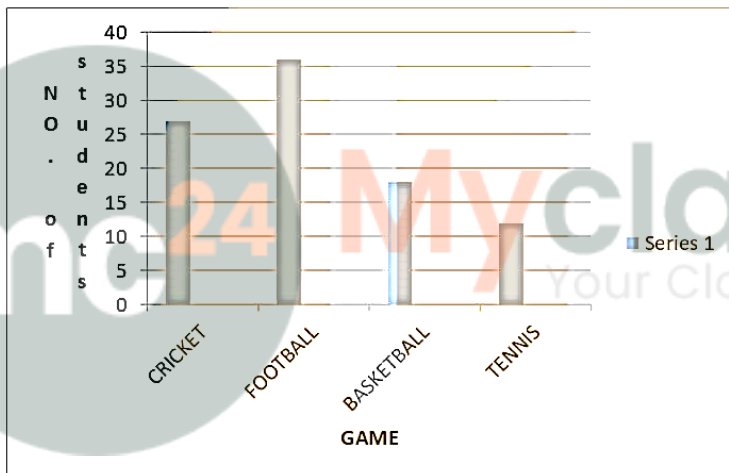

BAR GRAPH, HISTOGRAM AND FREQUENCY POLYGYON

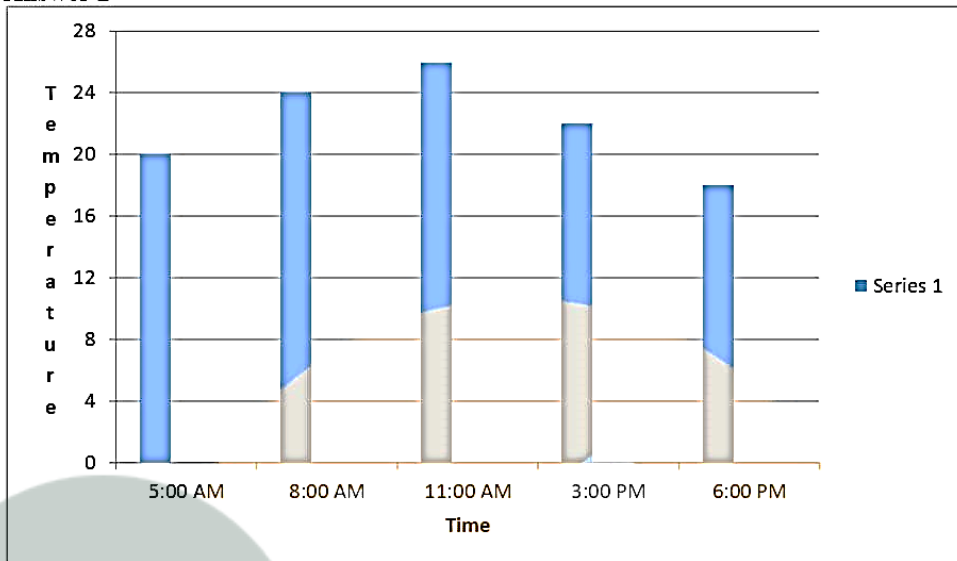
CHAPTER 17

EXERCISE17A

Answer 1:



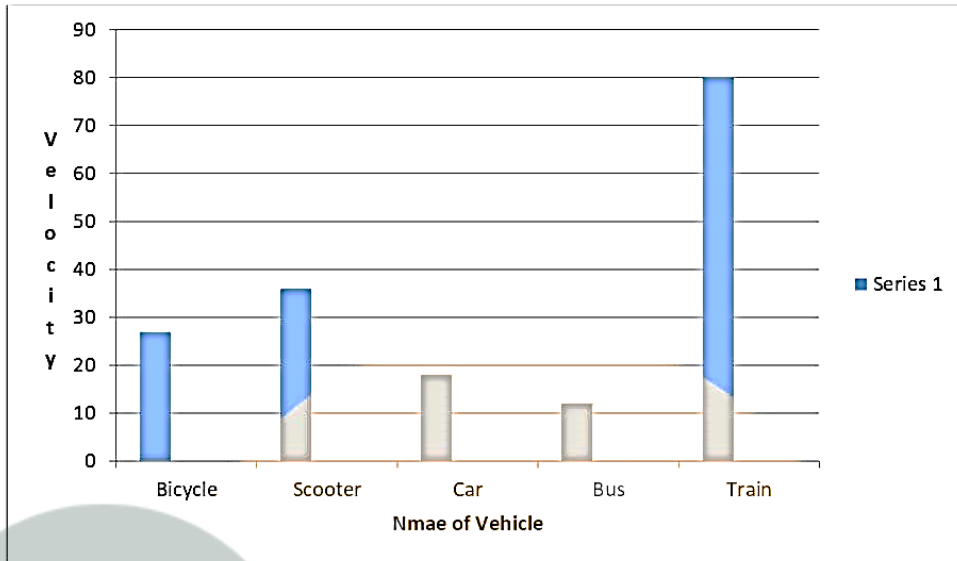
Answer 2



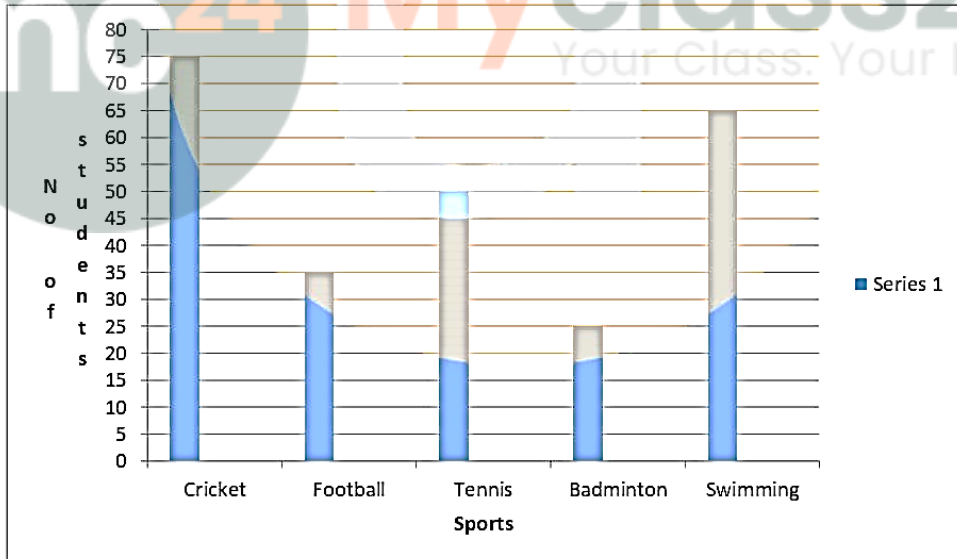
mc24

Answer 3:

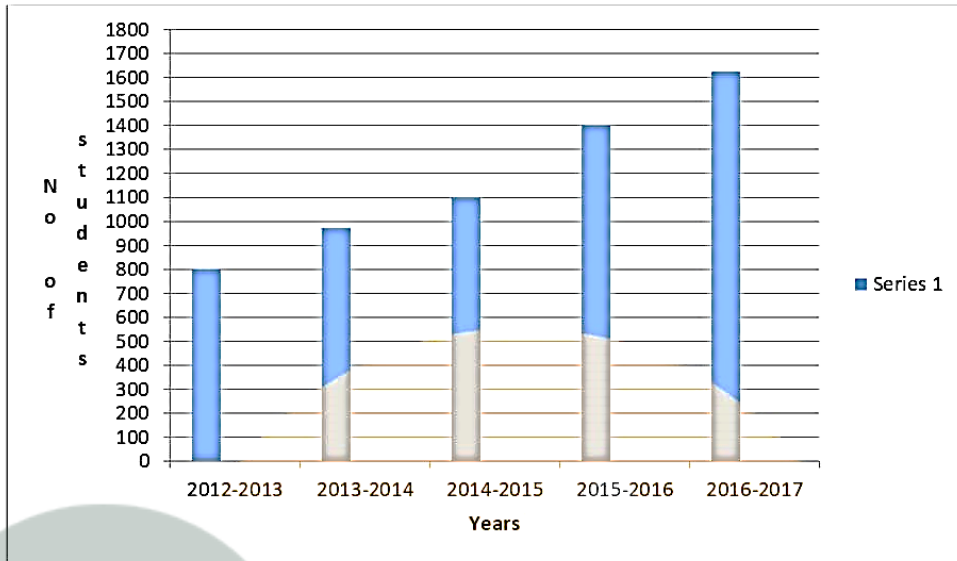
Myclass24
Your Class. Your Pace.



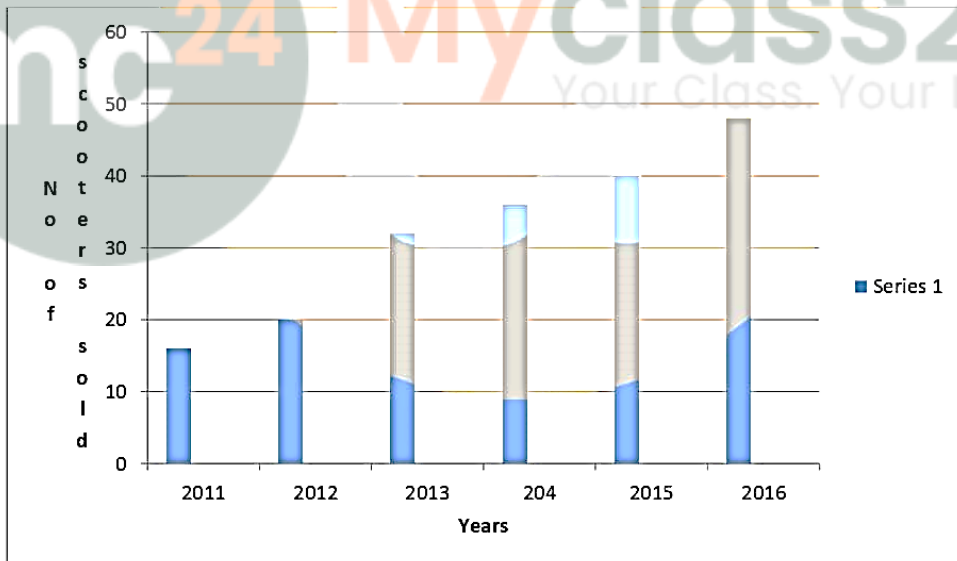
Answer 4



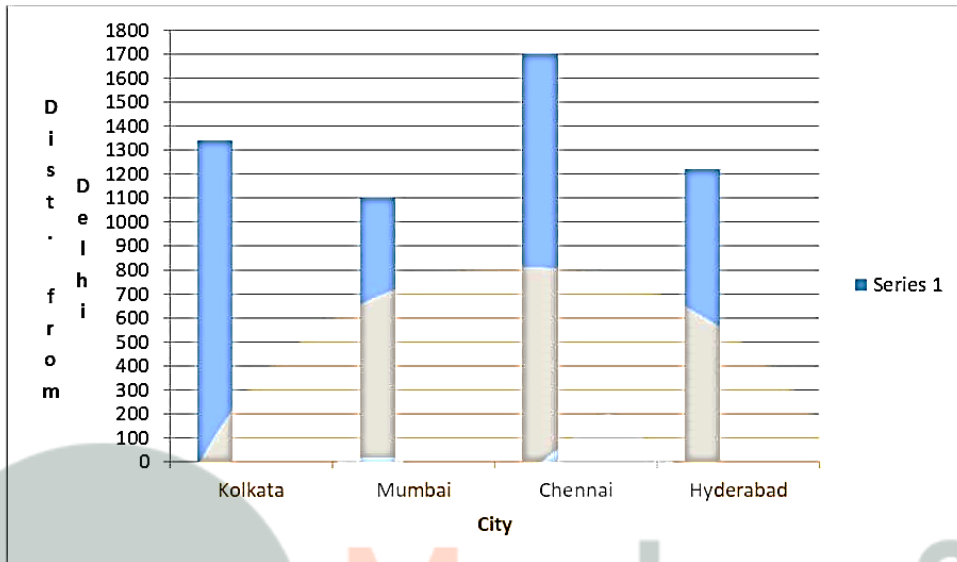
Answer 5:



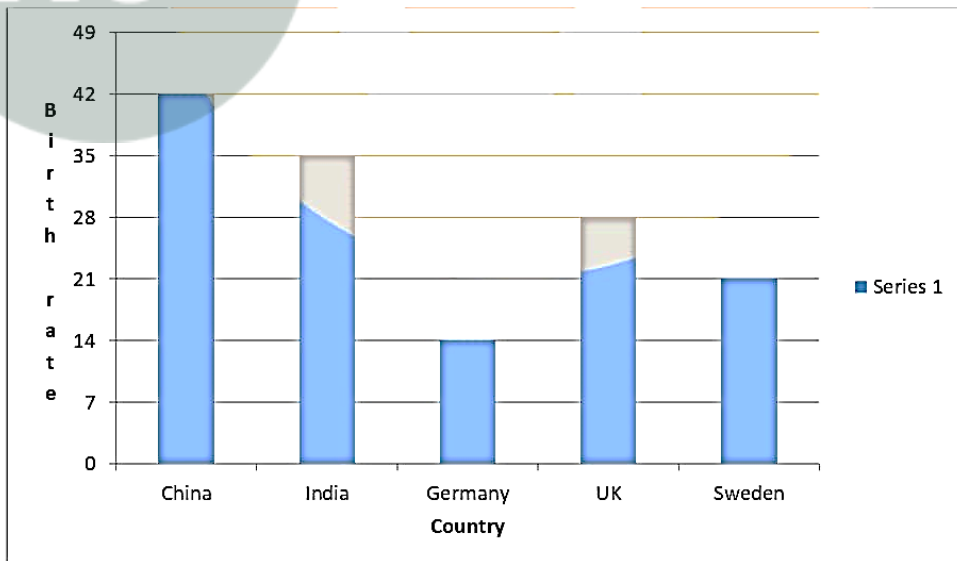
Answer 6:



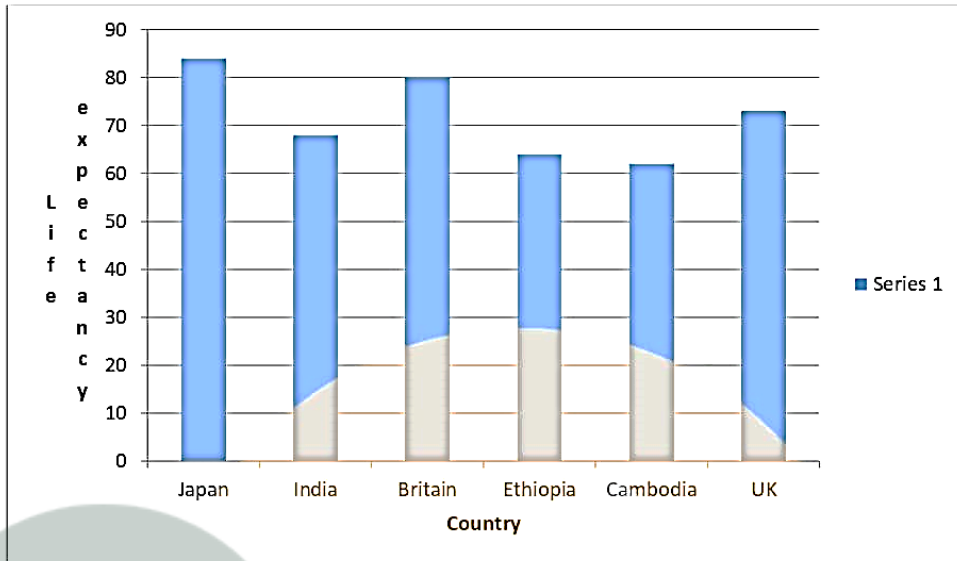
Answer: 7



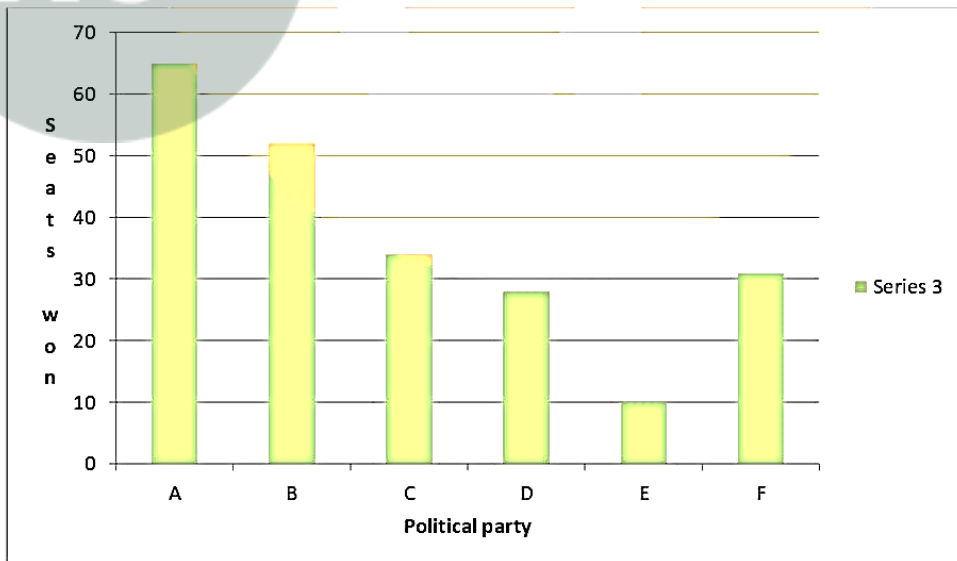
Answer 8:



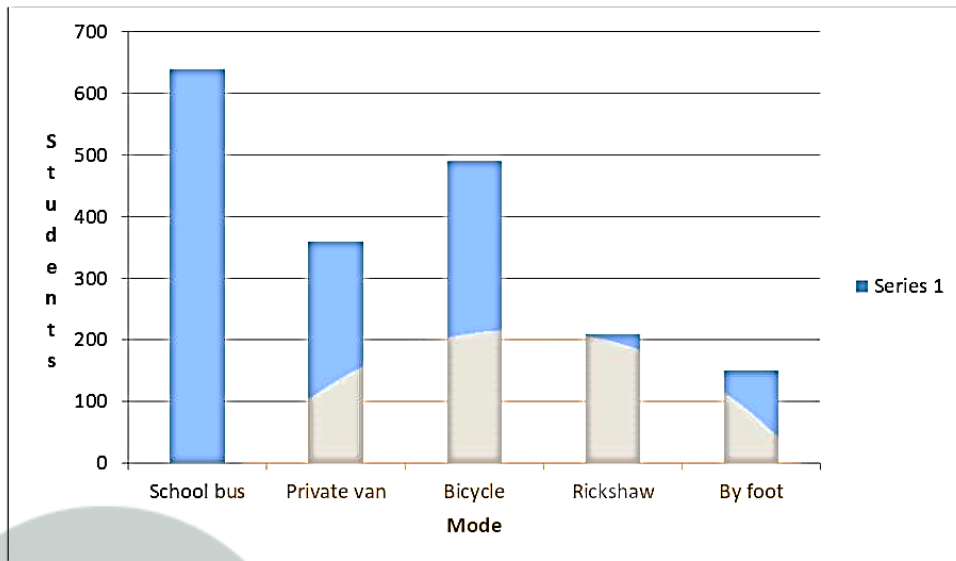
Answer 9:



Answer10 **mc24** Myclass24
Your Class. Your Pace.



