6). The collar sizes of staff were recorded as they came from the staffroom. $14,14.5,14,15,17,16,15.5,18,17.5,16.5,14,15,16.5,17.5,18$.
a). Find the modal collar size of the staff.
b). Look at your answer. Does this seem a good average for this group? Give reasons for your answer.

## The Median

The median is the middle number after the data has been put in order. If we have two numbers in the middle, we add them up and divide by 2 .
E.g. Find the median for the following sets of data.
a). $12,14,20,9,16,14,17,23,15$.


Put in order. $\quad 9,12,14,14, \underline{\mathbf{1 5}}, 16,17,20,23$.
The middle number is 15 .
The median $=15$.
b). $43,44,32,56,47,38,36,45,49,43$.

Put in order. $32,36,38,43,43,44,45,47,49,56$.
Two middle numbers $\frac{43+44}{2}=\frac{87}{2}=43.5$
The median $=43.5$
C. Find the median for the following sets of data.
1). $12,15,23,16,17,10,9,20,13$.
2). $32,28,35,32,35,29,38,34,36$.
3). $143,148,153,137,146,139,140,152,164$.
4). $\quad 164,163,154,169,171,158,173,163,165$.
5). $24,18,19,30,25,22,17,26,24,33$.
6). $52,45,63,46,55,53,58,60$.
7). $126,110,113,108,102,121,118,112,114,106$.
8). $\quad 89,78,80,87,92,88,72,85,86,79,74,80$.
9). $45,40,37,48,40,52,36,45,56,40,43,48,45$.

10). $134,120,137,129,130,143,132,138,127,119,137,126,143,136$.
11). $17,24,32,28,21,27,16,19,20,32,34,24,25,21,28,23,21$.
12). $87,76,78,77,89,80,75,69,72,77,83,75,77,71,80,76,83,72$.
13). $143,144,167,138,153,140,162,148,157,150,155,164,147,153,155,143,156$.
14). $9,4,6,5,1,2,13,2,7,13,10,9,7,6,8,3,2,8,4,15,11,13,7,4,5$.
15). $12,9,7,8,14,15,11,10,9,7,8,6,14,14,12,11,8,7,13,10,10,9,8$.
D. 1). Here are the number of miles a lorry driver travelled on his recent trips.
$56,73,46,70,82,54,39,65,72,84,81$.
Find the median.
2). Here are the heights of pupils (in cm ) in one class. $132,142,150,128,142,135,129,125,132,143,152,137,135,131,129,127$.
Find the median.
3). Here are the number of pages in a set of books written by the same author.

215, 245, 210, 196, 220, 132, 289, 303, 211, 257, 284, 243, 190, 218, 263.
Find the median.
4). The weight of each pupil in a class was recorded in kg.
$42,34,45,29,32,33,40,37,29,31,42,35,37,32,39,45,32,30,31,38,42,33$.
Find the median.
5). The number of pictures hung on walls in art galleries was recorded.
$53,89,35,63,76,80,95,110,43,56,24,54,72,83,65,85,43,68,79,76,82,91$.
Find the median.

