonde	7
Grey	5

b. What is the modal class?
c. What is the probability that somebody picked at random from this group has grey hair?

2. The table shows data of heights of people in a sample of people in year 10

Height (cm)	Frequency
$130 \leq h < 140$	7
$140 \leq h < 150$	12
$150 \leq h < 160$	16
$160 \leq h < 170$	5
$170 \leq h < 180$	2

a. Find the range of heights
b. Find the median class
c. What is the modal class?
d. Find an estimate of the mean height. Explain why this is an estimate and not the true mean for the sample

3. The following are heights of small Christmas trees in cm. The heights are between 21 cm and 66 cm

65, 32, 54, 56, 34, 43, 21, 51, 50, 61, 59, 45, 48, 39, 41, 31, 36, 65, 66, 44, 45, 40, 30, 50, 57, 32, 61, 48, 55, 45, 35, 30, 32, 45, 39, 32, 49, 47, 55, 34, 53, 43, 59, 41

a. Draw a stem and leaf diagram for the following data (use intervals of 10 cm).
b. Find the median height
c. Find the range of the heights
d. If a tree was selected at random from this sample, what is the probability its height lies between 50 cm and 60 cm?

4. Find the mean, median, mode and range of this set of data
   2, 9, 0, 4, 3, 6, 4, 5, 9, 8, 9, 9

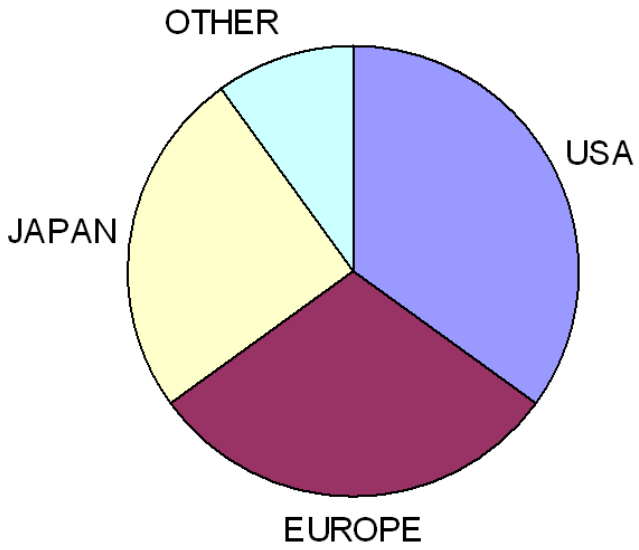
   a. What number needs to be added to the set to make the range equal to 11?
   b. What number needs to be added to the set to make the mean equal to 6?

5. For the following frequency table of the number of minutes late students are for registration:

Minutes late, x	0	1	2	3	4
Frequency, f	10	4	6	3	2

   a. Find the mean
   b. Find the median
   c. Find the mode
   d. Find the range
   e. Find the probability someone from this group is between 1 and 2 minutes late

6. The pie chart shows the distribution of exports of British cars to various countries in the world. The total number of cars represented by the pie chart is 100,000.



   a. Find the number of cars that were exported to Europe (to the nearest hundred). You will need to use a protractor
   b. Find the number of cars that were exported to the USA (to the nearest hundred)
   c. Find the number of cars that were exported to Japan (to the nearest hundred)
   d. Find the **percentage** of cars that were exported to other countries (to the nearest hundred)