Answer 11:



Answer 12:

(i) The bar graph shows the marks obtained by a student in various subjects in an examination.

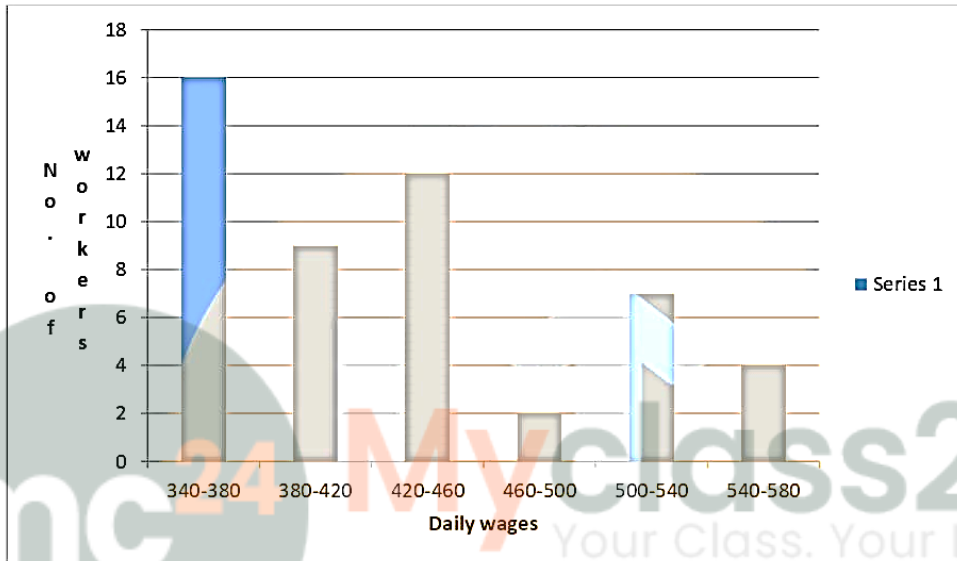
(ii) The student scores very good in mathematics, as the height of the corresponding bar is the highest.

(iii) The student scores bad in Hindi, as the height of the corresponding bar is the lowest.

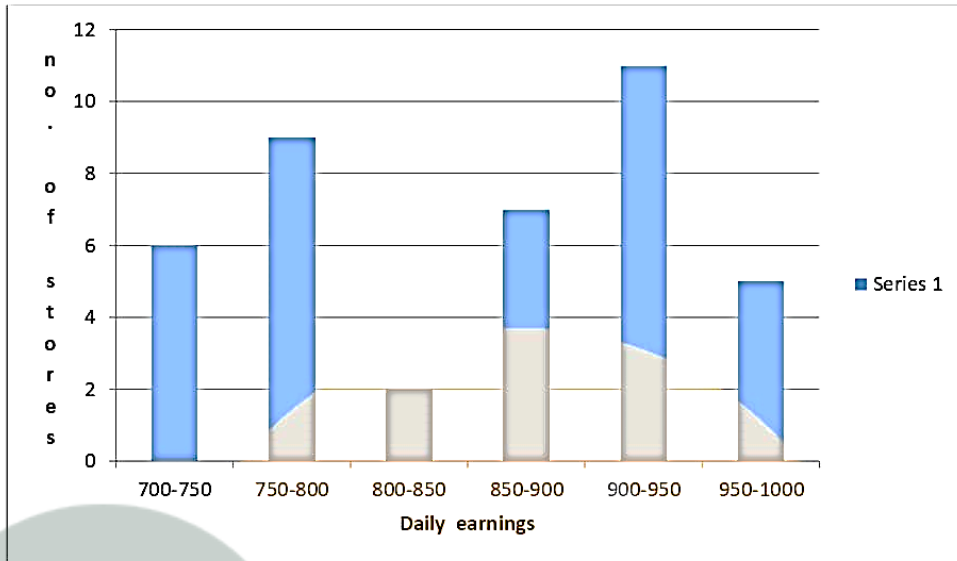
(iv) Average marks = $(60 + 35 + 75 + 50 + 60) \div 5 = 56$

EXERCISE 17B

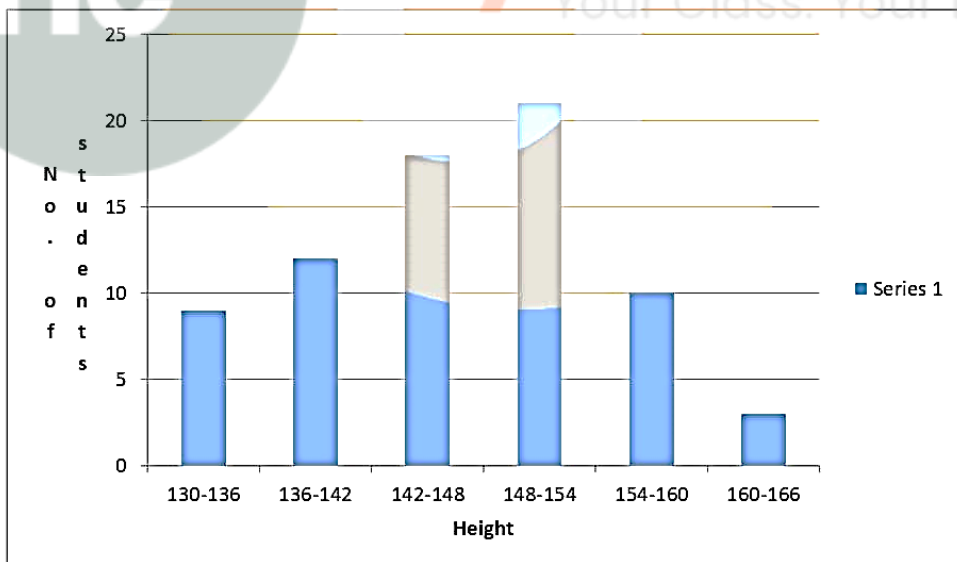
Answer 1:



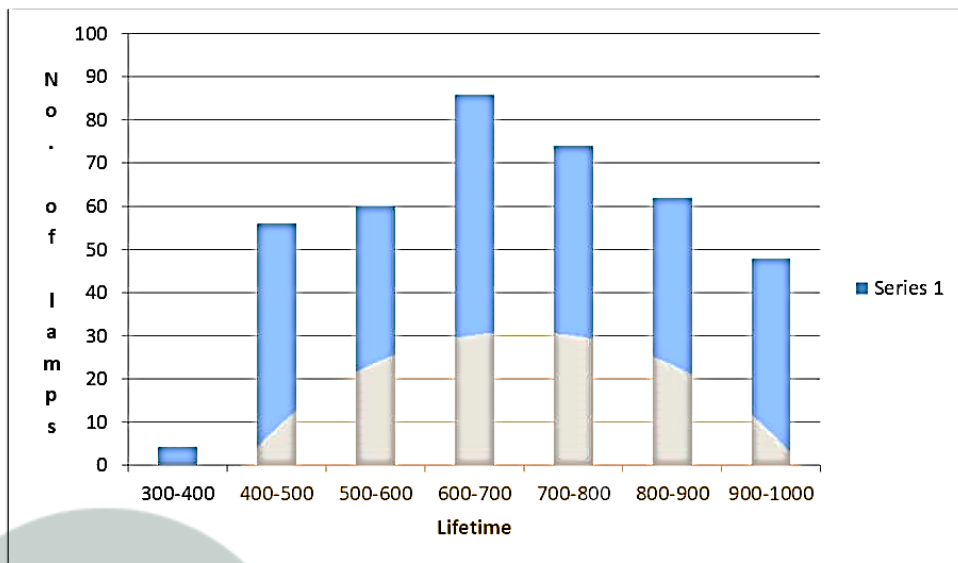
Answer 2:



Answer 3:

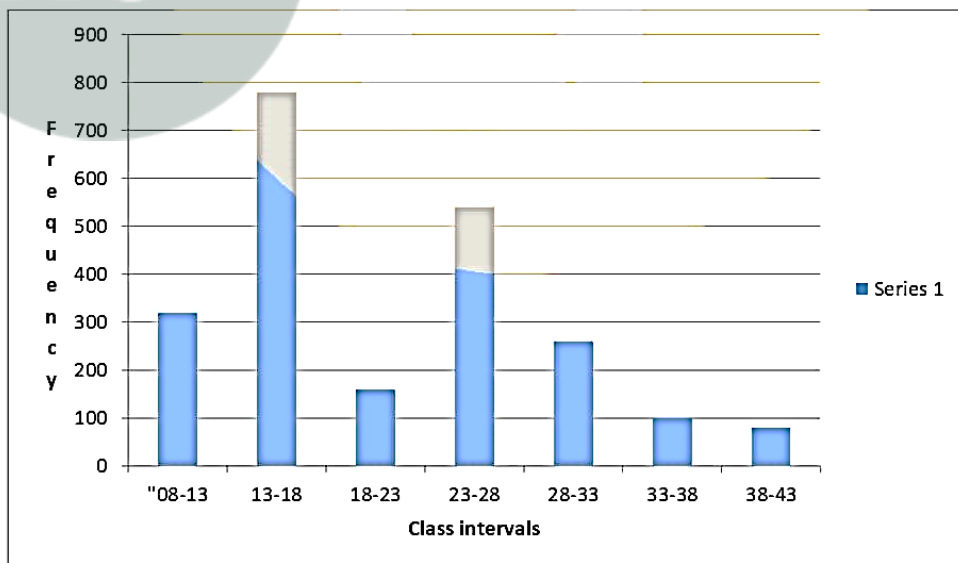


Answer 4:(i)



(ii) Lamps with lifetime more than 700 hours = $74 + 62 + 48 = 184$

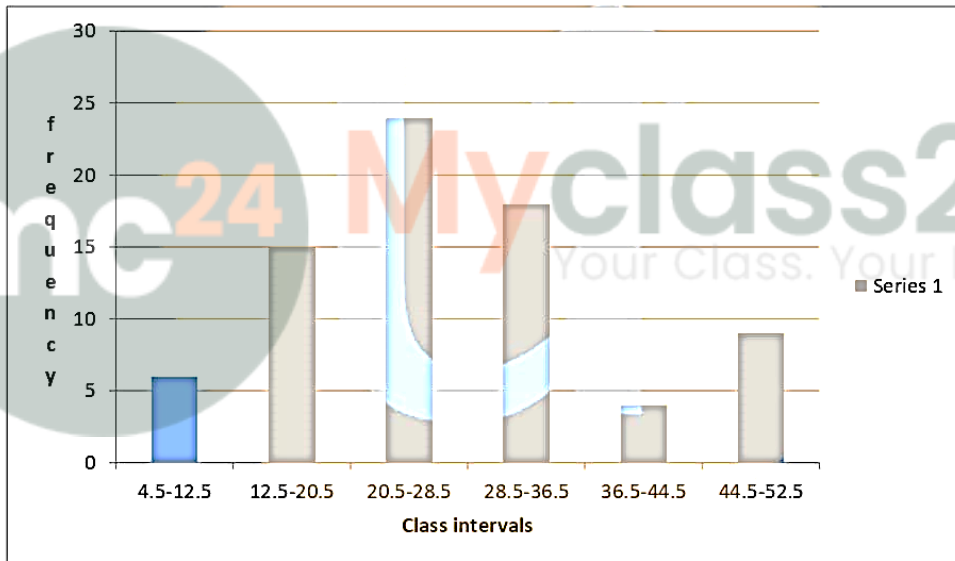
Answer 5:



Answer 6:

The given frequency distribution is in inclusive form.
So, we will convert it into exclusive form, as shown below:

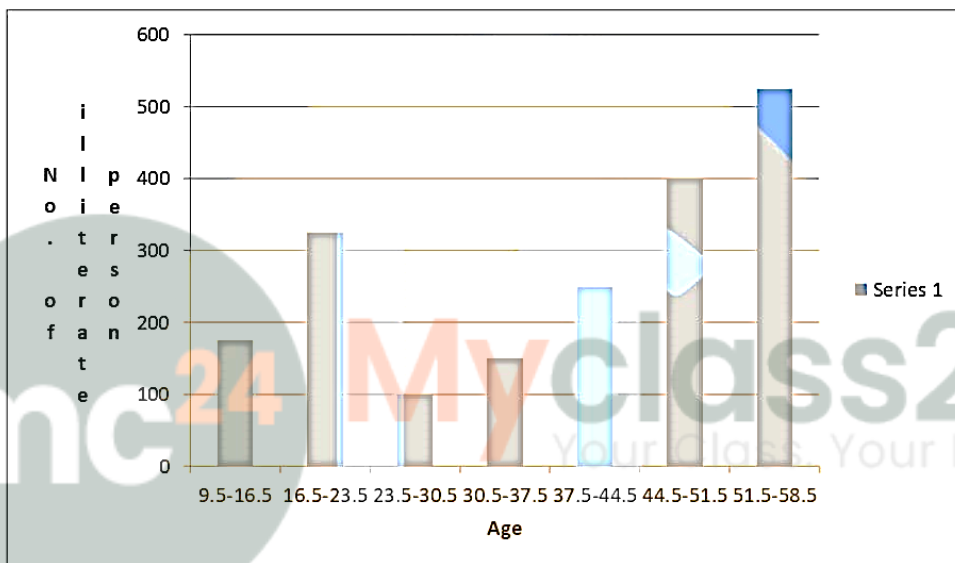
Class Interval	Frequency
4.5–12.5	6
12.5–20.5	15
20.5–28.5	24
28.5–36.5	18
36.5–44.5	4
44.5–52.5	9

**Answer 7:**

The given frequency distribution is inclusive form.
So, we will convert it into exclusive form, as shown below:

Age (in years)	Number of Illiterate Persons
----------------	------------------------------

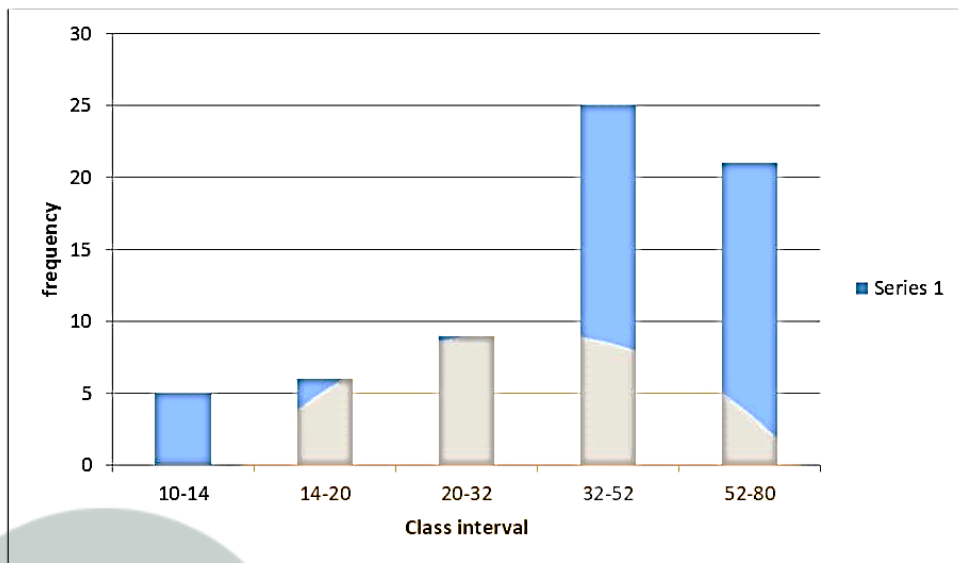
9.5-16.5	175
16.5-23.5	325
23.5-30.5	100
30.5-37.5	150
37.5-44.5	250
44.5-51.5	400
51.5-58.5	525



Answer 8:*

In the given frequency distribution, class sizes are different. So, we calculate the adjusted frequency for each class.

Class Interval	Frequency
10-14	5
14-20	6
20-32	9
32-52	25
52-80	21



Answer 9:

Here the class intervals are of unequal size. So, we calculate the adjusted frequency.

Class sizes are

$$4 - 1 = 3$$

$$6 - 4 = 2$$

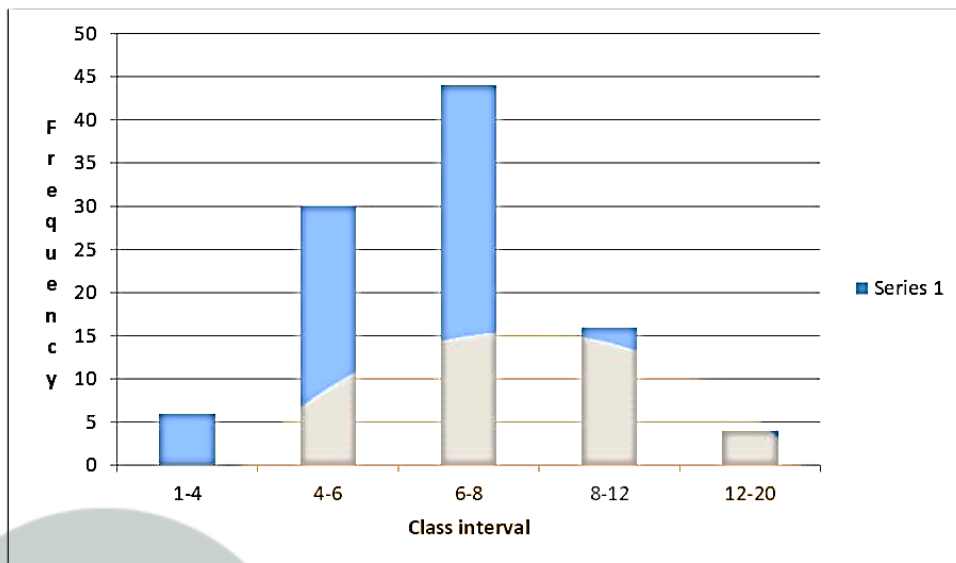
$$8 - 6 = 2$$

$$12 - 8 = 4$$

$$20 - 12 = 8$$

Minimum class size = 2

Class Interval	Frequency
1-4	6
4-6	30
6-8	44
8-12	16
12-20	4



(ii) Maximum number of surnames lie in the interval 6-8.

