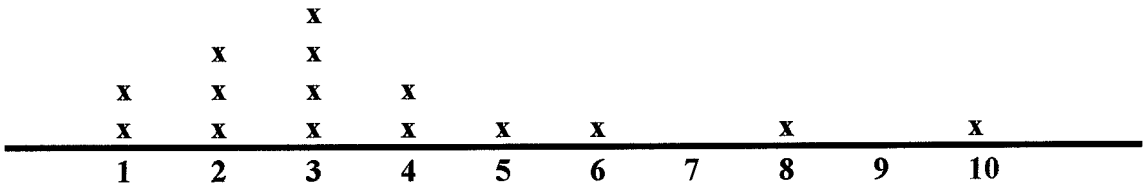
1 The following graph is a line plot which represents the result of a survey of 15 secondary students on how many telephone calls they had made on the previous Saturday.



For this survey, the range of scores was:

A 3 B 4
C 9 D 10

THE NEXT 5 QUESTIONS REFER TO THE FOLLOWING INFORMATION.
A survey was taken of 9 student on how many hours (to the nearest hour) they slept the previous night. Their answers were:

4, 7, 7, 7, 8, 8, 9, 10, 11

2 The mean number of hours they slept was:

A 7 B 7.9
C 8 D 8.2

3 The mode was:

A 7 B 7.9
C 8 D 8.2

4 The median was:

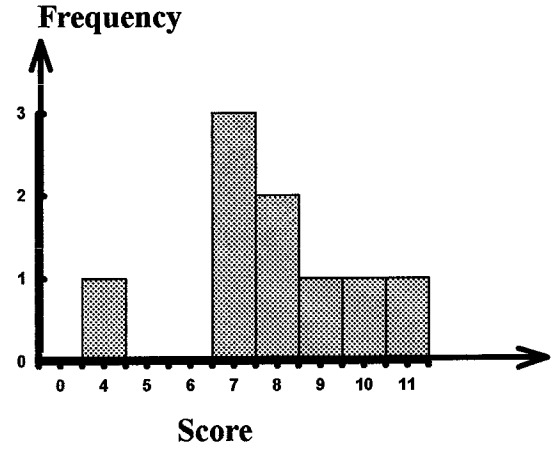
A 7 B 7.9
C 8 D 8.2

5 A tenth student was then surveyed, and the new result changed the mean to 8.5. The number of hours the student must have slept was:

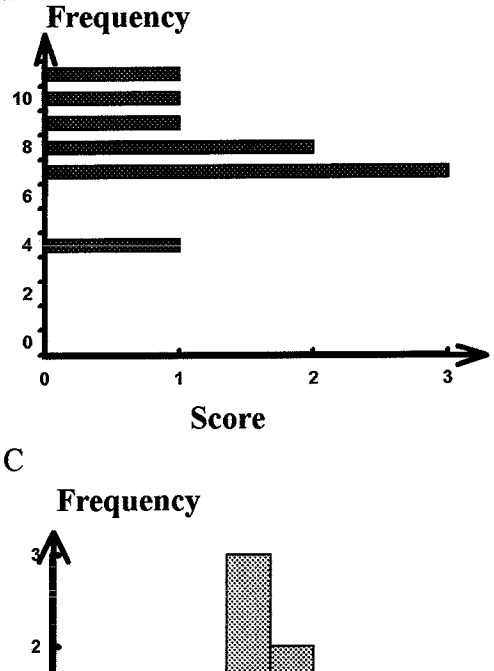
A 10. B 11
C 12. D 14.

6 The histogram to represent this data would be:

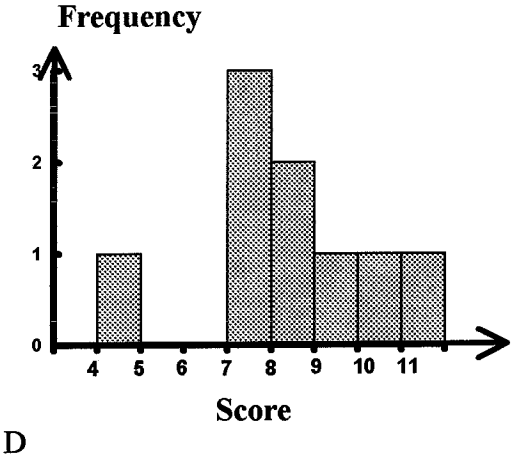
A



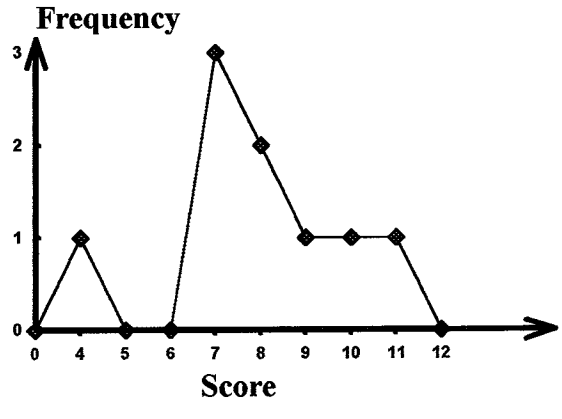
B



C



D



7 **In a survey about their mark on a spelling test, ten grade 3 students gained the following marks**

5, 7, 8, 10, 4, 6, 8, 8, 9, 6

In this survey:

A The mode was 8 and the median was 7.5.
B The mode was 8 and the median was 5.
C The mode was 6 and the median was 7.1.
D The mode was 7.1 and the median was 7.5.

THE NEXT **3** QUESTIONS REFER TO THE FOLLOWING SURVEY RESULTS.

1, 1, 2, 3, 5, 6, 8, 10, 11, 11, 13, 13, 14, 15, 18

8 **The 25th percentile is:**

A 2 B 2.5
C 3 D 4

9 **The range of the scores is:**

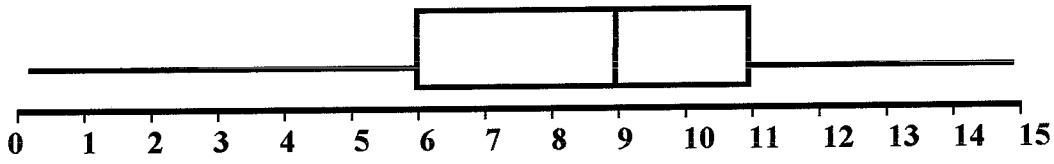
A 10 B 12
C 17 D 18

10 **The interquartile range is:**

A 10 B 12
C 17 D 18

THE NEXT 3 QUESTIONS REFER TO THE FOLLOWING INFORMATION.

A certain set of scores from a survey were represented in a box and whiskers plot, as shown:



11 **The median was:**

A 7 B 7.5
C 8 D 9

12 **The interquartile range was:**

A 2 B 3
C 5 D 15

13 **From this plot we can deduce that:**

A Half of the people in the survey had a score from 6 to 11.
B The mean score was 9.
C All of the actual scores were from 6 to 11, although the possible scores ranged from 0 to 15.
D 15 people were in the survey.

14 An example of discrete data is:

A the weight of adolescent students.
B the heights of primary aged children.
C the length of newborn babies.
D the number of cars stopping for petrol at a particular service station.

THE FOLLOWING 4 QUESTIONS REFER TO THE DATA TABLE BELOW.

Year 10 History Results

MARK	CLASS FREQUENCY
0 - 9	0
10 - 19	1
20 - 29	3
30 - 39	4
40 - 49	7
50 - 59	10
60 - 69	15
70 - 79	5
80 - 89	4
90 - 99	1

15 The total number of students in the History results survey was:

A 15 B 50
C 90 D 100

16 The modal class was:

A 90 - 100 B 60 - 69
C 50 - 59 D 40 - 49

17 The percentage of students with a mark below 60% was:

A 20% B 25%
C 50% D 59%

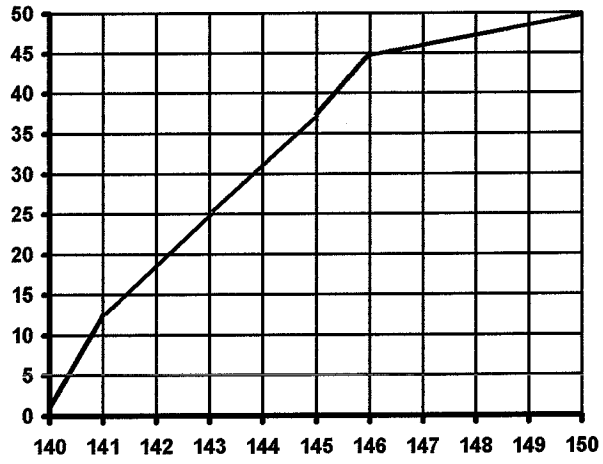
18 The mean History mark would be considered to be:

A 57.1 B 60
C 64.5 D 65

19 When a student received her report from a science competition which consisted of 50 multiple choice items, it stated that she was "on the 90th percentile".

A She gained 90% on the test.
B Ninety students gained her particular score.
C 90% of the candidates gained a mark higher than hers.
D 10% of the candidates gained a mark higher than hers.

THE FOLLOWING 4 QUESTIONS REFER TO THE INFORMATION BELOW:
This cumulative frequency graph represents a survey of students about their height, which was measured to the nearest centimetre.



20 This graph shows that:
A There were 50 students in the survey with a height of 150cm.
B There were 50 students in the survey altogether.
C The mode height was 150 cm.
D 50% of the students had a height of 150 cm.

21 The median is:
A 25 B 143
C 145 D 150

22 The interquartile range is from:
A 12.5 to 37.5 B 25 to 75
C 141 to 145 D 143 to 147

23 From the graph, the percentage of students taller than 146 cm is:
A 90% B 50%
C 10% D 5%

THE NEXT **2** QUESTIONS REFER TO THE FOLLOWING DATA.
This data lists the weights of 1000 randomly selected packets of sugar, labelled as 1 kg packets.

Weight in g	Frequency
980 -	1
985 -	17
990 -	132
995 -	350
1000 -	349
1005 -	131
1010 -	18
1015 - 1020	2
	1000

24 The value of the mean (to the nearest whole number) is:

A 990 g B 995 g C 1000 g D 1005 g

25 The percentage of packets of sugar which were underweight was:

A 15% B 35% C 50% D 85%

ANSWERS TO STATISTICS

1	C	2	B	3	A	4	C	5	D	6	A
7	A	8	C	9	C	10	A	11	D	12	C
13	A	14	D	15	B	16	B	17	C	18	A
19	D	20	B	21	B	22	C	23	C	24	C
25	C										