

### Exercise 24(D)

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1. Find the mode of the following data:

(i) 7, 9, 8, 7, 7, 6, 8, 10, 7 and 6

(ii) 9, 11, 8, 11, 16, 9, 11, 5, 3, 11, 17 and 8

**Solution:**

(i) It's seen that 7 occurs 4 times in the given data.  
Hence, mode = 7

(ii) Mode = 11  
As 11 occurs 4 times in the given data.

2. The following table shows the frequency distribution of heights of 50 boys:

Height (cm)	120	121	122	123	124
Frequency	5	8	18	10	9

Find the mode of heights.

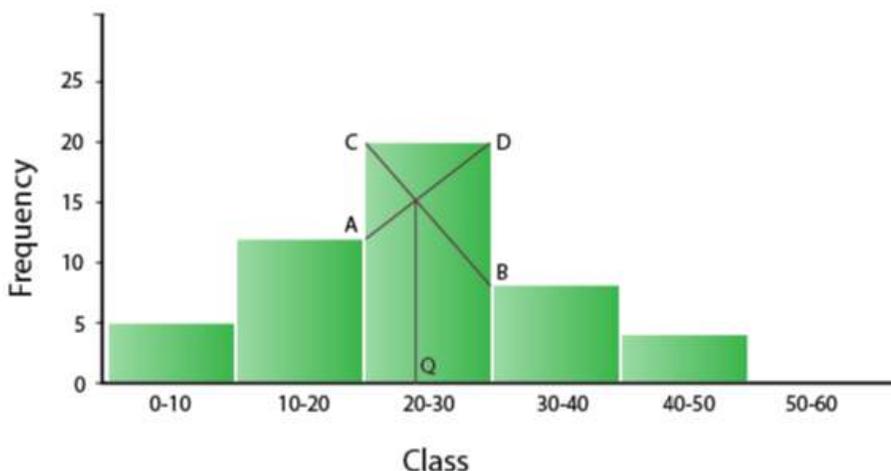
**Solution:**

Clearly,  
Mode is 122 cm because it has occurred the maximum number of times.  
i.e. frequency is 18.

3. Find the mode of following data, using a histogram:

Class	0-10	10-20	20-30	30-40	40-50
Frequency	5	12	20	9	4

**Solution:**

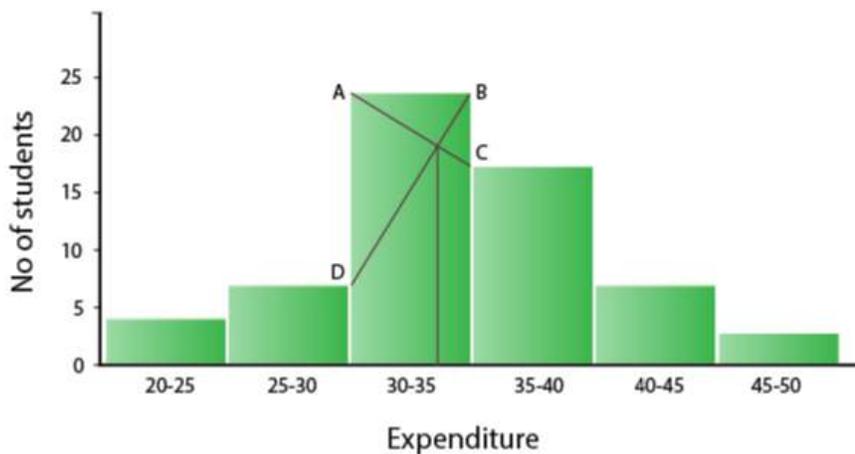


Clearly,  
Mode is in 20-30, because in this class there are 20 frequencies.

4. The following table shows the expenditure of 60 boys on books. Find the mode of their expenditure:

Expenditure (Rs)	No. of students
20-25	4
25-30	7
30-35	23
35-40	18
40-45	6
45-50	2

**Solution:**



Clearly,  
Mode is in 30-35 because it has the maximum frequency.