

* Discrete series of median.

Q. No. of buses - 2 4 8 10 12

No. of passengers - 80 75 50 35 25

Solution \rightarrow

X	f	c.f
2	80	80
4	75	155
8	50	205
10	35	240
12	25	265
Σf = 265		

$$m = \text{size of } \left(\frac{N+1}{2} \right)^{\text{th}} \text{ item}$$

$$= \left(\frac{265+1}{2} \right)^{\text{th}} \text{ item}$$

$$= \left(\frac{266}{2} \right)^{\text{th}} \text{ item}$$

$$m = 133^{\text{th}} \text{ item}$$

\therefore 133 lies in cumulative frequency
(c.f.) 155.

\therefore Median (M) = 4 $\frac{1}{2}$.

Q. From the following data find the value of median.

Packet Exp. (in ₹): 10 15 8 20 25 18

No. of children: 12 13 8 10 3 15

You solve yourself.