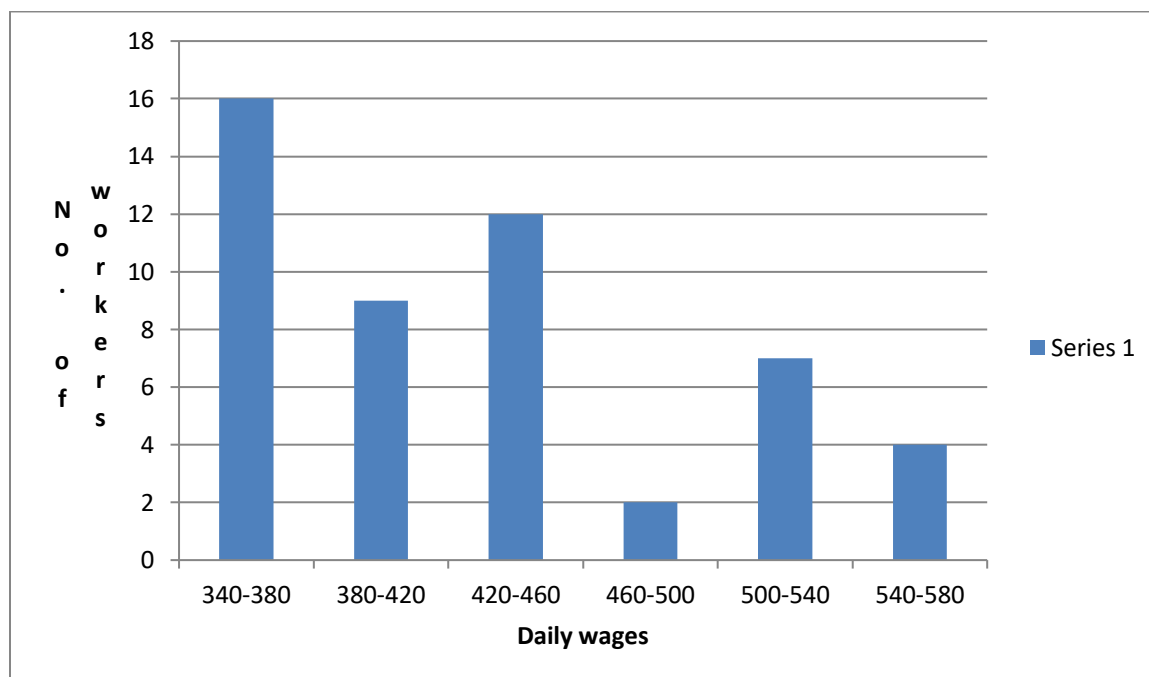
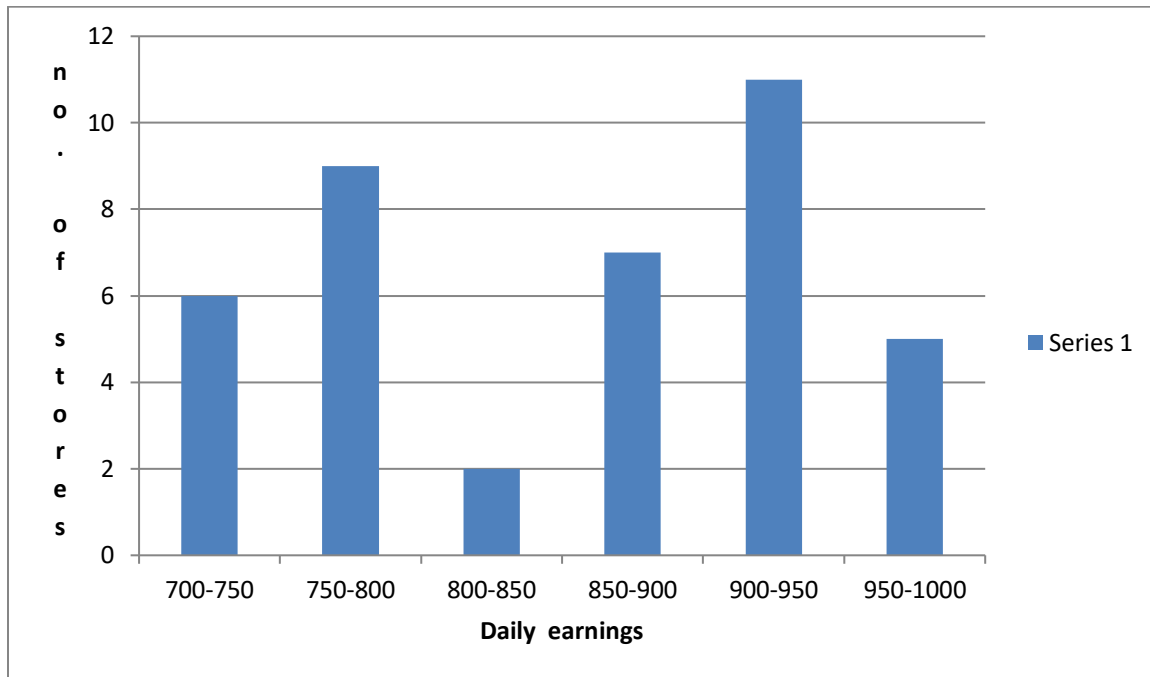

