

STATISTICAL GRAPHS

A variable can be NUMERIC or NON-NUMERIC. If it is NUMERIC, it can be DISCRETE or CONTINUOUS.

e.g.

Non-numeric : eye colour

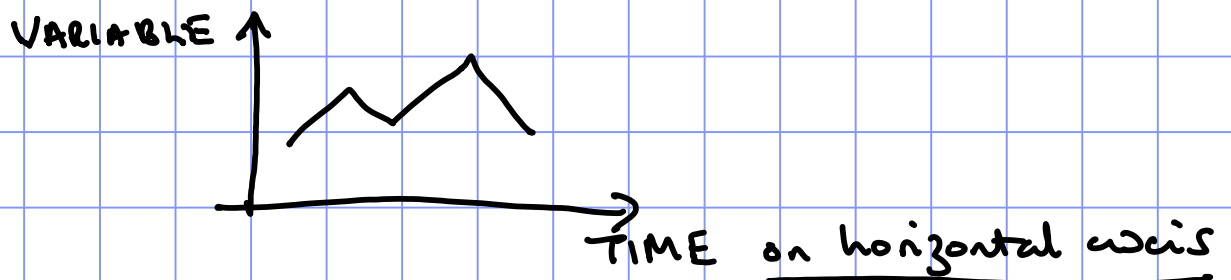
Discrete numeric : no of children in family,
shoe size

Continuous numeric : height, length of middle finger

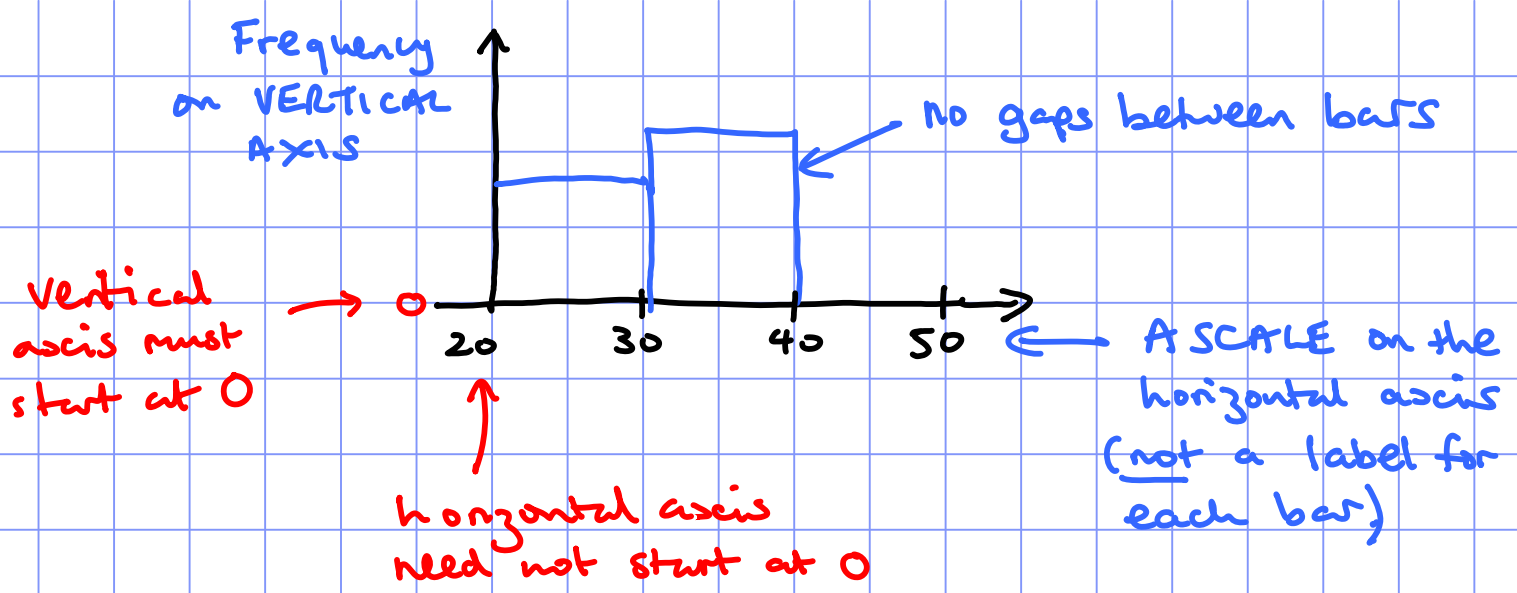
Types of graph :

Bar chart Useful for showing frequencies of non-numeric or discrete data.

line Graph Useful for showing how a numeric variable changes over time.



Histogram Useful for showing grouped frequencies of a continuous variable



[NB. On all graphs the axes must be labelled]

Pie Charts These are useful for showing how amounts or frequencies are divided up.

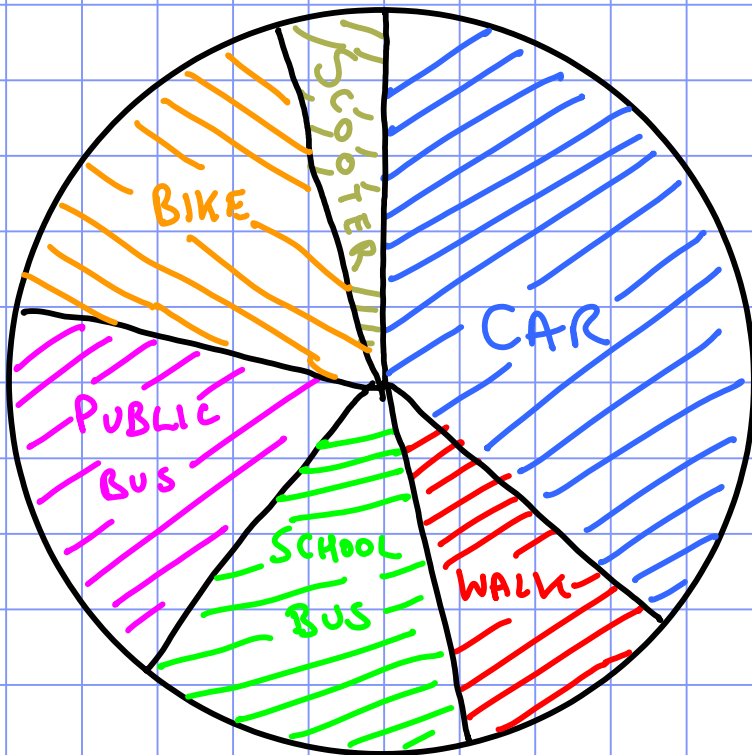
Example In a group of 24 people, the methods of coming to school are as follows

Method	Frequency
Car	8
Walk	3
School bus	4
Public bus	4
Bike	4
Scooter	1
	24

There are 360° in a circle, so each person is represented by $\frac{360}{24} = 15^\circ$

So we have

Method	Angle
Car	$8 \times 15^\circ = 120^\circ$
Walk	$3 \times 15^\circ = 45^\circ$
School bus	$4 \times 15^\circ = 60^\circ$
Public bus	$4 \times 15^\circ = 60^\circ$
Bike	$4 \times 15^\circ = 60^\circ$
Scooter	$1 \times 15^\circ = 15^\circ$
	<hr/>
	360°



Classwork
p 222 Ex 13F
Q 1, 2, 4, 6
p 225 Ex 13G
Q 1, 3