

OGIVE (Or Cumulative Frequency Polygon)

An OGIVE is a line joining the top right hand corners of the bars in a cumulative frequency polygon.

A cumulative frequency is the *running total* of a set of frequencies.

A badger goes on a night-time forage. He goes to a small patch of lawn to look for worms. The frequency tells you how many worms he finds on each visit.

So he found one worm on 4 visits, two worms on 9 visits, etc.

Draw in the tally for each visit. Now add up each of the frequencies, one at a time, as shown.

Work out the cumulative frequency by adding successive scores.

<u>Worms</u>	<u>Tally</u>	<u>Frequency</u>	<u>Cumulative frequency</u>
1		4	4
2		9 (+4) →	
3		6	
4		7	
5		3	
6		2	

Now draw a bar chart for the cumulative frequency column.

Once you've drawn your bar chart, draw a line to join up the top right-hand corners of each bar. This is the OGIVE. It gives you a trend line for the figures.



Let's look at the figures. This is the number of worms caught in all of the visits:

1,1,1,2,2,2,2,2,2,2,2,3,3,3,3,3,3,4,4,4,4,4,4,5,5,5,6,6

1. What is the average worms caught during the visits?
2. What is the modal number of worms?
3. What is the median number?
4. What is the range of the number of worms caught?



Why not have a go at finding frequencies for yourself? You could do some more frequency diagrams like these to show trends.