EXERCISE 17B

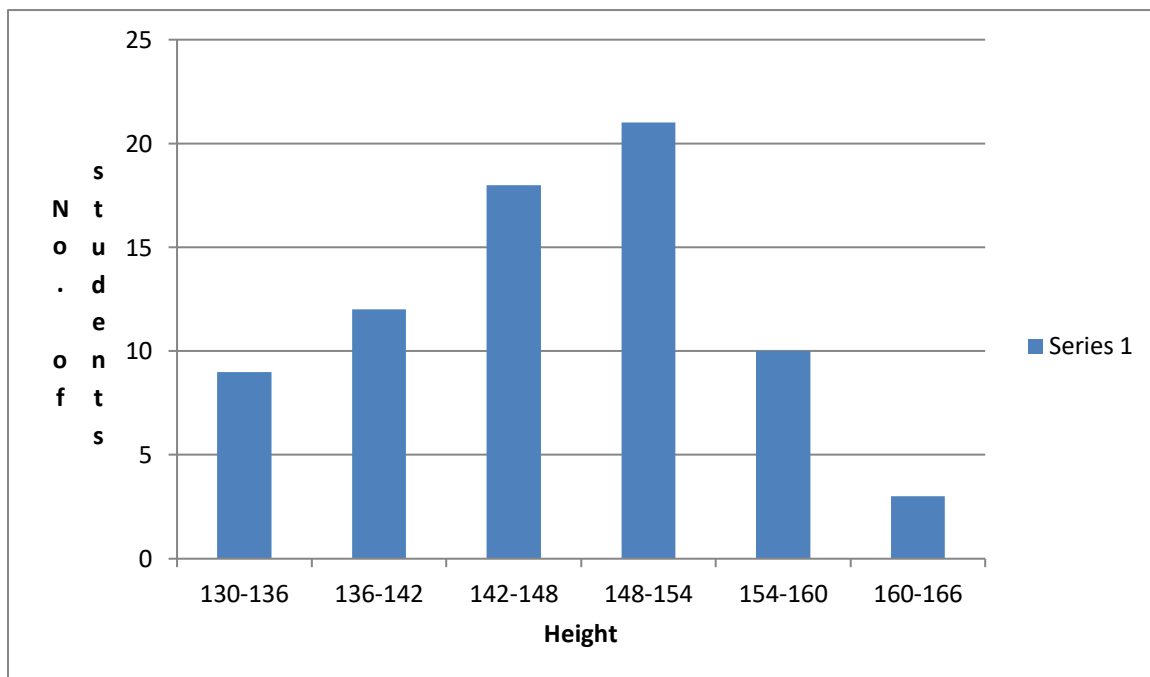
Answer 1:



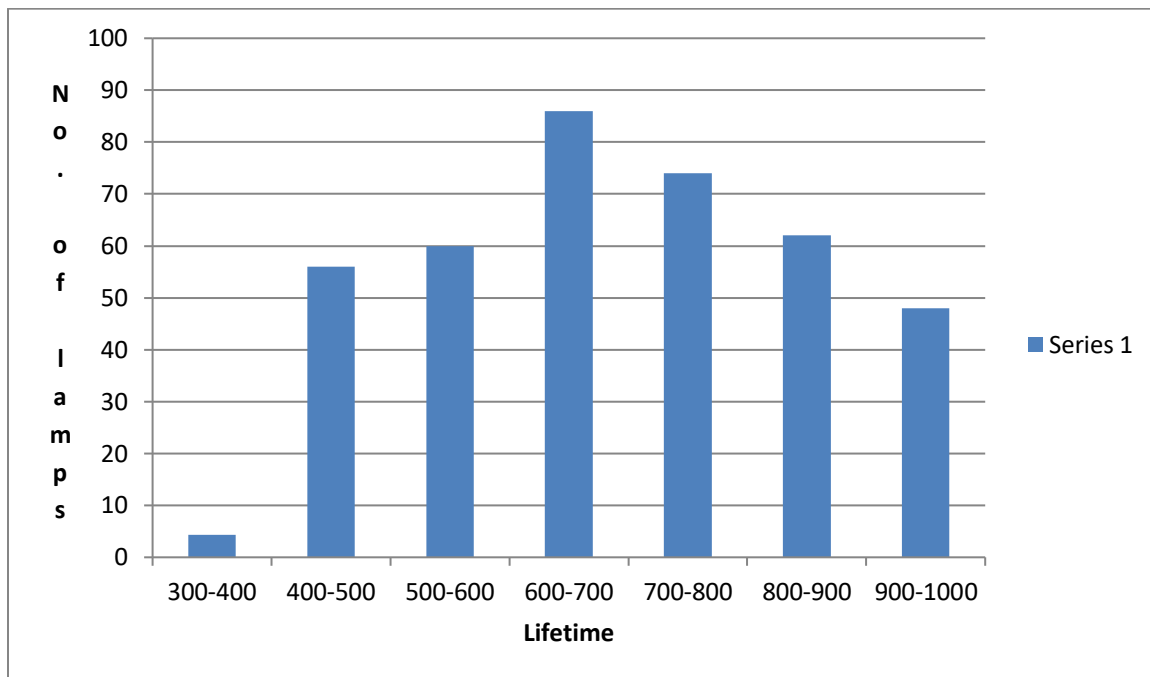
Answer 2:



Answer 3:

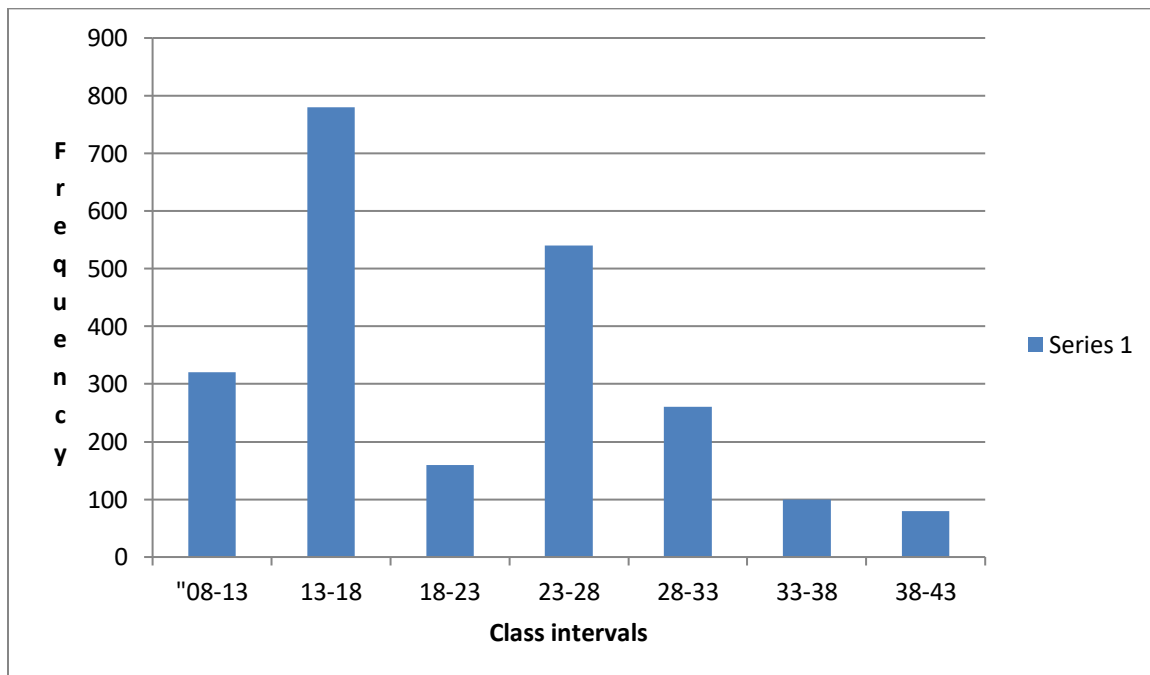


Answer 4:(i)



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

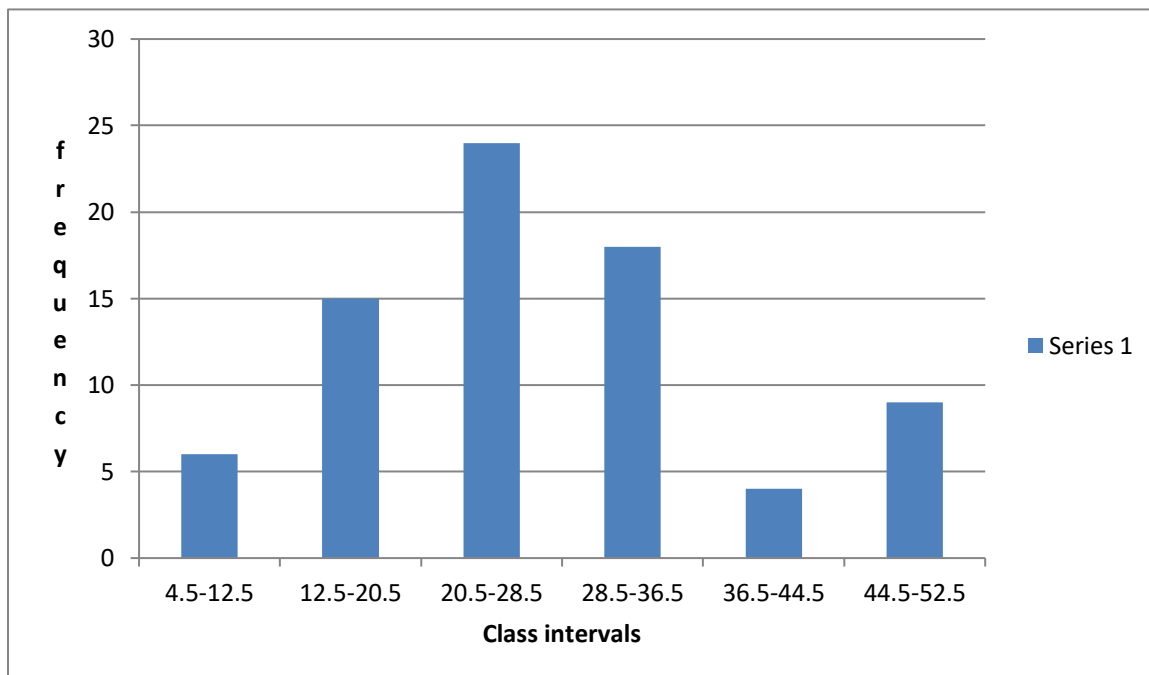
Answer 5:



Answer 6:

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

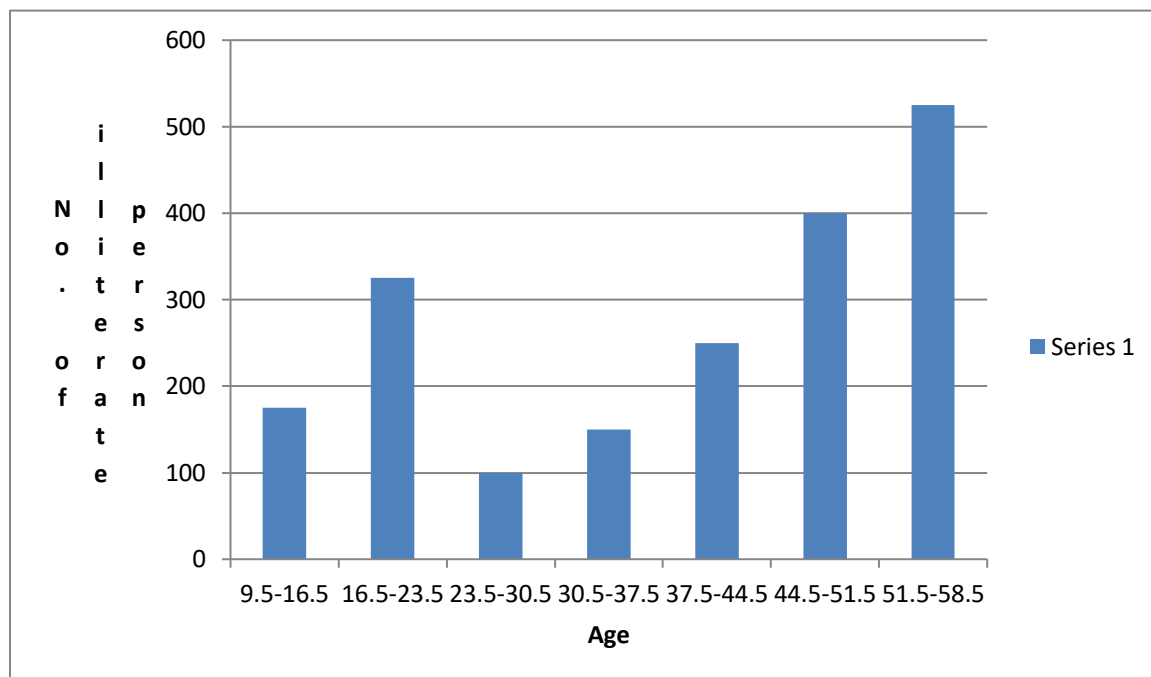
Class Interval	Frequency
4.5–12.5	6
12.5–20.5	15
20.5–28.5	24
28.5–36.5	18
36.5–44.5	4
44.5–52.5	9

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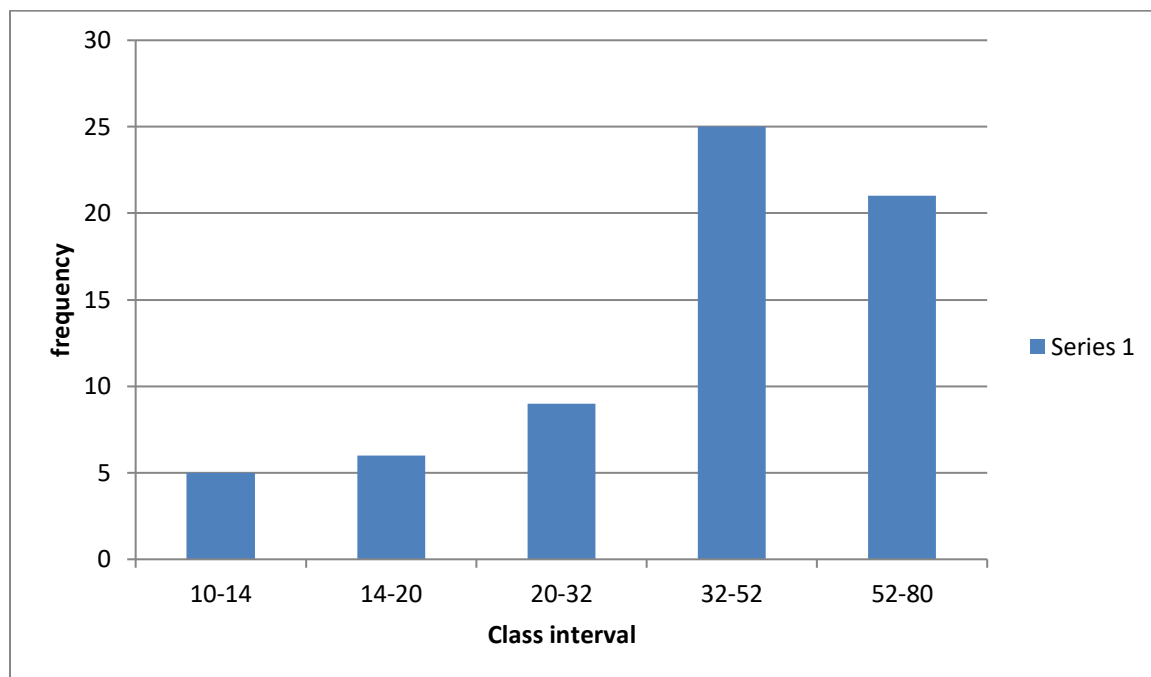
9.5-16.5	175
16.5-23.5	325
23.5-30.5	100
30.5-37.5	150
37.5-44.5	250
44.5-51.5	400
51.5-58.5	525



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

$$4 - 1 = 3$$

$$6 - 4 = 2$$

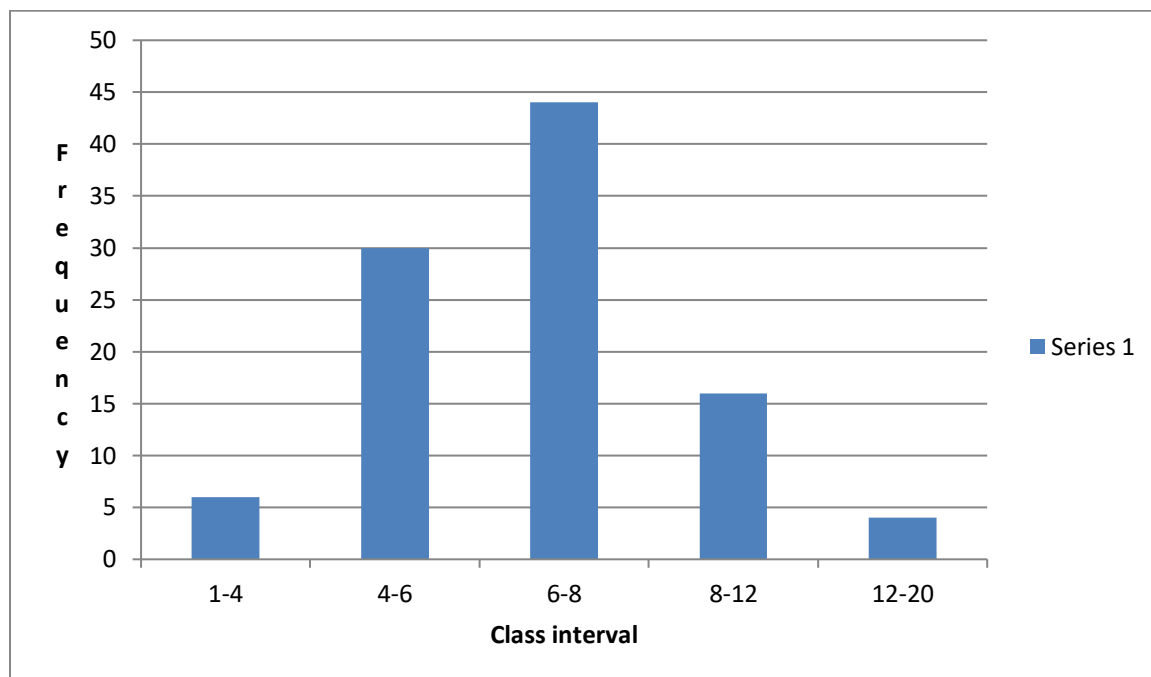
$$8 - 6 = 2$$

$$12 - 8 = 4$$

$$20 - 12 = 8$$

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

$$10 - 5 = 5$$

$$15 - 10 = 5$$

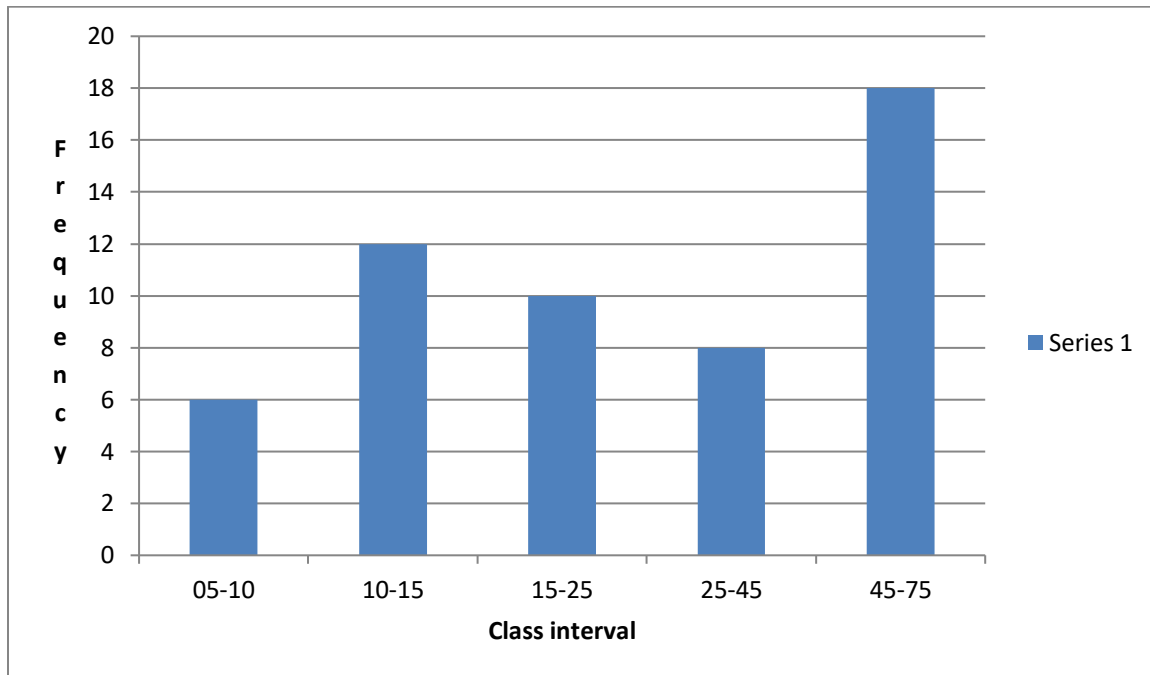
$$25 - 15 = 10$$

$$45 - 25 = 20$$

$$75 - 45 = 30$$

Minimum class size = 5

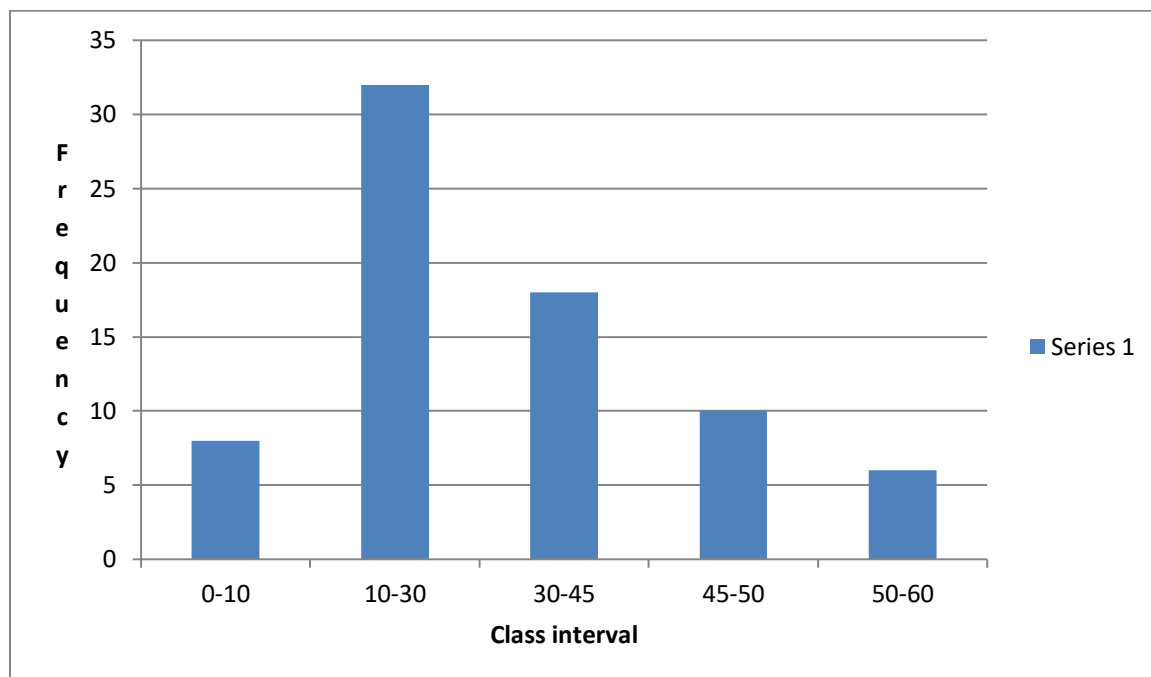
Class Interval	Frequency
5-10	6
10-15	12
15-25	10
25-45	8
45-75	18



Answer 11:

Minimum class size = 5

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

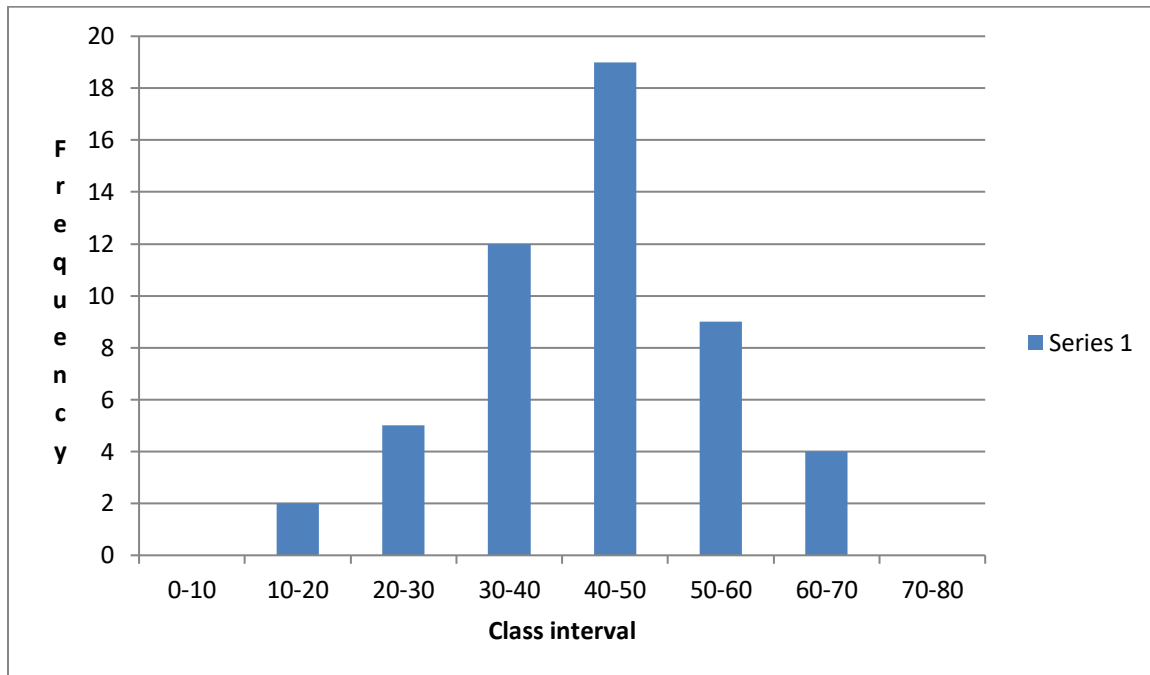


Answer 12:

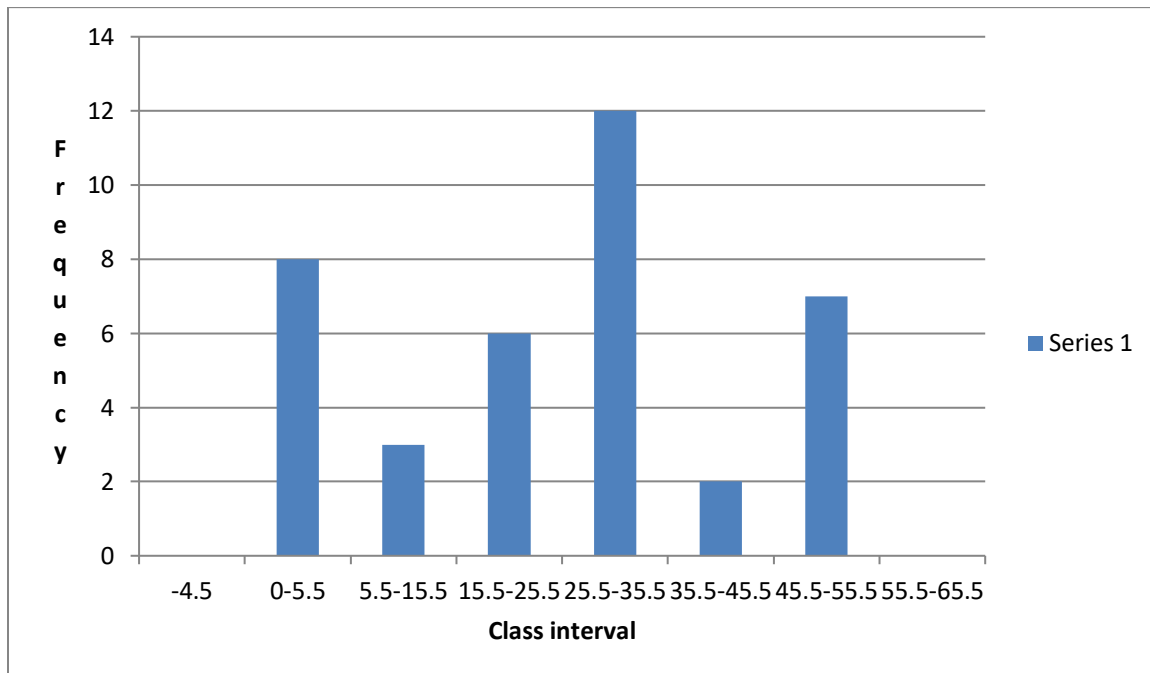
We take two imagined classes—one at the beginning (0–10) and other at the end (70–80)—each with frequency zero.

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

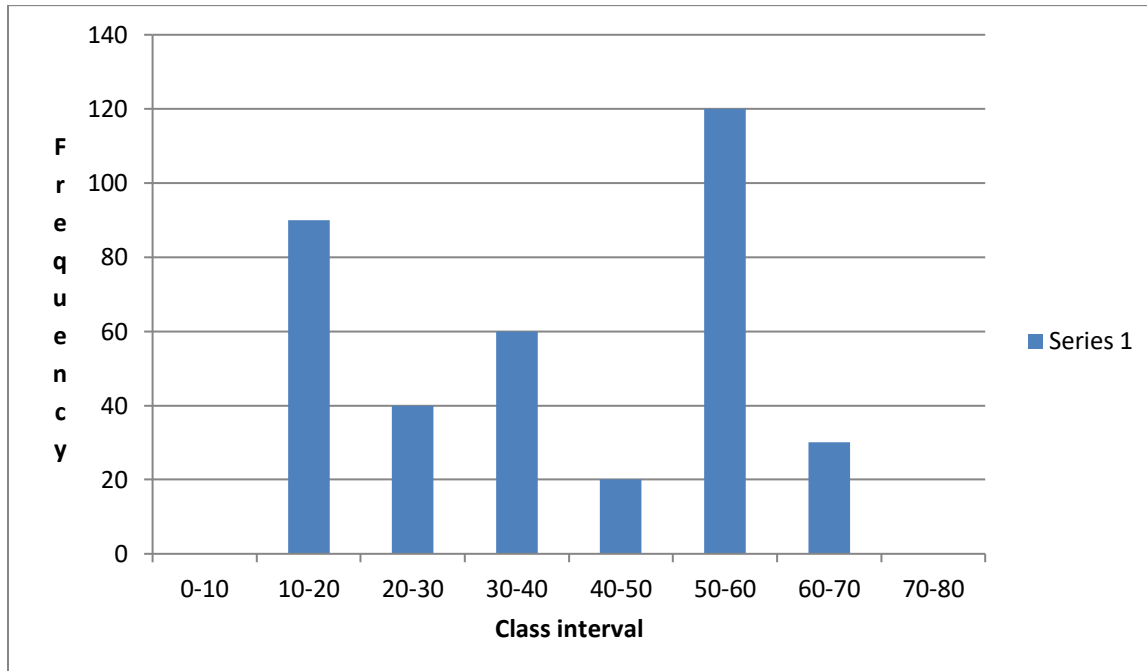


Answer 13:

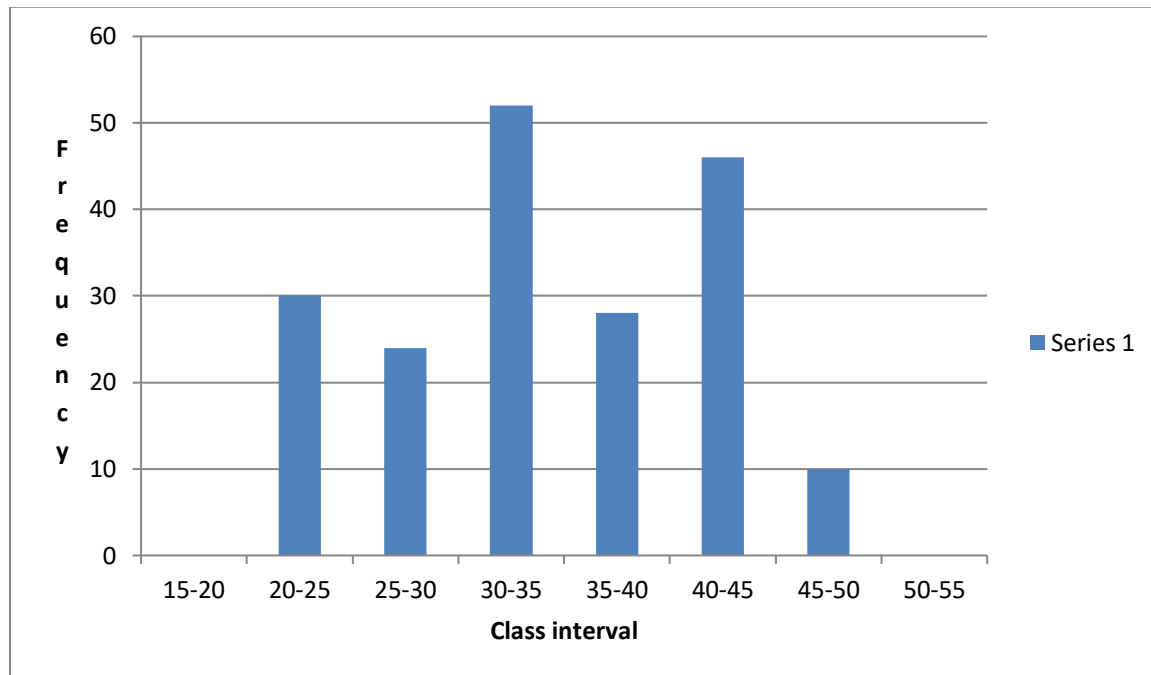


Class Interval	Class Mark	Frequency
–		
9–0	–4.5	0
1–10	5.5	8
11–20	15.5	3
21–30	25.5	6
31–40	35.5	12
41–50	45.5	2
51–60	55.5	7
61–70	65.5	0

Answer 14:



Answer 15:



Answer 16:

