Mr Bloggs, the English teacher, had a class of 20 students. One day he gave them a spelling test and recorded the number of mistakes each student made. These were:

0 1 2 2 1 3 4 1 3 0 1 3 1 2 2 3 2 2 2 3

1 **The mean number of spelling mistakes was:**

A   1   B   1.9   C   2   D   3

2 **The mode is:**

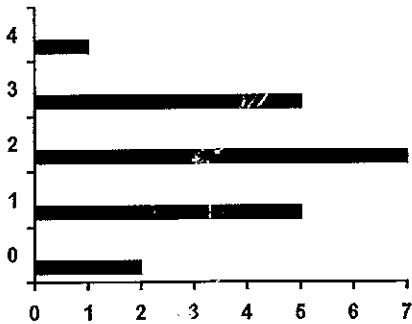A   1   B   2   C   3   D   4

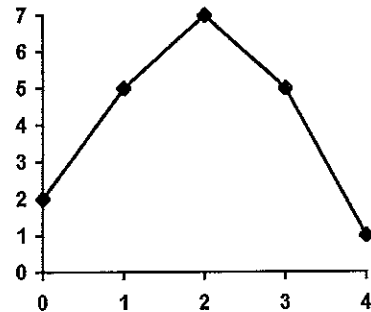**3** **Another word for the number of mistakes a certain student in the class made is:**
A   the frequency   B   the score
C   the range   D   the tally

4 **The line plot which might represent this information is:**

A

B

C

D
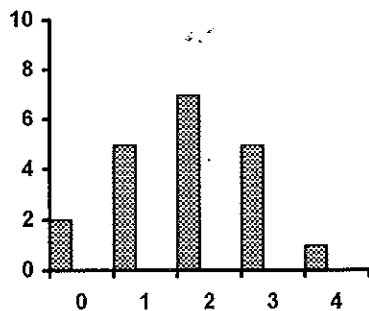
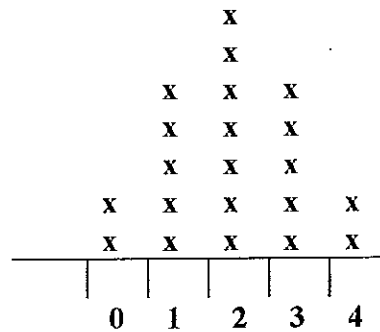5   A series of 5 numbers, 2, 5, x, 8, 10 has a mean of 7. x must equal:

A   6   B   7   C   8   D   10

6   The following frequency distribution table represents the number of complete books read by Year 9 students in the last month:

Score	Tally	Frequency
0	|	
1	||	
2	||||	
3	⊬||	m
4	⊬|	
5	⊬|	
6	||	
	Total	n

The value of m and n are:

A   7 and 28   B   6 and 30
C   6 and 27   D   7 and 21

7   This is a graph of some of the reasons people gave in a survey for preferring driving a car to other forms of transport.
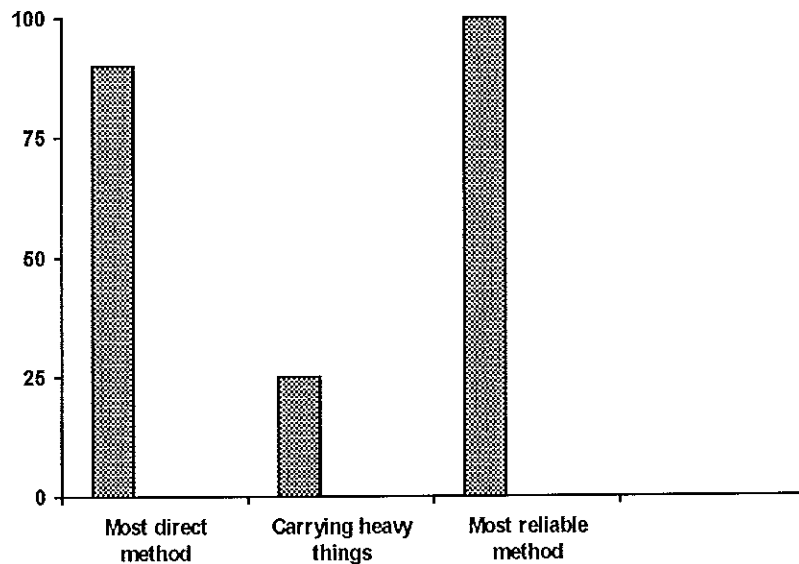
**This graph shows that:**
A   100 people were asked altogether.
B   About 70 people don't have to carry heavy things.
C   Almost 3 times more people were more concerned about reaching their destination by a reliable way than about carrying heavy things.
D   Almost 4 times more people were more concerned about reaching their destination along a direct route than about carrying heavy things.

8   A group of students wanted to convince their local Council to build an overpass over an extremely busy road near their school. To back up their submission they decided to do a traffic survey. Which one of the following proposals suggested by different students would give the most reliable results for their submission?

A   Count the number of cars down the busy road the next morning before school.
B   Count the number of cars crossing a line across the busy road between 8 am and 9 am and 3 pm and 4 pm each school day for the next 3 weeks.
C   Count the number of cars passing in front of the school for 1 hour during peak hour both morning and night for the next 7 days.
D   Count the number of cars crossing a line on the busy road for an entire day 7 am to 6 pm.

THE NEXT 3 QUESTIONS REFER TO THE FOLLOWING INFORMATION:
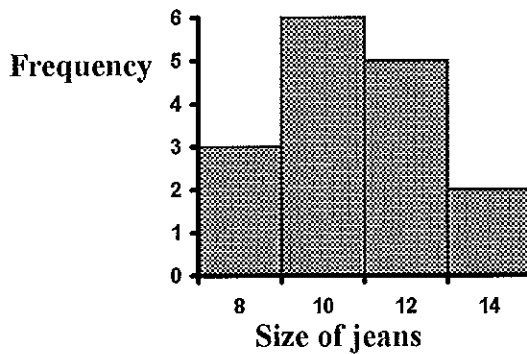
The histogram represents different size jeans sold at a big end of season sale.

9   The total number of people in the survey was:

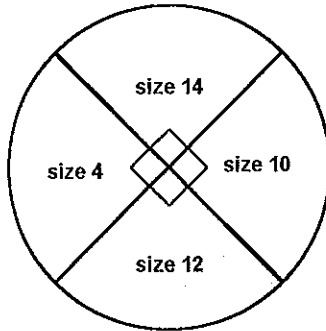A   6   B   14
C   16   D   unable to be determined from this graph.

10   The mode was:

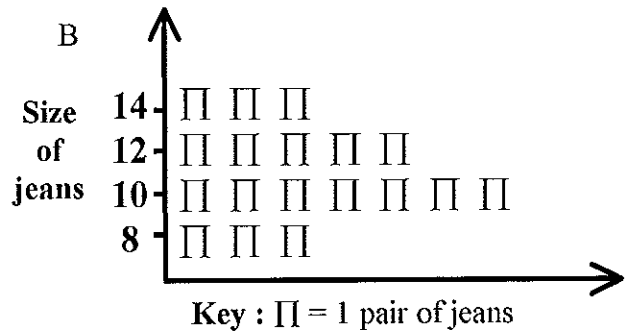A   size 8   B   size 10
C   size 12   D   size 14

11 Which of the following is an accurate alternative representation of the data in the histogram?

A

size 14

size 4   size 10

size 12

B

Size   14 ⊓ ⊓ ⊓
of   12 ⊓ ⊓ ⊓ ⊓ ⊓
jeans 10 ⊓ ⊓ ⊓ ⊓ ⊓ ⊓ ⊓
        8 ⊓ ⊓ ⊓

Key : ⊓ = 1 pair of jeans

C

        8 10 12 14
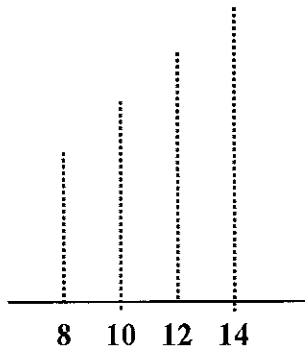
D

Score	Percentage Frequency
8	30
10	60
12	50
14	20

12 The following picture graph represents a survey of 360 students, who were given a choice of 4 types of music and were asked which one they preferred:

musical comedy   O O O
hard rock   O O O O O
classical   O
jazz   O O O
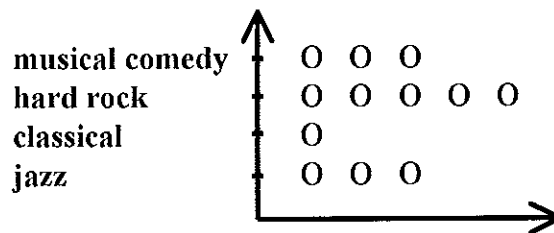
Which statement is NOT true?
A   Each circle must represent 30 students.
B   Jazz was 3 times more popular than classical music.
C   Two more people preferred hard rock than preferred jazz.
D   Hard rock was the most popular style of music.

THE NEXT **3** QUESTIONS REFER TO THE FOLLOWING INFORMATION:

This is a sector graph (pie chart) drawn from a survey of 120 students showing their preferred summer sport.
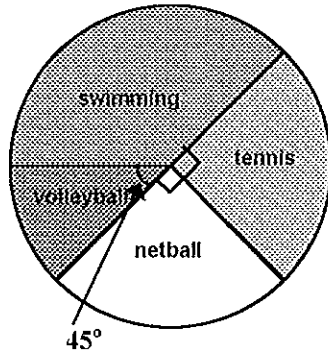
13 The number of students who chose tennis was:

A 30
B 60
C 90
D 108

14 The fraction of students who chose swimming was:

A $\dfrac{1}{4}$
B $\dfrac{3}{8}$

C $\dfrac{4}{5}$
D none of these.

15 The percentage of students who selected netball was:

A $\dfrac{1}{4}\%$
B 25%

C 30%
D 90%

16 The only meaningful kind of "average" for this kind of survey is:

A the mean
B the median
C the mode
D none of these

THE NEXT 2 QUESTIONS REFER TO THE FOLLOWING INFORMATION:

A Year 9 class was tested on the number of hours they spent asleep the night before. The results were:

No. of hours of sleep	Frequency
7	4
8	4
9	4
10	10
11	4

17 **The mean number of hours of sleep was:**

A   8.5   B   8.6
C   9.2   D   10.0

18 **The mode and median were, respectively:**

A   9 and 9   B   9 and 10
C   10 and 9   D   10 and 10

19 **Which one of the following sets of measurement would be best put in classes, in a frequency distribution table, rather than as individual values?**

A   the number of computers in students' homes.
B   the number of pets students have.
C   the height of students across all ages.
D   the number of completely read books in the past 3 weeks.

20 **Students were given a Statistics Test and their percentage was recorded in a frequency distribution table:**

Score	Frequency
0-	1
10-	2
20-	5
30-	7
40-	10
50-	11
60-	9
70-	3
80-	1
90-100	1

If the pass mark was 50%, what number of students passed this test?

A   11   B   25
C   14   D   50

ANSWERS TO STATISTICS – YEARS 7 & 8

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