Answer 10:

Here the class intervals are of unequal size. So, we calculate the adjusted frequency .

Class sizes are

$$10 - 5 = 5$$

$$15 - 10 = 5$$

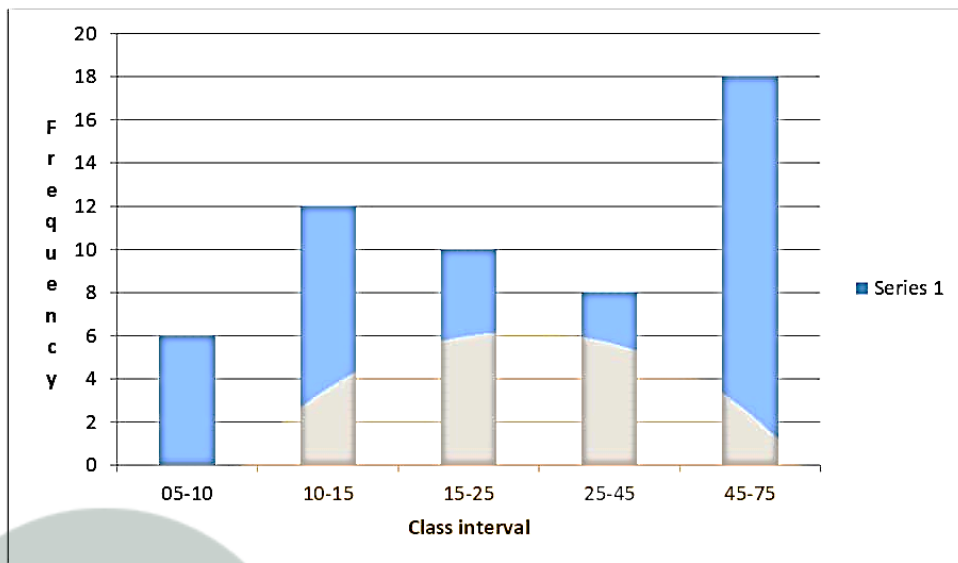
$$25 - 15 = 10$$

$$45 - 25 = 20$$

$$75 - 45 = 30$$

Minimum class size = 5

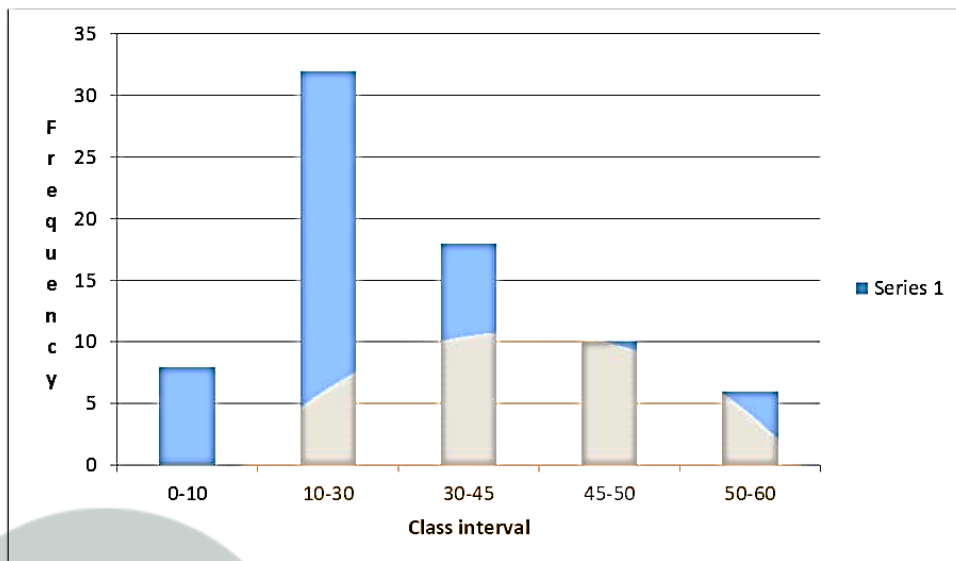
Class Interval	Frequency
5-10	6
10-15	12
15-25	10
25-45	8
45-75	18



Answer 11:
Minimum class size = 5

Class Interval	Frequency
0-10	8
10-30	32
30-45	18
45-50	10
50-60	6

Myclass24
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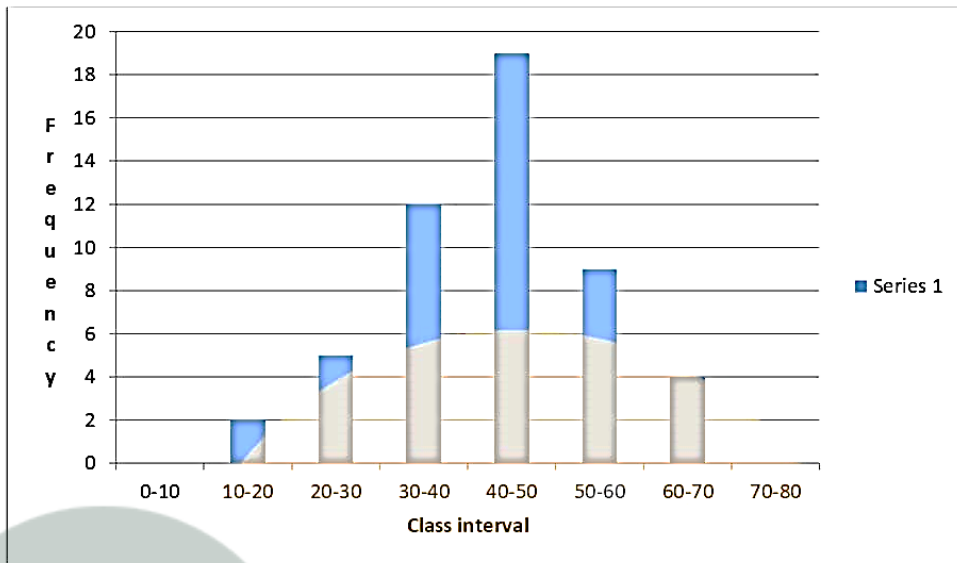


Answer 12:

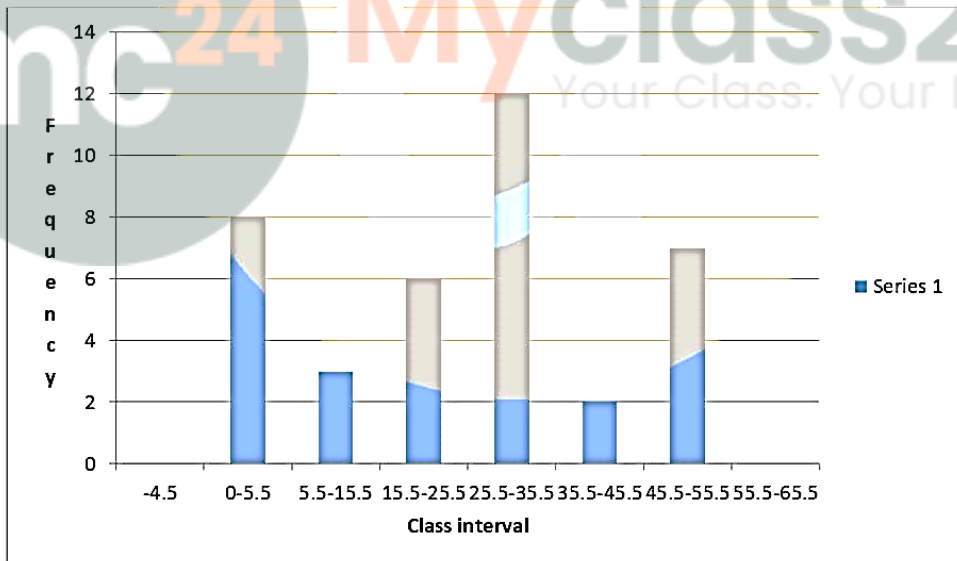
We take two imagined classes—one at the beginning (0–10) and other at the end (70–80)—each with frequency zero.

With these two classes, we have the following frequency table:

Age in Years	Class Mark	Frequency (Number of Patients)
0–10	5	0
10–20	15	2
20–30	25	5
30–40	35	12
40–50	45	19
50–60	55	9
60–70	65	4
70–80	75	0

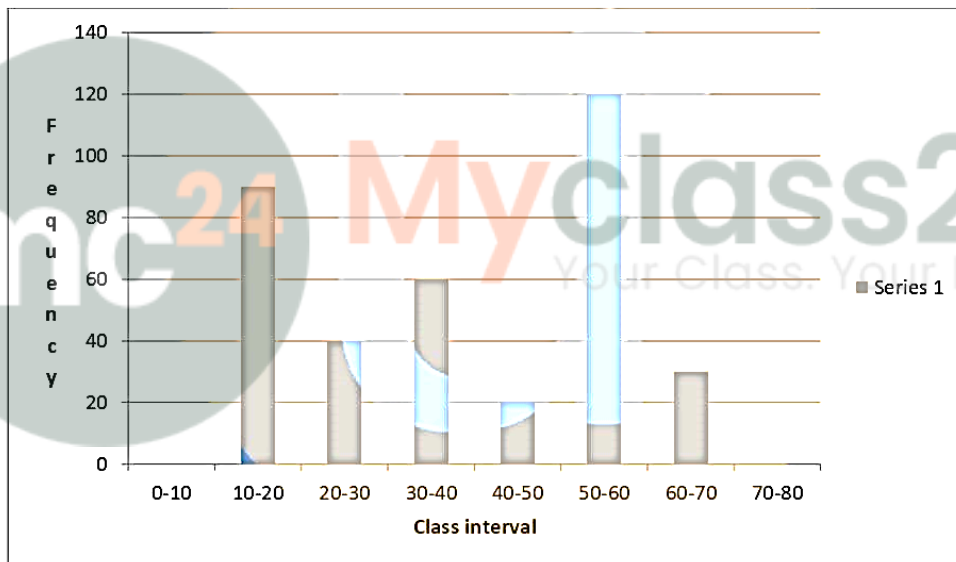


Answer 13:

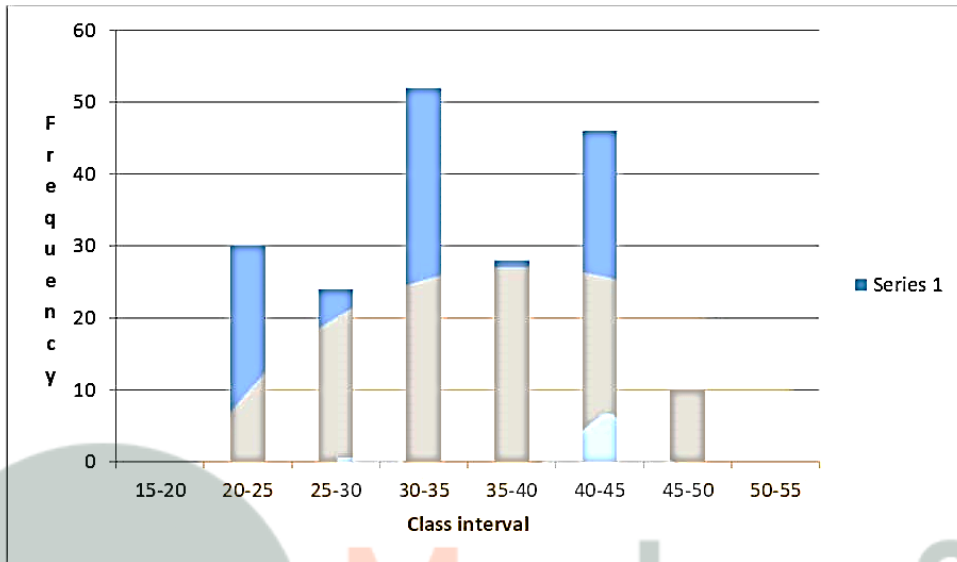


Class Interval	Class Mark	Frequency
–		
9–0	–4.5	0
1–10	5.5	8
11–20	15.5	3
21–30	25.5	6
31–40	35.5	12
41–50	45.5	2
51–60	55.5	7
61–70	65.5	0

Answer 14:



Answer 15:



Answer 16:

