



1) A "frequency table" is a way to organise the data we obtained in a statistic.

For example, we ask 20 people how many pets they have. The result is: 0, 0, 1, 0, 0, 2, 0, 1, 1, 0, 1, 0, 1, 1, 0, 1, 2, 0, 0, 1

The "frequency table" is:

Nº of pets	Absolute frequency	Relative frequency
0	10	0.5 (or 50%)
1	8	0.4 (or 40%)
2	2	0.1 (or 10%)
Total	20	1 (or 100%)

a) We ask 15 people how many books they read last year.

The result is: 2, 0, 1, 4, 0, 2, 0, 3, 1, 0, 2, 3, 1, 2, 1

Make a "frequency table".

b) We ask 16 bus passengers how happy they are about the bus service.

The result is: good, bad, very good, very bad, good, bad, good, good, good, bad, very good, bad, good, bad, very good, good,

Make a "frequency table".

2) Relate each chart with a description:

Bar charts a)

1. The angle for each category = value of the category $\cdot 360^\circ$ / total value of all the categories.

Pie charts b)

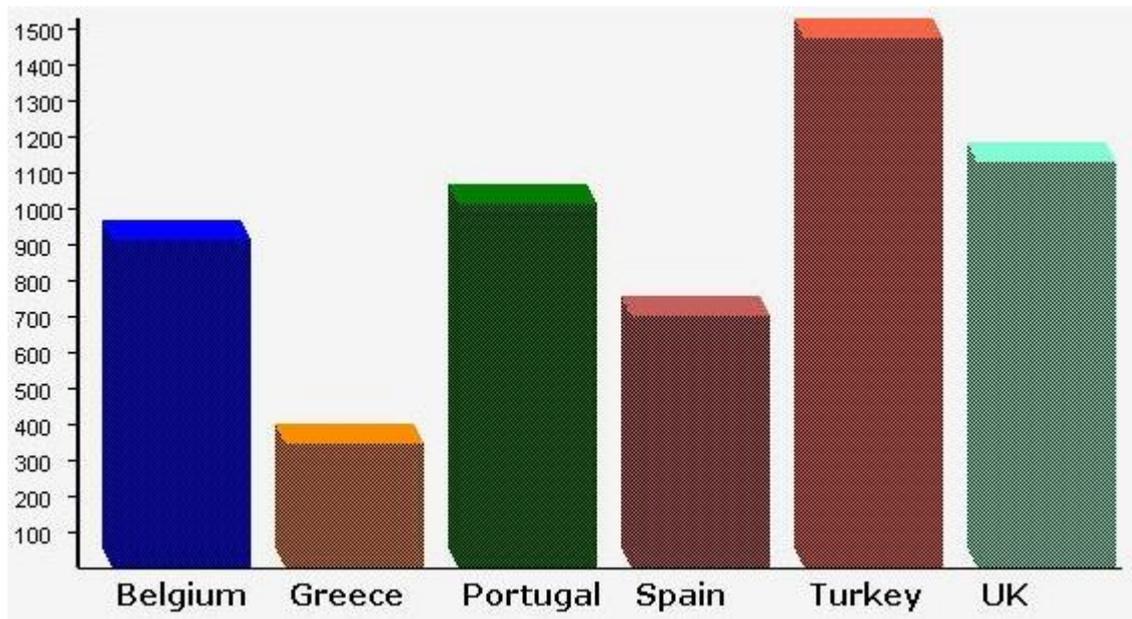
2. These charts show discrete (discontinuous) data.

Histograms c)

3. These charts show continuous data.

- 3) We ask 20 people how many friends they have, their answers are:
 3, 2, 6, 4, 8, 2, 12, 5, 0, 1, 6, 2, 4, 3, 5, 1, 4, 3, 5, 4
- What graph is correct, a bar chart or a histogram? Why?
 - Draw the graph.
 - Draw also a pie chart

- 4) The graph shows the number of fans of a music band in six countries.



- Which type of graph is it?
- Make a frequency table.
- Calculate: the mean, the mode, the median, the relative frequency, the absolute frequency, the cumulative frequency
- Calculate the angle for each category in a pie chart.
- Draw a pie chart.

- 5) Ninety six people like icecream, eight people don't like icecream.
- Calculate the angle for each category in a pie chart.
 - Draw a pie chart.

6) The number of people waiting at the bus stops along a bus line is:

2, 0, 1, 1, 3, 2, 5, 2, 1, 2, 1, 4, 1, 2, 0, 1, 2, 3, 0, 2, 1, 3, 0, 1, 3

- Which is the population?
- Which is the absolute frequency of stops with 2 people waiting?
- Calculate the the absolute frequency of stops with 2 people waiting?
- Draw a bar chart.
- Draw a frequency polygon.
- Calculate the mean, the mode and the median.

7) In a city of 4 million inhabitants we ask eighty people how many times they go to the swimming pool during the first week of July.

- What is the population?
- What is the sample?
- How many categories are there? Which are the categories?
- Which is the absolute frequency of people that goes two times to the pool?
- Which is the relative frequency of people that goes four times to the pool?
- Draw an appropriate chart.
- Calculate mean, mode and median.

Number of people	Number of times they go to the pool
12	0
16	1
25	2
12	3
8	4
4	5
2	6
1	7

8) True or false?

- The population is always smaller than the sample.
- In a statistic there are always seven categories.
- Frequency is how often something happens
- The median is the number in the middle of a group.