

The ages of students on a school bus are:

12, 15, 12, 13, 14, 16, 15, 11, 12  
 16, 15, 16, 14, 10, 13, 17, 15, 17

What is the mode?

MODE = MOST FREQUENT

Compare frequencies - you could use a  
 Frequency Distribution Table

x	10	11	12	13	14	15	16	17
frequency	1	1	3	2	2	4	3	2

mode = 15

Find the median of these numbers: 5, 8, 12, 4, 9, 3, 7, 2.

"middle"

order: 2, 3, 4, 5, 7, 8, 9, 12

Both 5 and 7 are in the middle

$$\text{average} = \frac{5+7}{2} = \frac{12}{2} = 6$$

⇒ median = 6



4. Find (i) the lower quartile 4  
 (ii) the upper quartile 11  
 (iii) the interquartile range 7

for this set of data:

4, 12, 17, 6, 10, 5, 11, 14, 2, 3, 9

Order: 2, 3, 4, 5, 6, 7, 9, 10, 11, 12, 14  
 $Q_1$                        $Q_2$                        $Q_3$   
 ←—————→  
 IQR = 11 - 4 = 7

2. Calculate the mean of this frequency distribution:

Variable (x)	1	2	3	4	5	6	Sum
Frequency (f)	9	9	6	4	7	3	38
x.f	9	18	18	16	35	18	114

mean =  $\bar{X} = \frac{114}{38} = 3$

this question can be done on the calculator.

MODE → 2: STAT

enter data into table

X	freq.
1	9
2	9
3	6
4	4
5	7
6	3

$\bar{X} = 3$