7

Data Handling

7th Standard

Mathematics

Exam Time : 00:01:00 Hrs

Total Marks : 1

87 x 1 = 87

1) The mode of the data 22,29, 27, 23, 43, 41, 27 is

(a) 23 and 27 (b) 27 (c) 23 and 43 (d) 22

2) The median of the data 2, 16, 29, 88, 49, 99,16,4,37 is

(a) 16 (b) 29 (c) 99 (d) 88

3) If mean of 6 observations is 4, then their sum is

(a) 20 (b) 22 (c) 24 (d) 26

4) The number of trees in different parks of a city are 33, 38, 48, 33, 34, 34, 33 and 24. The mode of this data is

(a) 24 (b) 34 (c) 33 (d) 48

5) Which measures of central tendency get affected, if the extreme observations on both the ends of a data a arranged in descending order are removed?

(a) Mean and mode (b) Mean and median (c) Mode and median

(d) Mean, median and mode

6) The difference between the highest and the lowest observations in a data is its

(a) frequency (b) width (c) range (d) mode

7) The mean of three numbers is 40. All the three numbers are different natural numbers. If lowest is 19, what could be the heighest possible number of remaining two numbers?

(a) 81 (b) 40 (c) 100 (d) 71

8) Khilona earned scores of 97,73 and 88, respectively in her first three examinations. If she scored 80 in the fourth examination, then her average score will be

(a) increased by 1 (b) increased by 1.5 (c) decreased by 1 (d) decreased by 1.5

9) The runs scored in a cricket match by 11 players are as follows: 6, 15, 120, 50, 100, 80, 10, 15, 8, 10, 10. Find the median of scores.

(a) 46 (b) 8 (c) 15 (d) 120

10) The money saved by a student during first six days of a week are Rs. 46, Rs. 24, Rs 29, Rs 27, Rs. 4 and Rs 42. Find the average saving per day.

(a) 42 (b) 39 (c) 35 (d) 36

11) A bag is having 4 red balls and 6 yellow balls. If a ball is pulled out without seeing them, then find the probability of getting a red ball.

(a) $\frac{2}{5}$ (b) $\frac{3}{5}$ (c) $\frac{9}{12}$ (d) $\frac{2}{3}$

12) The ages of 10 teachers in a school are 32, 41, 28, 54, 35, 26, 23, 33, 38, 40 The range of ages of teachers is :

(a) 30 years (b) 32 years (c) 40 years (d) 31 years

13) Mode of given data 2, 2, 2, 3, 3, 4, 5, 5, 5, 6, 6, 8 is :

(a) 2 (b) 3 (c) 5 (d) 2,5 both

14) Which of the following is the mean of first five natural numbers?

(a) 2 (b) 3 (c) 4 (d) 5

15) Which of the following is the mode of the data 1, 1, 2, 4, 3, 2, 1, 2, 2, 4?

(a) 1 (b) 2 (c) 3 (d) 4

16) An unbiased die is tossed once. Which of the following is the probability of getting an even number?

(a) 1 (b) $\frac{1}{2}$ (c) $\frac{1}{3}$ (d) $\frac{1}{4}$

17) A container contains 3 red and 4 black balls. If one ball is selected at random from the container, what is the probability that it is black?

(a) $\frac{3}{7}$ (b) $\frac{4}{7}$ (c) 1 (d) zero

18) A number is selected at random from the first five natural numbers. Find the probability that the number is a prime?

(a) $\frac{3}{7}$ (b) $\frac{4}{7}$ (c) $\frac{3}{5}$ (d) $\frac{2}{5}$

19) The range of the data 14, 6, 12, 17, 21, 10,4,3 is

(a) 21 (b) 17 (c) 18 (d) 11

20) The mode of the data 23, 26, 22, 29, 29, 26, 29,22,23 is

(a) 23 and 29 (b) 23 only (c) 29 only (d) 26 only

21) The median of the data 40, 50, 99, 68, 98, 60, 94 is

(a) 40 (b) 60 (c) 68 (d) 99

22) Which of the following has the same mean, median and mode?

(a) 6,2,5,4,3,4, 1 (b) 4,2,2,1,3,2,3 (c) 2,3,7, 3, 8, 3, 2 (d) 4,3,4, 3,4,6,4

23) Let x, y, z be three observations. The mean of these observations is

(a) $\frac{x\times y\times z}{3}$ (b) $\frac{x+y+z}{3}$ (c) $\frac{x-y-z}{3}$ (d) $\frac{x\times y+z}{3}$

24) The range of the data: 21,6,17,18,12,8,4, 13 is

(a) 17 (b) 12 (c) 8 (d) 15

25) The median of the data: 3, 4, 5, 6, 7, 3, 4 is

(a) 5 (b) 3 (c) 4 (d) 6

26) Out of 5 brands of chocolates in a shop, a boy has to purchase the brand which is most liked by children. What measure of central tendency would be most appropriate if the data is provided to him?

(a) Mean (b) Mode (c) Median (d) Any of the three

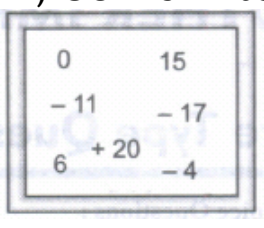
27) What is the probability of picking up an ace from set of 52 cards?

(a) $\frac{1}{13}$ (b) $\frac{2}{6}$ (c) $\frac{3}{6}$ (d) $\frac{4}{6}$

28) In a school, only 2 out of 5 students can participate in quiz. What is the chance that a student picked at random makes it to the competition?

(a) 20% (b) 40% (c) 50% (d) 30%

29) Some integers are marked on a board. What is the range of these integers?



(a) 31 (b) 37 (c) 20 (d) 3

30) On tossing a coin, the outcome is:

(a) only head (b) only tail (c) neither head nor tail (d) either head or tail

31) Which measure of central tendency best represents the data of the most popular politician after a debate?

(a) Mean (b) Median (c) Mode (d) Any of the above

32) Which of the following is the mean of the given data?

(a) The middle value of the data arranged in ascending or descending order

(b) The value of the observation occurring most frequently

(c) The sum of all the values of the data divided by the total number of values.

(d) None of these.

33) Range of data is equal to:

(a) highest value + lowest value (b) highest value - lowest value

(c) highest value x lowest value (d) highest value -i- lowest value

34) When the data values are arranged from smallest to greatest in order, then the central value is:

(a) mean (b) median (c) mode (d) range

35) Which of the following is the mean of the given data?

(a) The middle value of the data arranged in ascending or descending order

(b) The value of the observation occurring most frequently

(c) The sum of all the values of the data divided by the total number of values.

(d) None of these.

36) When the data values are arranged from smallest to greatest in order, then the central value is:

(a) mean (b) median (c) mode (d) range

37) The data which is collected directly from the source is called:

(a) Primary data (b) Ungrouped data (c) Grouped data (d) Secondary data

38) The made of 3, 4, 3, 3, 1, 0, 5, 4, 2, 3 is

(a) 2.8 (b) 14 (c) 3 (d) 0

39) The median of 1,4, 1,2, 0, 1, 5,4,2,2 is

(a) 0 (b) 1 (c) 2 (d) 4

40) The mean of 1, 4, 1, 2, 0, 1, 5, 4, 2, 2 is:

(a) 11 (b) 2.2 (c) 2 (d) 5

41) The range 11, 25, 48, 15, 20, 25, 48, 90 is:

(a) 11 (b) 90 (c) 79 (d) 25

42) The probability of an event is always a fraction between

(a) 0 and 1 (b) 1 and 2 (c) 2 and 3 (d) none of these

43) The mode of the data 5, 1, 6, 3, 5, 4, 2, 1, 3, 5, 0 is:

(a) 5 (b) 4 (c) 3.3 (d) 3

44) The mean of the data 99, 100, 101,98, 100,102 is

(a) 300 (b) 98 (c) 99 (d) 100

45) The median of first five odd numbers is:

(a) 6 (b) 12.5 (c) 5 (d) None of these

46) The probability selecting the letter 'A' from the word 'ROAD' is

(a) $\frac{1}{2}$ (b) $\frac{1}{4}$ (c) $\frac{4}{3}$ (d) 0

47) The probability of an impossible event is:

(a) 0 (b) 1 (c) Less than 1 (d) None of these

48) The number of tourists visiting a historical place in a week is shown in the following table

Day	Number of tourists
Monday	65
Tuesday	72
Wednesday	98
Thursday	84
Friday	60
Saturday	108
Sunday	160

On which day is the number of tourists maximum?

(a) Sunday (b) Wednesday (c) Tuesday (d) Saturday.

49) The number of tourists visiting a historical place in a week is shown in the following table

Day	Number of tourists
Monday	65
Tuesday	72
Wednesday	98
Thursday	84
Friday	60
Saturday	108
Sunday	160

On which day is the number of tourists minimum?

(a) Friday (b) Monday (c) Thursday (d) Saturday

50) The number of tourists visiting a historical place in a week is shown in the following table

Day	Number of tourists
Monday	65
Tuesday	72
Wednesday	98
Thursday	84
Friday	60
Saturday	108
Sunday	160

On which day 60 tourists visit?

(a) Monday (b) Tuesday (c) Friday (d) Sunday.

51) The number of tourists visiting a historical place in a week is shown in the following table

Day	Number of tourists
Monday	65
Tuesday	72
Wednesday	98
Thursday	84
Friday	60
Saturday	108
Sunday	160

What is the difference between the number of tourists visiting on Friday and Monday?

(a) 10 (b) 24 (c) 38 (d) 5

52) The number of tourists visiting a historical place in a week is shown in the following table

Day	Number of tourists
Monday	65
Tuesday	72
Wednesday	98
Thursday	84
Friday	60
Saturday	108
Sunday	160

The sum of the number of tourists visiting on Sunday and Friday is

(a) 160 (b) 60 (c) 220 (d) 100

53) The difference between the maximum and minimum number of tourists is

(a) 50 (b) 80 (c) 90 (d) 100

54) A batsman scored the following number of runs in six innings:35,30,45,65,39,20 The mean runs scored by him in an inning is

(a) 39 (b) 38 (c) 37 (d) 40

55) The range of the weights (in kg) of a students of a class given below is
49, 60, 47, 50, 47, 59, 58, 45, 53

(a) 10 (b) 15 (c) 20 (d) 2

56) The marks of 11 students of a class are as given below
78, 11, 99, 63, 94, 6, 78, 36, 30, 55, 22 The range of marks is

(a) 90 (b) 91 (c) 92 (d) 93

57) The rainfall (in mm) in a city on 7 days of a certain week was recorded as follows

Day	Rainfall (in mm)
Monday	0.0
Tuesday	0.0
Wednesday	1.0
Thursday	2.0
Friday	3.0
Saturday	5.0
Sunday	4.0

On how many days was the rainfall less than 6 mm?

(a) 0 (b) 3 (c) 6 (d) 7

58) The mode of the distribution 3, 5, 7, 4, 2, 1, 4, 3, 4 is

(a) 7 (b) 4 (c) 3 (d) 1

59) The marks of some students are as given below: 30, 31, 32, 32, 33, 32, 34, 35, 30, 31, 33, 32 Find the mode of their marks

(a) 30 (b) 31 (c) 32 (d) 33

60) The median of the distribution 2, 3, 4, 7, 5, 1, 6 is

(a) 1 (b) 2 (c) 3 (d) 4

61) The median of the data 20,30,40,10,15,25,35 is

(a) 20 (b) 25 (c) 30 (d) 40

62) Which of the following statements is true?

(a) The mode is always one of the numbers in a data

(b) The mean is always one of the numbers in a data (c) Mean < Mode in a data

(d) Median < Mode in a data

63) A coin is tossed. What is the probability of getting head?

(a) 0 (b) 1 (c) $\frac{1}{2}$ (d) 2

64) A coin is tossed. What is the probability of getting tail?

(a) 1 (b) $\frac{1}{2}$ (c) 2 (d) 0

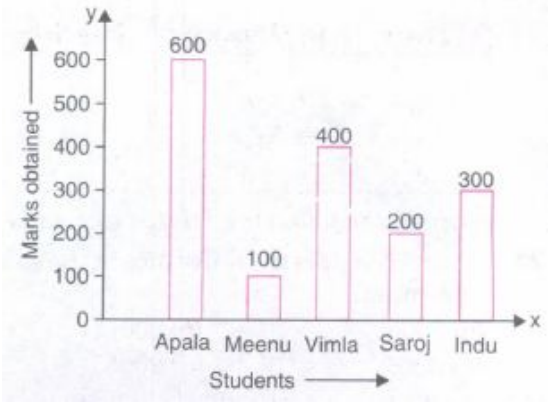
65) A die is thrown. What is the probability of getting 1?

(a) 0 (b) 1 (c) $\frac{1}{2}$ (d) $\frac{1}{6}$

66) A die is thrown. What is the probability of getting 6?

(a) 0 (b) $\frac{1}{6}$ (c) $\frac{1}{2}$ (d) 1

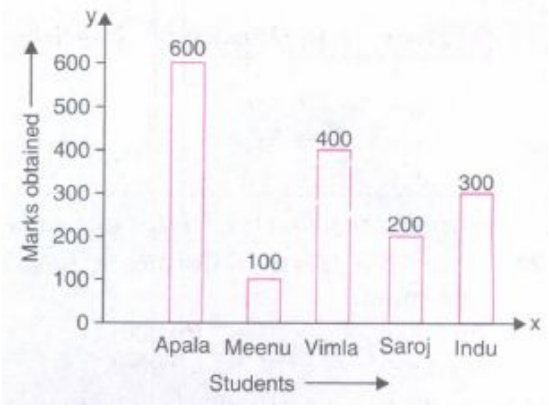
67) Read the following bar graph and answer the question



Who got the maximum marks?

(a) Apala (b) Meenu (c) Saroj (d) Indu

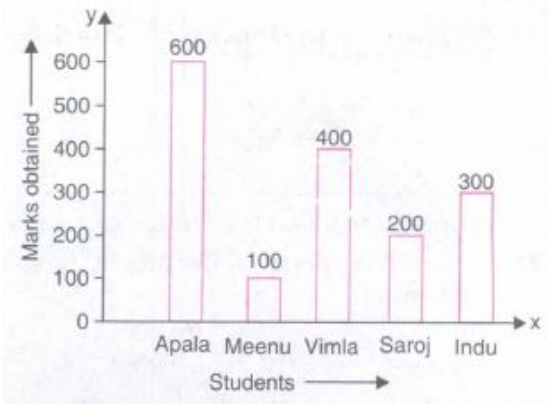
68) Read the following bar graph and answer the question



Who got the minimum marks?

(a) Apala. (b) Meenu (c) Vimla (d) Indu

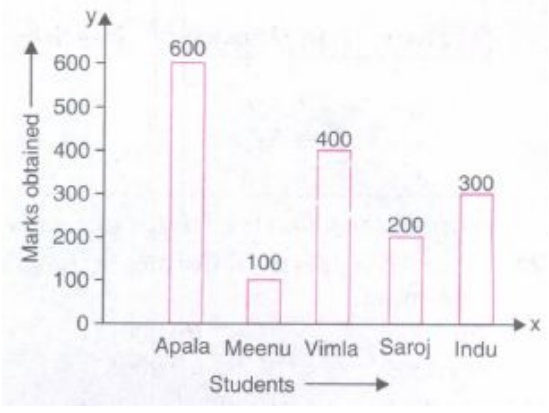
69) Read the following bar graph and answer the question



The difference between maximum and minimum marks is

(a) 100 (b) 200 (c) 400 (d) 500

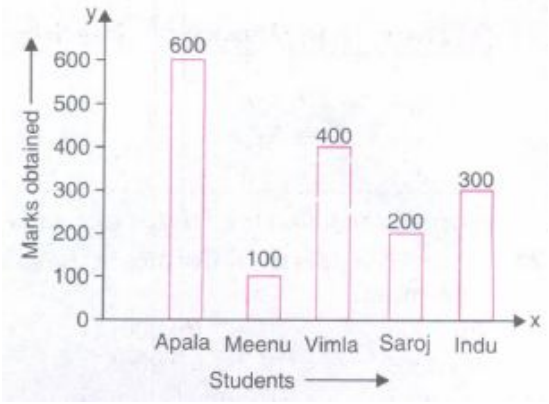
70) Read the following bar graph and answer the question



The ratio between the marks obtained by Saroj and Vimla is

(a) 1:2 (b) 2**:3** (c) 3:4 (d) 1:6

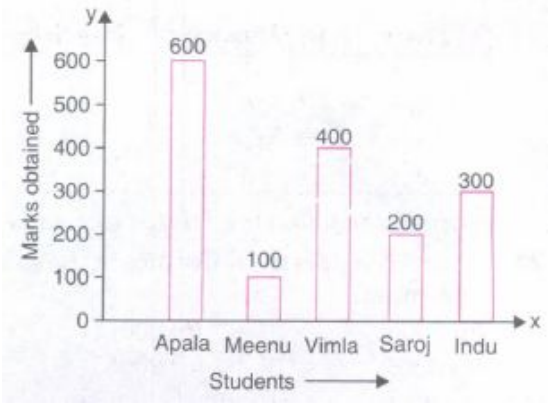
71) Read the following bar graph and answer the question



How many girls have got marks more than 100?

(a) 2 (b) 3 (c) 4 (d) 1

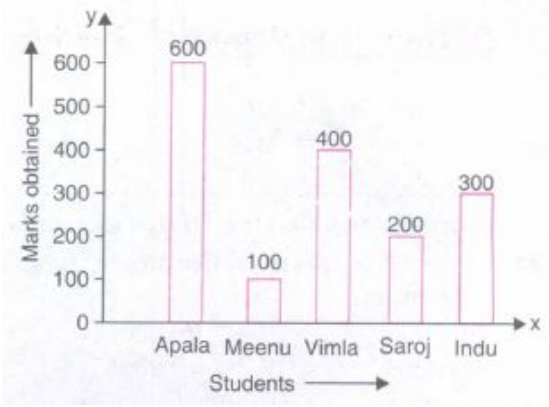
72) Read the following bar graph and answer the question



Who has got 400 marks?

(a) Vimla (b) Saroj (c) Indu (d) Apala

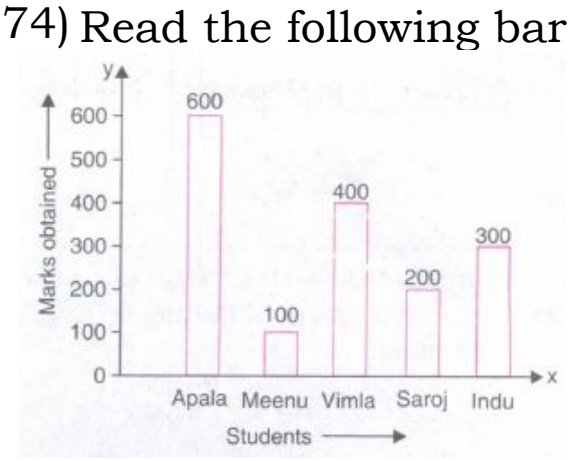
73) Read the following bar graph and answer the question



The difference between the marks obtained by Vimla and Saroj is how many times the difference between the marks obtained by Meenu and Saroj?

(a) 2 (b) 3 (c) 4 (d) 6

74) Read the following bar graph and answer the question



How many girls have got marks less than 600?

(a) 1 (b) 2 (c) 3 (d) 4

75) Sale of Mathematics and English books in the year 2005, 2006, 2007 and 2008 are given below:

Years	**Mathematics**	**English**
2005	200	1000
2006	300	250
2007	400	200
2008	500	500

In which year is the difference in the sale minimum?

(a) 2008 (b) 2007 (c) 2006 (d) 2005

76) Sale of Mathematics and English books in the year 2005, 2006, 2007 and 2008 are given below:

Years	Mathematics	English
2005	200	1000
2006	300	250
2007	400	200
2008	500	500

In which year is the difference in the sale maximum?

(a) 2005 (b) 2006 (c) 2007 (d) 2008

77) Sale of Mathematics and English books in the year 2005, 2006, 2007 and 2008 are given below:

Years	Mathematics	English
2005	200	1000
2006	300	250
2007	400	200
2008	500	500

The ratio of sales in the year 2005 is

(a) 2:1 (b) 3:1 (c) 4:1 (d) 2:3

78) Sale of Mathematics and English books in the year 2005, 2006, 2007 and 2008 are given below:

Years	Mathematics	English
2005	200	1000
2006	300	250
2007	400	200
2008	500	500

The rise in the sale ofMathematics books from 2005 to 2008 is

(a) 100 (b) 200 (c) 300 (d) 400

79) Sale of Mathematics and English books in the year 2005, 2006, 2007 and 2008 are given below:

Years	Mathematics	English
2005	200	1000
2006	300	250
2007	400	200
2008	500	500

The fall in the sale of English books from 2006 to 2007 is

(a) 50 (b) 100 (c) 150 (d) 200

80) Number of children in six different classes are given below:

Class	Number of children
6	400
7	350
8	320
9	280
10	225
11	200

In which class is the number of children maximum?

(a) 6 (b) 7 (c) 8 (d) 9

81) Number of children in six different classes are given below:

Class	Number of children
6	400
7	350
8	320
9	280
10	225
11	200

In which class is the number of children minimum?

(a) 8 (b) 9 (c) 10 (d) 11

82) Number of children in six different classes are given below:

Class	Number of children
6	400
7	350
8	320
9	280
10	225
11	200

The difference between the maximum and minimum number of children is

(a) 100 (b) 200 (c) 300 (d) 400

83) Number of children in six different classes are given below:

Class	Number of children
6	400
7	350
8	320
9	280
10	225
11	200

In how many classes is the number of childern less than 500?

(a) 2 (b) 4 (c) 5 (d) 6

84) Number of children in six different classes are given below:

Class	Number of children
6	400
7	350
8	320
9	280
10	225
11	200

In how many classes is the number of childern more than 100?

(a) 6 (b) 4 (c) 3 (d) 1

85) Number of children in six different classes are given below:

Class	Number of children
6	400
7	350
8	320
9	280
10	225
11	200

The ratio of the number of childern of class 6 and 11 is

(a) 3:1 (b) 2:1 (c) 2:3 (d) 1:4

86) Number of children in six different classes are given below:

Class	Number of children
6	400
7	350
8	320
9	280
10	225
11	200

The total number of childern is

(a) 1775 (b) 1675 (c) 1575 (d) 1785

87) The mean of the numbers 10,20,30 and 40 is

(a) 20 (b) 25 (c) 30 (d) 50

43 x 1 = 43

88) If the arithmetic mean of 3, 9, 4, x, 9, 7,6 is 6, then the value of x is.....

89) The median of any data lies between the ... and ... observations.

90) The median of data 18, 14, 24, 29, 27 is.....

91) If the arithmetic mean of 8, 4, x, 6, 2, 7 is 5, then the value of x is

92) Mean, median, mode are the measures of.....

93) The range of data 17, 26, 33, 37, 61, 69, 91,97 is _____

94) The representation of data with bars of uniform width is called _____

95) When a die is thrown the probability of getting a number less than 3 is.....

96) The mode of the following data 62,61,49,37, 91,61,47, 53, 54, 97, 98, 99 is

97) If 12 observation's mean is 6. Then, the sum of 12 observations is.....

98) When a die is thrown, the probability of getting a number less than 7 is _____

99) .....can be used to compare two collections of data

100) The mean of first five prime numbers is_____.

101) The probability of getting a number greater than 2 on throwing a die once is_____.

102) The difference between the highest and the lowest observation of a data is called_____.

103) The mean of a data is defined as_____.

104) In a set of observations, the observation that occurs the most often is called_____.

105) In a given data, arranged in ascending or descending order, the middle most observation is called_____.

106) The probability of an event which is certain to happen is_____.

107) The probability of an event which is impossible to happen is_____

108) In throwing a die the number of possible outcomes is_____.

109) Median is one of the observation in the data if number of observations is_____.

110) The sum of all the observations, when divided by the number of observations gives the _____ of the data[median/mean]

111) The difference between the highest and the lowest observation is called the_____ of the data. [mode/range]

112) The observation occurring the most in a set of given data is called the_____ of the data. [mode/median]

113) The mean of the first five natural numbers is _____[7.5/3]

114) The mean of first ten whole numbers is _____[4.5/5.5]

115) The mean of first ten natural numbers is _____[5/5.5]

116) The mean of all the single digit natural numbers is_____ [4.5/5]

117) The mean of all the single digit whole numbers is_____[4.5/5]

118) The mode is_____ one of the given data. [always/not always]
119) The mean is _____one of the given data. [always/not always]
120) The median is_____ one of the given data. [always/not always]
121) For a given data there be _____more than one mode. [can/cannot]
122) Mean of the data is_____
123) Range of the data is_____
124) Median of the data is_____
125) A die is thrown. The probability of getting a prime number is[0, $\frac{1}{2}$]
126) For tossing a coin, the probability of getting tail is _____ [1, $\frac{1}{2}$]
127) A die is thrown, the probability of getting the number 0 is _____ [0, $\frac{1}{6}$]
128) die is thrown. The probability of getting a number less than 4 is _____ [$\frac{1}{2}$ / $\frac{1}{3}$]
129) The difference between the highest and lowest observation is known as _____.
130) _____ is the most common representative value of a group of data.

28 x 1 = 28

131) The mode is always one of the numbers in a data
(a) False (b) True
132) The mean is one of the numbers in a data
(a) True (b) False
133) The median is always one of the numbers in a data
(a) False (b) True
134) The data 6, 4, 3, 8, 9, 12, 13, 9 has mean 9
(a) True (b) False
135) The data 11, 12, 16, 18, 19 has every observation as mode.
(a) False (b) True
136) The range of the data 2, - 5, 4, 3, 7 and 6 would change, if 2 is subtracted from each value in the data.
(a) True (b) False
137) The range of the data 3,7, 1, - 2, 2, 6, - 3, - 5 would change, if 8 is added to each value in the data.
(a) True (b) False
138) The mean of the data 20, 40, 60, 80, 70 is 55.
(a) True (b) False
139) Mean can never be a fraction
(a) True (b) False
140) The value of x is 4 in the data 16, 8, 2, 6, x, 0, 4, 6, where mean is 5.
(a) True (b) False
141) Median of the data may or may not be from the given data
(a) False (b) True
142) The mean of 2, 18, 46 is 22 is equal to mean of 10,12,26.
(a) True (b) False
143) When a coin is tossed, there are 2 possible outcomes.
(a) True (b) False
144) If a die is thrown, then the probability of getting a number greater than 6 is 1
(a) False (b) True

145) The mode of the observation 23, 26,15,12,28,38,19, 23, 26, 23 is 28.

(a) True (b) False

146) Median of the data: 4,5,9,2,6,8, 7, is 2

(a) True (b) False

147) If the extreme observation on both the ends of a data arranged in ascending order are removed, the median gets affected.

(a) True (b) False

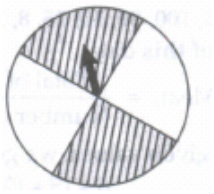
148) The measures of central tendency may not lie between the 'maximum and minimum values of data.

(a) True (b) False

149) It is impossible to get a sum of 14 of the numbers on both dice when a pair of dice is thrown together.

(a) False (b) True

150) The probability of the spinning arrow stopping in the shaded region is $\frac{1}{2}$



(a) False (b) True

151) A coin is tossed 15 times and the outcomes are recorded as follows :
H T T H T H H H T T H T H T T. The chance of occurrence of a head is 50 per cent.

(a) True (b) False

152) Mean, Median and Mode may be the same for some data.

(a) False (b) True

153) The probability of getting an ace out of a deck of cards is greater than 1.

(a) True (b) False

154) Mean of the data is always from the given data.

(a) True (b) False

155) Mode of the data is always from the given data.

(a) False (b) True

156) Mean of the observations can be lesser than each of the observations.

(a) True (b) False

157) Range of the data is always from the data.

(a) True (b) False

158) The data 12, 13, 14, 15, 16, has every observation as mode.

(a) False (b) True

8 x 1 = 8

159) Arithmetic mean

160) Range

161) Median

162) Mode

163) The probability of an event that may happen

164) The mode of a set of observations is the observation

165) The arithmetic mean is

166) In a given data arranged in an order, the median is the value of the

(1) that occurs most often

(2) Highest frequency

(3) Middle observation

(4) $\frac{sum\ of\ all\ observation}{the\ total\ number\ of\ observation}$

(5) $\frac{sum\ of\ all\ observations}{Number\ of\ observations}$

(6) can lie between 0 and 1

(7) Highest observation - Lowest observation

(8) middle most term

167) What is the mean of first four counting numbers?
168) What is the mean of four highest single digit counting numbers?...
169) If the mode of the data 1, 1, 2, 2, 3, 3, 4, 4, 5, 5, x is 2, then What is the value of x.
170) What is the probability of an impossible event?
171) What is the mean of first four counting numbers?
172) What is the mean of four highest single digit counting numbers?
173) What is the mean of first six single digit counting numbers?
174) What is the mean of all the single digit whole numbers?
175) What is the range of first ten natural numbers?
176) What is the range of first ten whole numbers?
177) What is median of first ten whole numbers?
178) What is the median of first ten natural numbers?
179) What is the mode of 3, 1, 2, 3, 4, 3, 5, 3, 1?
180) What is the mode of 1, 2, 2, 3, 3, 3, 4, 4, 4,4?
181) What is the median of 1, 2, 2, 3, 3, 3, 4, 4, 4,4?
182) What is the median of 10, 1, 9, 2, 8, 3, 7, 4, 6,5?
183) the mode of the data 1, 1, 2, 2, 3, 3, 4, 4, 5, 5, x is 2, then what is the value of x?
184) If the mode of 1, 4, 6, 7, 9, x, 1, 4, 6, 7, 9 is 7, then what is the value of x?
185) If the median of 1, 2, x, 6, 5 is 4, then what is the value of x?
186) If the median 1, 6, 5, 3, x is 3.5, then what is the value of x?
187) What is the mean of 98, 99, 100, 0, 1 and 2?
188) What is the mean of 101, 102, 103, 104 and 105?
189) What is the range of 101, 102, 103, 104 and 105?
190) What is the range of 97, 98, 99, 100, 0, 1, 2 and 3?
191) What do we call the number of times an observation occurs in a data?
192) What do we call the value of an observation which occurs the most in a data?
193) What is the probability of a sure event?
194) What do we call the central value of a data when their values are arranged in an ascending or descending order?
195) Find the median of: 6, 5, 14, 8, 11, 13, 8, 7, 3, 8
196) The marks of 11 students out of 25 are as follows: 21, 20, 13, 15, 10, 20, 15, 21, 18, 20 and 14
Find the median.
197) The marks of 11 students out of 25 are as follows: 21, 20, 13, 15, 10, 20, 15, 21, 18, 20 and 14
Find the range.
198) The marks of 11 students out of 25 are as follows: 21, 20, 13, 15, 10, 20, 15, 21, 18, 20 and 14.
Find the mean.
199) Find the median of the following data: 12, 14, 15, 18, 14, 19, 14, 13, 9.
200) Find the median of the following data: 12, 14, 15, 18, 14, 19, 14, 13, 9
Are the median and mode same for this data?
201) Find the mode, mean and median of the following data: 4, 5, 3, 6, 3, 5, 3, 4, 3
202) Write 'Yes' or 'No' for each of the following data:
Is the median of a set of data always the observation that occurs most often?
203) Write 'Yes' or 'No' for each of the following data:
Is the arithmetic mean smaller than each of the observation?
204) Write 'Yes' or 'No' for each of the following data:
Is the mode the most occurring observation in a set of data?

205) Write it certain to happen, impossible, can happen but not certain for each of the following events:
A tossed coin will land tails up.

206) Write it certain to happen, impossible, can happen but not certain for each of the following events.
Next traffic light seen will be red.

207) Write it certain to happen, impossible, can happen but not certain for each of the following events.
A die when thrown shall land up 15 on the top.

208) Write it certain to happen, impossible, can happen but not certain for each of the following events.
The sun coming up from the east.

209) Write it certain to happen, impossible, can happen but not certain for each of the following events:
India winning the next test series

210) A dice [a cube having 6 faces with numbers 1 to 6] is thrown. Find the probability of a number 5.

211) There are five cards in a box with numbers from 1 to 5 marked on them. What is the probability of drawing a card with number 3.

212) What is the probability of getting a head for tossing a coin?

86 x 2 = 172

213) Find the mode of the following data.1 , 4, 6, 5, 6, 2, 3, 4, 5, 3, 2, 4, 5, 2, 3

214) Find the median of the following data:35, 32, 35, 42, 38, 32, 34

215) Weight (in kg) atleast 20 children (girls and boys) of your class. Organise the data and answer the following questions using this data. Who is the heaviest of all?

216) Weight (in kg) atleast 20 children (girls and boys) of your class. Organise the data and answer the following questions using this data. What is the most common weight?

217) Weight (in kg) atleast 20 children (girls and boys) of your class. Organise the data and answer the following questions using this data. What is the difference between your weight and that of your best friend?

218) Find the range of heights of any ten students of your class.

219) Find the mean of the first five whole numbers.

220) A cricketer scores the following runs in eight innings: 58, 76, 40, 35, 46, 45, 0, 100 Find the mean score

221) The marks (out of 100) obtained by a group of students in a Science test are 85, 76, 90, 85, 39, 48, 56,95,81 and 75. Find the highest and the lowest marks obtained by the students.

222) The marks (out of 100) obtained by a group of students in a Science test are 85, 76, 90, 85, 39, 48, 56,95,81 and 75. Find the range of the marks obtained

223) The marks (out of 100) obtained by a group of students in a Science test are 85, 76, 90, 85, 39, 48, 56,95,81 and 75. mean marks obtained by the group

224) The heights of 10 girls were measured (in cm) and the results are as follows: 135, 150,139, 128, 151, 132, 146, 149, 143, 141 - What is the height of the tallest girl?

225) The heights of 10 girls were measured (in cm) and the results are as follows: 135, 150,139, 128, 151, 132, 146, 149, 143, 141 - What is the height of the shortest girl?

226) The heights of 10 girls were measured (in cm) and the results are as follows: 135, 150,139, 128, 151, 132, 146, 149, 143, 141 - What is the range of the data?

227) The heights of 10 girls were measured (in cm) and the results are as follows: 135, 150,139, 128, 151, 132, 146, 149, 143, 141 - What is the mean height of the girls?

228) The heights of 10 girls were measured (in cm) and the results are as follows: 135, 150,139, 128, 151, 132, 146, 149, 143, 141 - How many girls have heights more than the mean height?

229) Find the mode of 2,6,5,3,0,3,2,4,5,2,4.

230) Find the mode of 2, 14, 16, 12, 14, 14, 16, 14, 10, 14, 18, 14

231) Find the mean of the numbers 10, 20, 30 and 40

232) Find the mode of the distribution 3, 7, 5, 4, 2, 1,4,3 and 4.

233) Find the median of the distribution 2, 3, 4, 7, 5,1 and 6

234) Following are the weights of 12 boys in a class (in kg): 59,78,45,80,52,69,92,75,50,87,73,60 Compute the average weight (approx).

235) The marks obtained by 10 students in Mathematics are given below: ; :10,20,13,49, 50, 10, 29, 37, 0,5 - Find the mean marks

236) The marks obtained by 10 students in Mathematics are given below: ; :10,20,13,49, 50, 10, 29, 37, 0,5 - Find the range

237) If the arithmetic mean of 6, 8, 5, 7, P and 4 is 7, then find the value of p.

238) The median of the following observations arranged in ascending order is 24. Find the value of x. 11,12,14,18,(x+2),(x+4),30,32,35,41

239) The runs scored by a batsman in seven innings are as follows:67,1,28,120,98,37,55

240) The heights of plants (in em) in a garden are given below:

HEIGHTS	37	21	34	28	38
NUMBER OF PLANTS	10	22	18	31	25

241) If mode of the following data is 9, then find the value of x: 2,5,3,7,9,12,9,5, (12 -x)

242) There are 8 marbles in a bag. If the numbers from 1 to 8 are marked on each of them. Then, what is the probability of drawing a marble with number 2?

243) Toss a coin 100 times and record the data. Find the number of times heads and tails occur in it.

244) Tell whether the following is certain to happen, impossible, can happen but not certain. - You are older today than yesterday

245) Tell whether the following is certain to happen, impossible, can happen but not certain - A tossed coin will land heads up

246) Tell whether the following is certain to happen, impossible, can happen but not certain - A die when tossed shall land up with 8 on top

247) Tell whether the following is certain to happen, impossible, can happen but not certain - The next traffic light seen will be green

248) Tell whether the following is certain to happen, impossible, can happen but not certain - Tomorrow will be a cloudy day

249) There are 6 marbles in a box with numbers from 1 to 6 marked on each of them - What is the probability of drawing a marble with number 2?

250) There are 6 marbles in a box with numbers from 1 to 6 marked on each of them - What is the probability of drawing a marble with number 5?

251) A coin is flipped to decide which team starts the game. What is the probability that your team will start?

252) A coin is tossed. What is the probability of getting a tail?

253) A die is thrown. What is the probability - of getting 3?

254) A die is thrown. What is the probability - of getting 7?

255) What is the probability that when a die is thrown, then number appearing on top is even?

256) Write down all the possible outcomes, if two coins are tossed.

257) A bag contains 3 black balls and 2 white balls. A ball is drawn without looking into the bag. What is the probability that the colour of the ball will be white?

258) A letter is chosen from the word 'MATHS'. What is the probability that the letter is a consonant?

259) One letter is chosen from the English alphabet. What is the probability that it is a consonant?

260) Find the probability of choosing an even number from 1 to 10.

261) A coin is tossed twice, write down all the possible outcomes and find the probability of getting 1 head

262) A survey of 100 persons showed that 75 like cricket while 25 dislike it. One person is chosen at random. What is the probability that the chosen person - likes cricket

263) A survey of 100 persons showed that 75 like cricket while 25 dislike it. One person is chosen at random. What is the probability that the chosen person - Dislike Criket

264) A die is thrown. Find the probability of getting a number greater than or equal to 3.

265) Find the mean of first five even numbers

266) Find the number between $\frac{1}{3}$ and $\frac{1}{4}$

267) Find the range of the data 12, 4, 6, 7, 9, 14, 26, 36

268) Find the range of the following heights (in cm) of 7 students of Class VII. 140,142,141,139,138,146,136.

269) A cricketer's scores in 4 innings are 64, 32, 68, 92. Find the mean score.

270) Find the median of the following data. 42,46,69,62,91,72,74

271) Find the mode of the following weights (in kg).39,36,35,36,41,49,36

272) The height of 6 girls in a group are 142 cm, 150 cm, 146 cm, 154 cm, x cm and 148 cm, their average height is 147. Then, find the value of x.

273) A single card is chosen at random from a standard deck of 52 playing cards. What is the probability of chasing a king?

274) The scores in Mathematics test (out of 25) of 15 students is as follows: 18,21,23,24,19,18,17,16,15,25,22,20,9,4,6 Find the median of this data.

275) The runs scored in a cricket match by 11 players is as follows: 0,9,65,72,49,51,23,24,8,4,26 Find the mean runs scored of this data

276) Find the mode, mean and median of the following data 4,5,5,3,9,2,6,4

277) There are 8 marbles in a box with numbers from 1 to 8 marked on each of them.
(a) What is the probability of drawing a marble with 2?
(b) What is the probability of drawing a marble with number 5?

278) There are 6 cards in a box with numbers from 1 to 6 marked on them, what is the probability of drawing a card with number 3?

279) Find the mean of the first ten even natural numbers.

280) The mean of 3 numbers is 60. All the three numbers are different natural numbers. If two number are 19 and 49. Then, what could be the highest possible value of remaining number?

281) A car seller collects the following data of cars sold in his shop

COLOUR OF CARS	**NUMBER OF CARS SOLD**
Red	15
Black	20
White	17
Silver	12
Others	9

(a) Which colour of the car is most liked?
(b) Which measure of central tendency was used in (a)

282) A die is thrown 100 times with the following frequencies for the outcomes 1, 2, 3, 4, 5, 6 as given below:

Outcomes	1	2	3	4	5	6
Frequency	22	15	31	9	10	13

Find the probability of happening of each outcome

283) Find the range of the data 14,6,11,12,13,17,21,10, 10and3.

284) Find the mode of the data 23,26, 22, 29, 23, 29, 26, 29, 22 and 23

285) Find the median of the data 40,50,99,68,98,60 and 94.

286) Rahul scored the following number of runs in six innings:
34,37,47,49, 54, 61 Calculate the mean runs scored by him per inning.

287) Find the arithmetic mean of first 6 natural numbers.

288) Given below are the ages of 25 students of class VIII in a school. Prepare a discrete frequency distribution.
15, 16, 16, 14, 17, 17, 16, 15, 15, 16, 16, 17, 15, 16, 16, 14, 16, 15, 14, 15, 16, 16, 15, 14, 15

289) Form a discrete frequency distribution from the following scores :
15, 18, 16, 20, 25, 24, 25, 20, 16, 15, 18, 18, 16 24, 15, 20, 28, 30, 27, 16, 24, 25, 20, 18, 28, 27 25,24,24,18,18,25,20,16,15,20,27,28,29,16

290) Find the median of the data :
21,15, 6, 25, 18, 13, 20, 9, 8, 12

291) If the mean of 26, 28, 25, x, 24 is 27, find the value of x.

292) The median of observations 11, 12, 14, 18, x + 2,20, 22, 25, 61 arranged in ascending order is 21. Find the value of x.

293) Following table shows the marks obtained in various subjects by Prabhat in an Examination Represent the given data on a bar graph

Subject	General science	English	Maths	Hindhi	Social science
Marks obtained	45	25	55	50	35

294) Answer the following questions with the help of Example 1 bar graph:
In which subject did Prabhat obtained highest marks and least marks?

295) Answer the following questions with the help of Example 1 bar graph:
If 40 is the pass marks, then name the subjects in which he got less than pass marks.

296) The heights (in em) of the students of a class are given below. Find the modal height of the class.
162, 163, 165, 160, 163, 164, 163, 162, 163, 165, 160, 163, 160, 163, 164, 162, 163, 164, 162 161, 163, 160, 163, 165, 168, 160, 161, 162, 163, 164.

297) There are 6 iron-plates marked as $\boxed{1}, \boxed{2}, \boxed{3}, \boxed{4}, \boxed{5}$ *and* $\boxed{6}$
One of them is to be taken out without seeing them. Find the probability of a plate marked $\boxed{3}$ is taken out.

298) Ashish studies for 4 hours, 5 hours and 3 hours respectively on three consecutive days.How many hours does he study daily on an average ?

120 x 3 = 360

299) How would you find the average of your study hours for the whole week?

300) Find the mean of your sleeping hours during one week.

301) Organise the following marks in a class assessment,in a tabular form: 4, 6, 7, 5, 3, 5, 4, 5, 2, 6, 2, 5, 1, 9, 6, 5, 8, 4, 6, 7 - Which number is the highest?

302) Organise the following marks in a class assessment,in a tabular form: 4, 6, 7, 5, 3, 5, 4, 5, 2, 6, 2, 5, 1, 9, 6, 5, 8, 4, 6, 7 - Which number is the lowest

303) Organise the following marks in a class assessment ,in a tabular form: 4, 6, 7, 5, 3, 5, 4, 5, 2, 6, 2, 5, 1, 9, 6, 5, 8, 4, 6, 7 - What is the range of the data?

304) Organise the following marks in a class assessment ,in a tabular form: 4, 6, 7, 5, 3, 5, 4, 5, 2, 6, 2, 5, 1, 9, 6, 5, 8, 4, 6, 7 - Find the arithmetic mean

305) Following table shows the points of each player scored in four games

PLAYERS	**GAME**	**GAME**	**GAME**	**GAME**
	1	2	3	4
A	14	16	10	10
B	0	8	6	4
C	8	11	Did not play	13

Find the mean to determine A's average number of points scored per game.

306) Following table shows the points of each player scored in four games

PLAYERS	**GAME**	**GAME**	**GAME**	**GAME**
	1	2	3	4
A	14	16	10	10
B	0	8	6	4
C	8	11	Did not play	13

To find the mean number of points per game for C, would you divide the total points by 3 or by 4? Why?

307) Following table shows the points of each player scored in four games

PLAYERS	**GAME**	**GAME**	**GAME**	**GAME**
	1	2	3	4
A	14	16	10	10
B	0	8	6	4
C	8	11	Did not play	13

B played in all the four games. How would you find the mean?

308) Following table shows the points of each player scored in four games

PLAYERS	**GAME**	**GAME**	**GAME**	**GAME**
	1	2	3	4
A	14	16	10	10
B	0	8	6	4
C	8	11	Did not play	13

Who is the best performer?

309) The enrolment in a school during six consecutive years was as follows:
1555,1670,1750,2013,2540,2820
Find the mean enrolment of the school for this period

310) The rainfall (in mm) in a city on 7 days of a certain week was recorded as follows:

DAY	Mon	Tue	Wed	thurs	Fri	Sat	Sun
RAINFALL(IN MM)	0.0	12.2	2.1	0.0	20.5	5.5	1.0

Find the range of the rainfall in the above data.

311) The rainfall (in mm) in a city on 7 days of a certain week was recorded as follows:

DAY	Mon	Tue	Wed	thurs	Fri	Sat	Sun
RAINFALL(IN MM)	0.0	12.2	2.1	0.0	20.5	5.5	1.0

Find the mean rainfall for the week

312) The rainfall (in mm) in a city on 7 days of a certain week was recorded as follows:

DAY	Mon	Tue	Wed	Thurs	Fri	Sat	Sun
RAINFALL(IN MM)	0.0	12.2	2.1	0.0	20.5	5.5	1.0

On how many days, was the rainfall less than the mean rainfall?

313) Find the mode of the following data - 12,14,12,16,15,13,14,18,19,12,14,15,16,15, 16, 16, 15, 17, 13, 16, 16, 15, 15, 13, 15, 17, 15, 14, 15,13,15,14

314) Heights (in cm) of 25 children are given Below 168,165,163,160,163,161,162,164, 163, 162, 164, 163, 160, 163, 160, 165, 163, 162, 163, 164, 163, 160, 165,163, 162 What is the mode of their heights? What do we understand by mode here?

315) (a) two situations; where mean would be an appropriate representative value to use, and
(b) two situations; where mode would be an appropriate representative value to use.

316) Your friend found the median and the mode of a given data. Describe and correct your friends' error, if any: 35, 32, 35, 42, 38, 32, 34 Median = 42 and Mode = 32

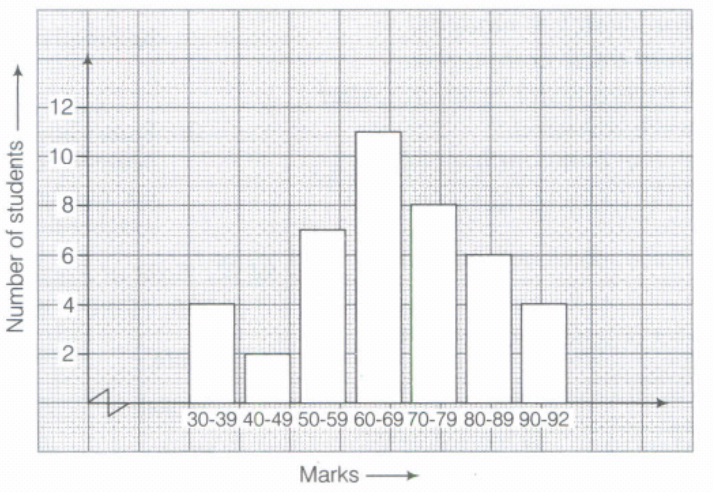
317) The scores in Mathematics test (out of 25) of 15 students is as follows: 19, 25, 23, 20, 9, 20, 15, 10, 5, 16, 25, 20, 24, 12, 20 Find the mode and median of this data. Are they same?

318) The runs scored in a cricket match by 11 players are as follows: 6,15,120,50,100,80,10,15,8,10,15 Find the mean, mode and median of this data. Are the three same?

319) The weights (in kg) of 15 students of a class are 38, 42, 35, 37, 45, 50, 32, 43, 43, 40, 36, 38, 43, 38 and 47.
(i) Find the mode and median of this data.
(ii) Is there more than one mode?

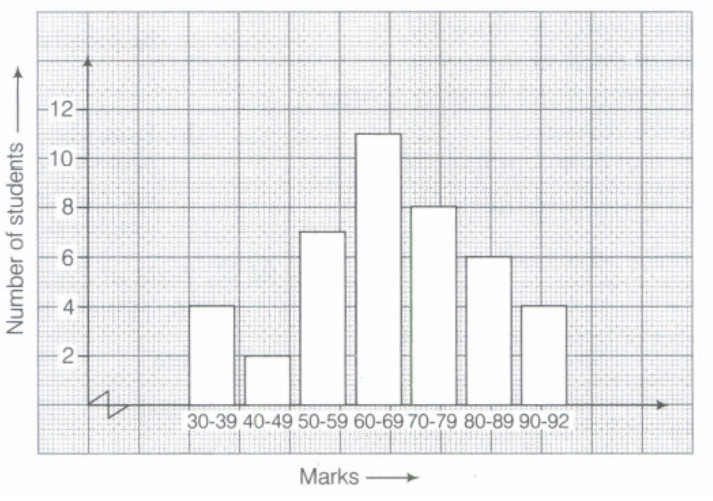
320) Find the mode and median of the following data. 13, 16, 12, 14, 19, 12, 14, 13, 14

321) The bar graph given below shows the marks of students of a class in a particular subject



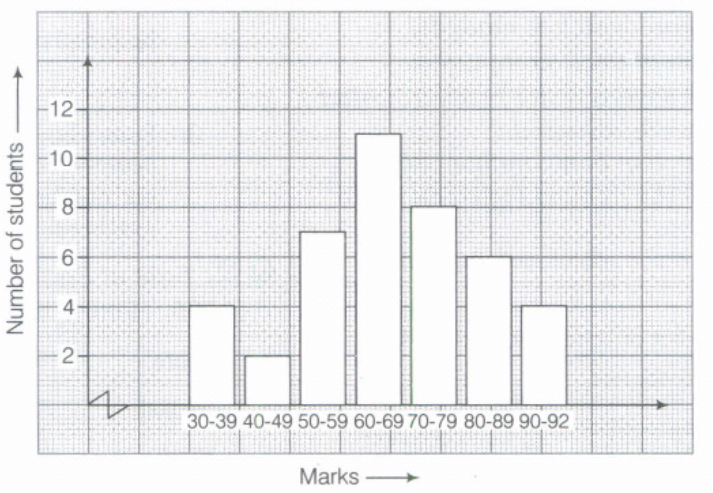
If 40 is the pass mark, then how many students have failed?

322) The bar graph given below shows the marks of students of a class in a particular subject



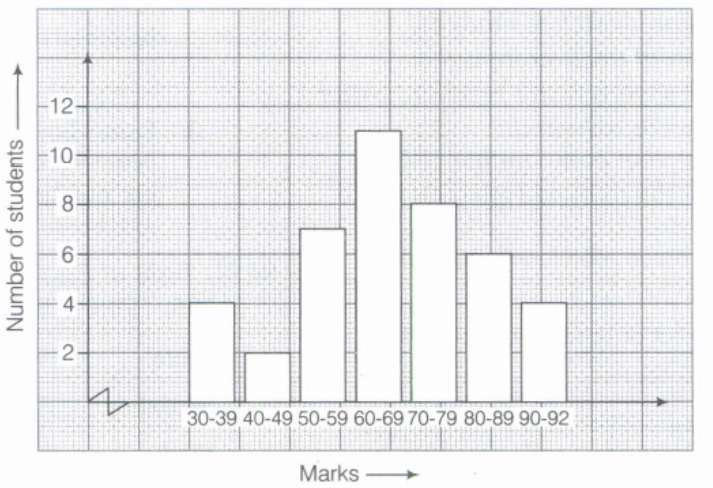
How many students got marks from 50 to 69?

323) The bar graph given below shows the marks of students of a class in a particular subject



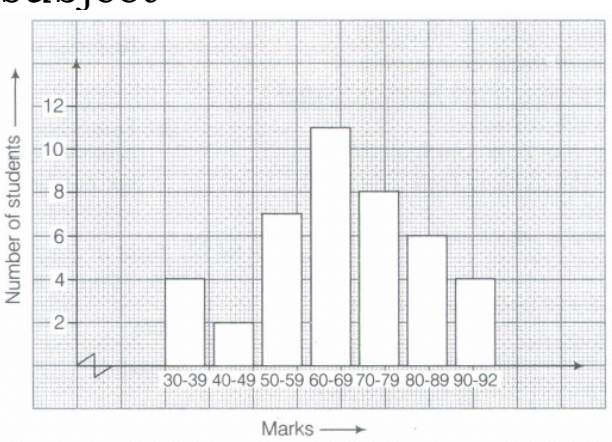
How many students scored 90 marks and above?

324) The bar graph given below shows the marks of students of a class in a particular subject



If students who scored marks above 80 are given merits, then how many merit holders are there?

325) The bar graph given below shows the marks of students of a class in a particular subject



What is the strength of the class?

326) Sale of English and Hindi books in the year 1995, 1996, 1997 and 1998 are given below:

YEARS	1995	1996	1997	1998
ENGLISH	350	400	450	620
HINDI	500	525	600	650

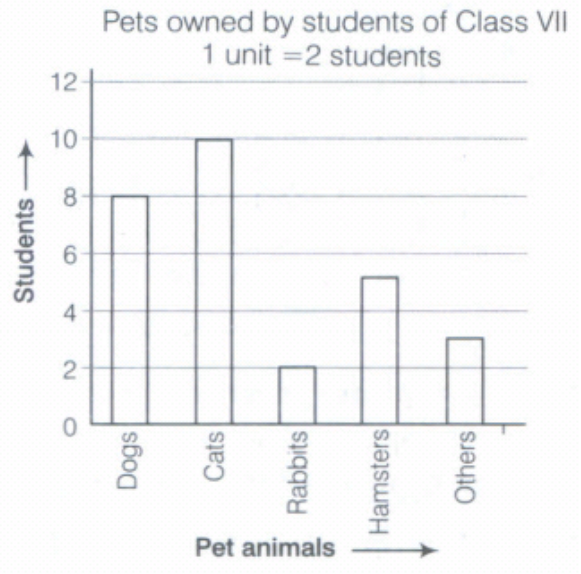
Draw a double bar graph and answer the following questions. - In which year, was the difference in the sale of the two language books least?

327) Sale of English and Hindi books in the year 1995, 1996, 1997 and 1998 are given below:

YEARS	1995	1996	1997	1998
ENGLISH	350	400	450	620
HINDI	500	525	600	650

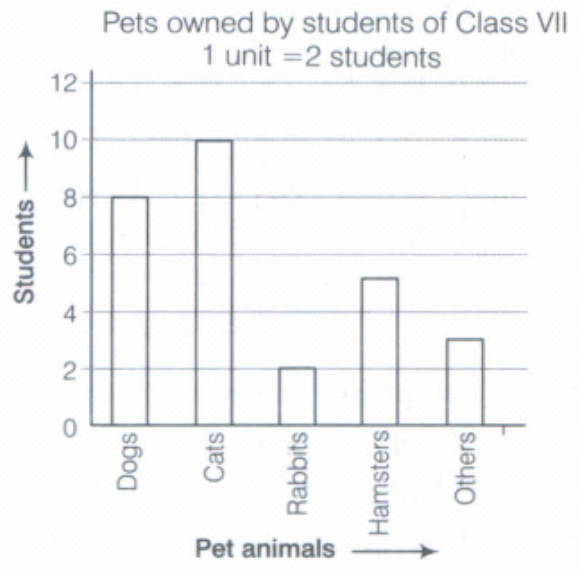
Draw a double bar graph and answer the following questions. - Can you say that the demand for English books rose faster? Justify.

328) Use the bar graph (in the given figure) to answer the following questions.



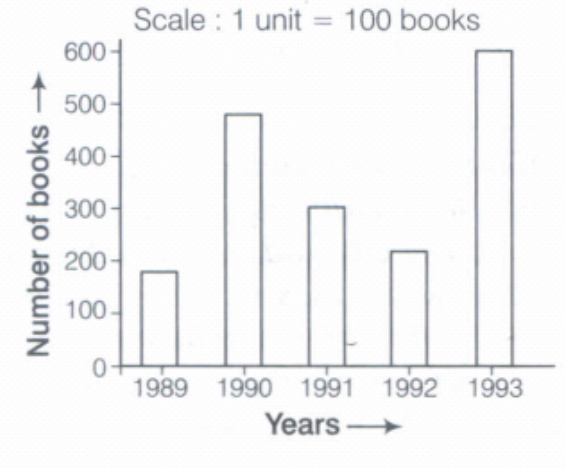
Which is the most popular pet?

329) Use the bar graph (in the given figure) to answer the following questions.



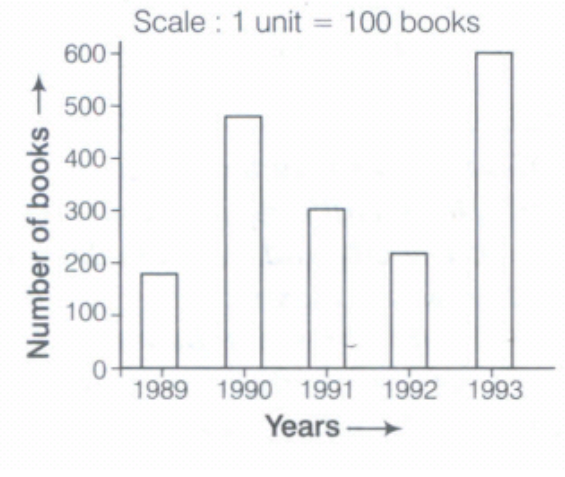
How many students have dog as a pet?

330) Read the bar graph (in the given figure), which shows the number of books sold by a bookstore during five consecutive years and answer the following questions.



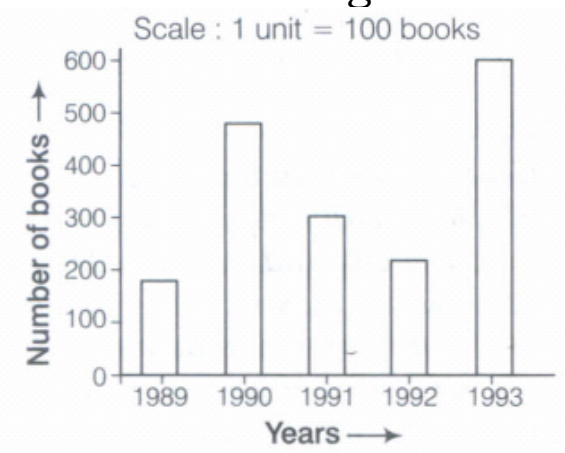
About how many books were sold in 1989, 1990 and 1992?

331) Read the bar graph (in the given figure), which shows the number of books sold by a bookstore during five consecutive years and answer the following questions.



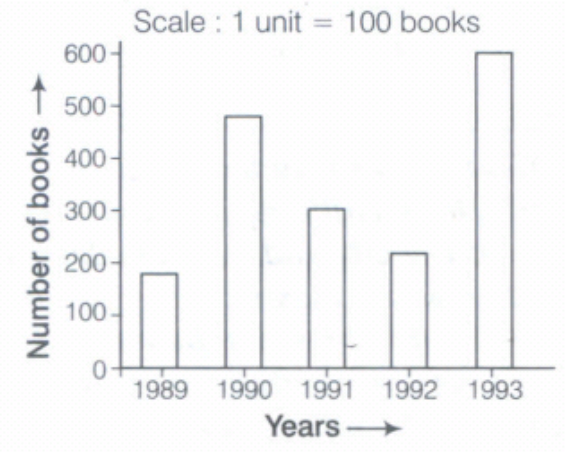
In which year were about 475 books sold? About 225 books sold?

332) Read the bar graph (in the given figure), which shows the number of books sold by a bookstore during five consecutive years and answer the following questions.



In which years were fewer than 250 books sold?

333) Read the bar graph (in the given figure), which shows the number of books sold by a bookstore during five consecutive years and answer the following questions.



Can you explain how you would estimate the number of books sold in 1989?

334) Number of children in six different classes are given below. Represent the data on a bar graph.

CLASS	Fifth	Sixth	Seventh	Eighth	ninth	tenth
NUMBER OF CHILDREN	135	120	95	100	90	80

How would you choose a scale?

335) Number of children in six different classes are given below. Represent the data on a bar graph.

CLASS	Fifth	Sixth	Seventh	Eighth	ninth	tenth
NUMBER OF CHILDREN	135	120	95	100	90	80

Which class has the maximum number of children and the minimum?

336) Number of children in six different classes are given below. Represent the data on a bar graph.

CLASS	Fifth	Sixth	Seventh	Eighth	ninth	tenth
NUMBER OF CHILDREN	135	120	95	100	90	80

Find the ratio of students of class sixth to the students of class eighth.

337) The performance of a student in 1st term and 2nd term is given. Draw a double bar graph choosing appropriate scale and answer the following:

SUBJECTS	English	Hindi	Maths	Science	S.science
1ST TERM (MM 100)	67	72	88	81	73
2ND TERM (MM 100)	70	65	95	85	75

In which subject has the child improved his performance the most?

338) The performance of a student in 1st term and 2nd term is given. Draw a double bar graph choosing appropriate scale and answer the following:

SUBJECTS	English	Hindi	Maths	Science	S.science
1ST TERM (MM 100)	67	72	88	81	73
2ND TERM (MM 100)	70	65	95	85	75

In which subject is the improvement the least?

339) The performance of a student in 1st term and 2nd term is given. Draw a double bar graph choosing appropriate scale and answer the following:

SUBJECTS	English	Hindi	Maths	Science	S.science
1ST TERM (MM 100)	67	72	88	81	73
2ND TERM (MM 100)	70	65	95	85	75

Has the performance gone down in any subject?

340) Consider this data collected from a survey of a colony

FAVOURITE SPORT	Cricket	Basket Ball	Swimming	Hockey	Athletics
WATCHING	1240	470	510	430	250
PARTICIPATING	620	320	320	250	105

Draw a double bar graph choosing an appropriate scale. What do you infer from the bar graph?

341) Consider this data collected from a survey of a colony

FAVOURITE SPORT	Cricket	Basket Ball	Swimming	Hockey	Athletics
WATCHING	1240	470	510	430	250
PARTICIPATING	620	320	320	250	105

Which sport is most popular?

342) Consider this data collected from a survey of a colony

FAVOURITE SPORT	Cricket	Basket Ball	Swimming	Hockey	Athletics
WATCHING	1240	470	510	430	250
PARTICIPATING	620	320	320	250	105

Which is more preferred, watching or participating in sports?

343) Take the data giving the minimum and the maximum temperature of various cities given in the below table. Plot a double bar graph using the data and answer the following:

A TEMPERATURE OF CITIES AS ON 20.06.2006		
City	**maximum**	**Minimum**
Ahmedabad	38^0C	29^0C
Amritsar	27^0C	26^0C
Bangalore	28^0C	21^0C
Chennai	36^0C	27^0C
Delhi	38^0C	28^0C
Jaipur	39^0C	29^0C
Jammu	41^0C	26^0C
Mumbai	32^0C	27^0C

Which city has the largest difference in the minimum and maximum temperatures on the given date?

344) Take the data giving the minimum and the maximum temperature of various cities given in the below table. Plot a double bar graph using the data and answer the following:

A TEMPERATURE OF CITIES AS ON 20.06.2006

City	**maximum**	**Minimum**
Ahmedabad	38^0C	29^0C
Amritsar	27^0C	26^0C
Bangalore	28^0C	21^0C
Chennai	36^0C	27^0C
Delhi	38^0C	28^0C
Jaipur	39^0C	29^0C
Jammu	41^0C	26^0C
Mumbai	32^0C	27^0C

Which is the hottest city and which is the coldest city?

345) Take the data giving the minimum and the maximum temperature of various cities given in the below table. Plot a double bar graph using the data and answer the following:

A TEMPERATURE OF CITIES AS ON 20.06.2006

City	**maximum**	**Minimum**
Ahmedabad	38^0C	29^0C
Amritsar	27^0C	26^0C
Bangalore	28^0C	21^0C
Chennai	36^0C	27^0C
Delhi	38^0C	28^0C
Jaipur	39^0C	29^0C
Jammu	41^0C	26^0C
Mumbai	32^0C	27^0C

Name two cities, where maximum temperature of one was less than the minimum temperature of the other

346) Take the data giving the minimum and the maximum temperature of various cities given in the below table. Plot a double bar graph using the data and answer the following:

A TEMPERATURE OF CITIES AS ON 20.06.2006

City	**maximum**	**Minimum**
Ahmedabad	38^0C	29^0C
Amritsar	27^0C	26^0C
Bangalore	28^0C	21^0C
Chennai	36^0C	27^0C
Delhi	38^0C	28^0C
Jaipur	39^0C	29^0C
Jammu	41^0C	26^0C
Mumbai	32^0C	27^0C

Name the city, which has the least difference between its minimum and the maximum temperatures.

347) Number of children in six different classes are given below:

CLASS	NUMBER OF CHILDREN
VI	100
VII	120
VIII	130
IX	90
X	125
XI	110

In which class, is the number of children maximum?

348) Number of children in six different classes are given below:

CLASS	NUMBER OF CHILDREN
VI	100
VII	120
VIII	130
IX	90
X	125
XI	110

Find the difference between the maximum and minimum numbers of children

349) Number of children in six different classes are given below:

CLASS	NUMBER OF CHILDREN
VI	100
VII	120
VIII	130
IX	90
X	125
XI	110

Find the ratio of the number of students of Classes VI and XI

350) Number of children in six families are given below Represent the data on the bar graph

FAMILIES	A	B	C	D	E
NUMBER OF CHILDREN	5	2	7	4	6

How many families have less than 5 children?

351) Number of children in six families are given below Represent the data on the bar graph

FAMILIES	A	B	C	D	E
NUMBER OF CHILDREN	5	2	7	4	6

Which family has the maximum number of children?

352) Number of children in six families are given below Represent the data on the bar graph

FAMILIES	A	B	C	D	E
NUMBER OF CHILDREN	5	2	7	4	6

Find the ratio of children of families B and E

353) The following table shows wheat and rice productions (in tonne) in five consecutive years. Draw a double bar graph choosing appropriate scale and answer the following:

YEARS	1970	1971	1972	1973	1974
WHEAT	19	5	20	18	10
RICE	7	18	4	9	28

In which year the difference between wheat and rice productions is maximum?

354) The following table shows wheat and rice productions (in tonne) in five consecutive years. Draw a double bar graph choosing appropriate scale and answer the following:

YEARS	1970	1971	1972	1973	1974
WHEAT	19	5	20	18	10
RICE	7	18	4	9	28

In which year, the sum of wheat and rice productions is minimum?

355) The following table shows wheat and rice productions (in tonne) in five consecutive years. Draw a double bar graph choosing appropriate scale and answer the following:

YEARS	1970	1971	1972	1973	1974
WHEAT	19	5	20	18	10
RICE	7	18	4	9	28

Which year is the best in wheat production?

356) Consider this data collected from a survey of two towns

Mobile Brands → Town ↓	Nokia	Samsung	Micromax
A	1096	1200	875
B	820	1000	730

Which brand is most popular in town A?

357) Consider this data collected from a survey of two towns

Mobile Brands → Town ↓	Nokia	Samsung	Micromax
A	1096	1200	875
B	820	1000	730

Which brand has least popularity in town B?

358) Consider this data collected from a survey of two towns

Mobile Brands → Town ↓	Nokia	Samsung	Micromax
A	1096	1200	875
B	820	1000	730

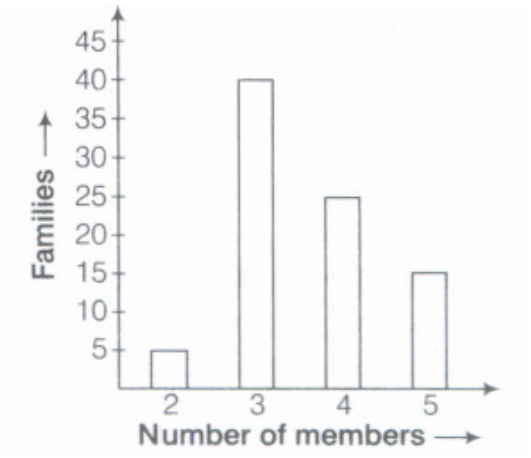
Overall, which brand is most preferred in towns A and B?

359) Following table shows the number of books of different subjects in a library:

SUBJECTS	Physics	Chemistry	Biology	psychology	Maths
NUMBER OF BOOKS	100	150	75	200	125

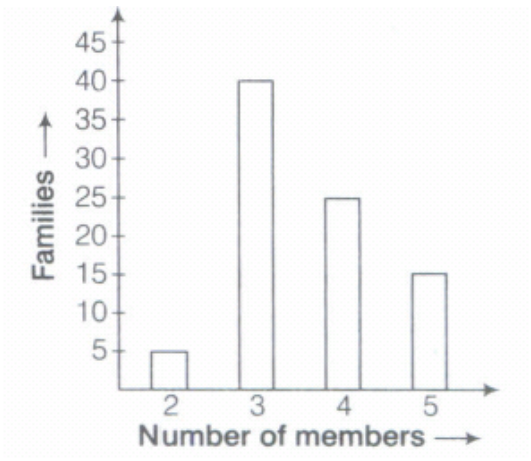
Construct a bar graph to represent the above data

360) In a survey of 85 families of a COlony, the number of members in each family was recorded and the data has been represented by the following bar graph:



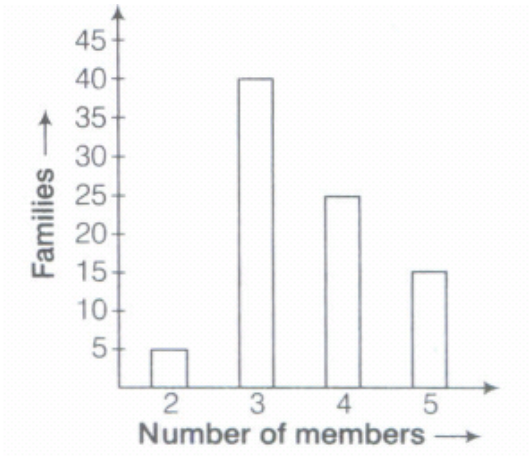
What information does the bar graph give?

361) In a survey of 85 families of a COlony, the number of members in each family was recorded and the data has been represented by the following bar graph:



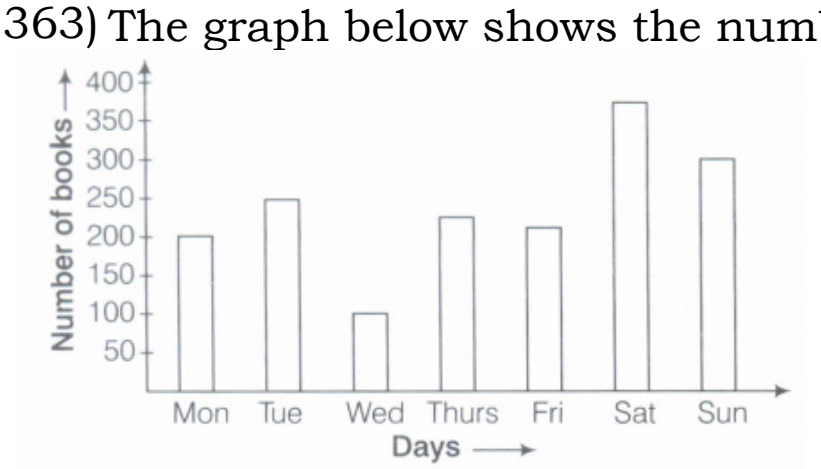
How many families have 3 members?

362) In a survey of 85 families of a COlony, the number of members in each family was recorded and the data has been represented by the following bar graph:



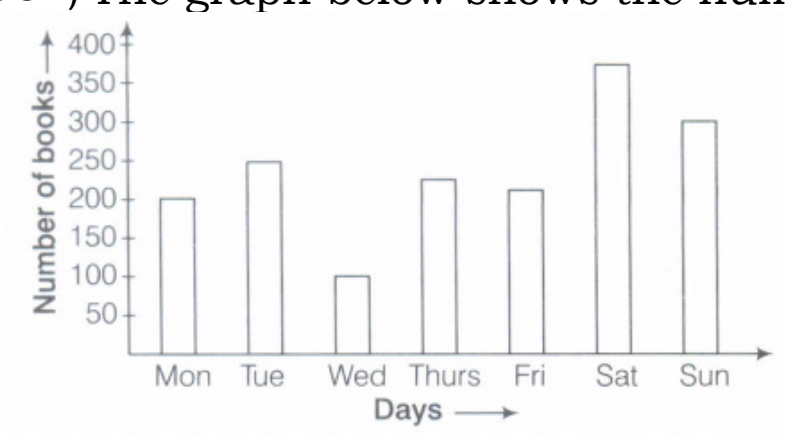
How many people live alone?

363) The graph below shows the number of books sold by a bookstore in a week:



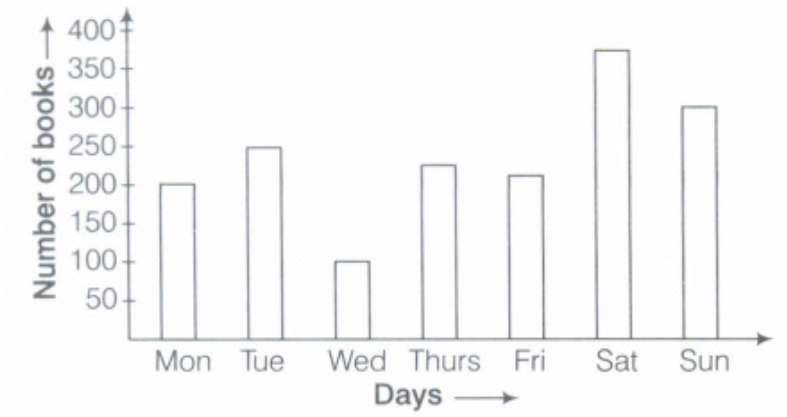
How many books were sold on Thursday than on Wednesday?

364) The graph below shows the number of books sold by a bookstore in a week:



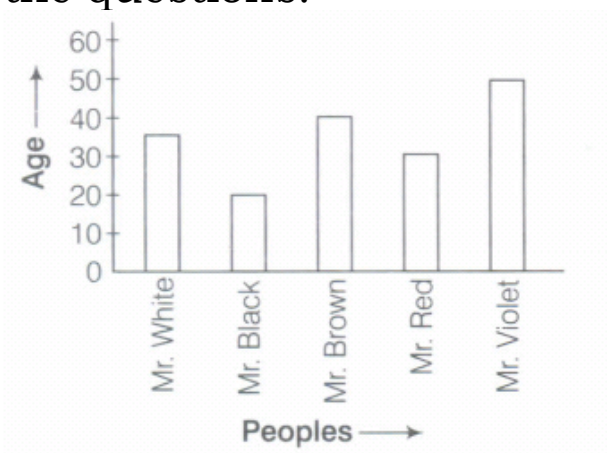
One which day was the most number of books sold?

365) The graph below shows the number of books sold by a bookstore in a week:



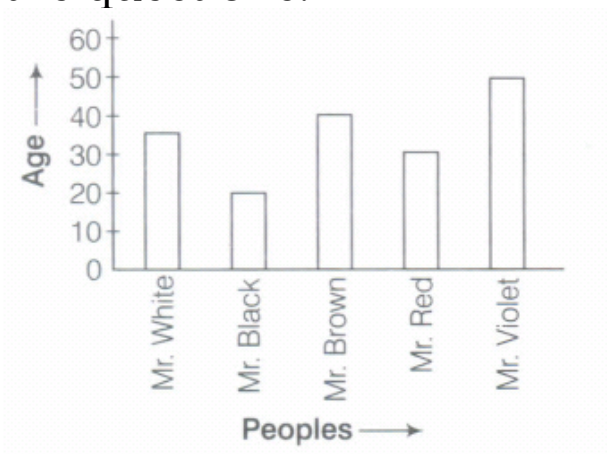
What was the total number of books sold during the weekends?

366) The following graph shows the age of 5 people, study the graph carefully and answer the questions:



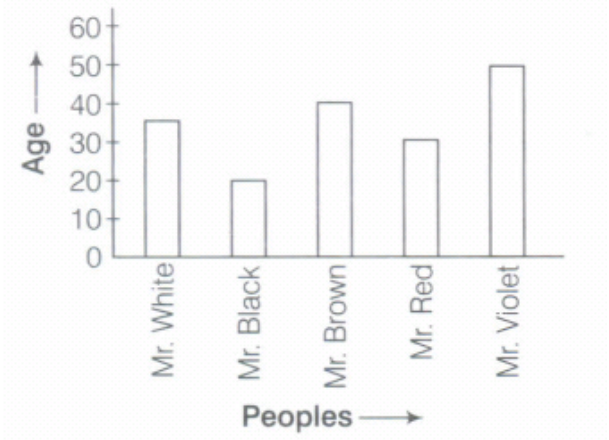
Who is twice as old as Mr. Black?

367) The following graph shows the age of 5 people, study the graph carefully and answer the questions:



Who is the youngest of all?

368) The following graph shows the age of 5 people, study the graph carefully and answer the questions:



By how many year is Mr. White older than Mr. Red?

369) Aftaab threw a die 250 times and got the following table. Draw a bar graph for this data

Number of the die	Tally marks
1	𝍸 𝍸 𝍸 𝍸 𝍸 𝍸
2	𝍸 𝍸 𝍸 𝍸 𝍸 𝍸 𝍸 𝍸 𝍸 III
3	𝍸 𝍸 𝍸 𝍸 𝍸 𝍸 𝍸 𝍸 𝍸 II
4	𝍸 𝍸 𝍸 𝍸 𝍸 𝍸 𝍸 𝍸 𝍸 𝍸 II
5	𝍸 𝍸 𝍸 𝍸 𝍸 𝍸 𝍸 III
6	𝍸 𝍸 𝍸 𝍸 𝍸 𝍸 𝍸 𝍸

370) Construct or think of five situations, where outcomes do not have equal chances.

371) If the mean of 4 observations x, 2x, 3x and 4x is 10. Then, find the mean of the last three observations.

372) Find the value of x, if the mean of the following data is 36.
8,11,19,14,13,18,26,x,2x,6

373) The median of the observations 6, 7, x, (x + 2), 12,14 arranged in ascending order is 9. Find the value of x.

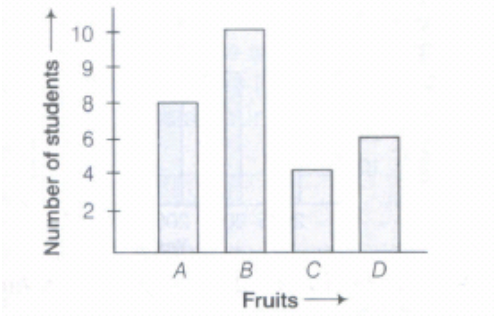
374) In a school, only 3 out 5 students can participate in a quiz. What is the chance that a student picked at random marks up to the competition (in percentage)?

375) The run scored by a batsman in 6 cricket matches are as follows: 109, 92, 14, 2, 6, 89. Find the average score

376) A coin is tossed 100 times and head is obtained 59 times on tossing a coin at random. Find the probability of getting (a) a head (b) a tail.

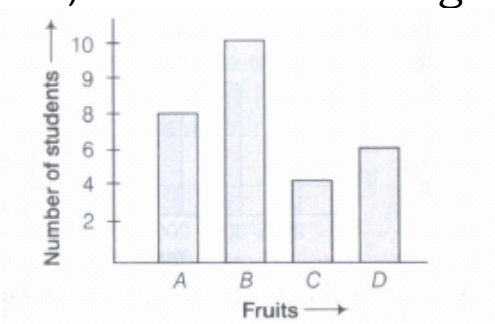
377) A bag having 3 red balls 2 yellow balls. If a ball is pulled out without seeing them. Find the probability of getting a yellow ball.

378) Use the following bar graph to answer the questions:



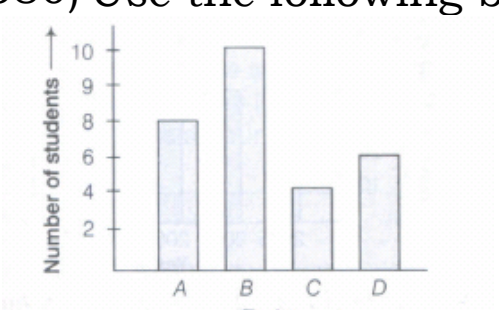
A = Orange; B = Mango; C = Grapes; D = Apple
Which is the most popular fruit among the students?

379) Use the following bar graph to answer the questions:



A = Orange; B = Mango; C = Grapes; D = Apple
Which is the least popular fruit among the students?

380) Use the following bar graph to answer the questions:



A = Orange; B = Mango; C = Grapes; D = Apple
How many students like orange?

381) A die is thrown 300 times and the outcomes are noted as shown below

OUTCOMES	1	2	3	4	5	6
FREQUENCY	35	45	38	46	65	71

What is the probability of getting an even number?

382) The median of observations 10, 12, 14, 15, 16, (x + 2),22, 24, 25, 29 and 30 arranged in ascending order is 26. Find the value of x.

383) Following cards are put facing down

A	E	I	O	U

What is the chance of drawing out
(a) a vowel?
(b) a card marked U?
(c) A or I?
(d) a consonant?

384) Classify the events as certain to happen, impossible to happen, may or may not happen - Getting a number less than 1 on throwing a die.

385) Classify the events as certain to happen, impossible to happen, may or may not happen - Getting head when a coin is tossed

386) Classify the events as certain to happen, impossible to happen, may or may not happen - A team winning the match.

387) Classify the events as certain to happen, impossible to happen, may or may not happen - Christmas will be on 25th December.

388) Classify the events as certain to happen, impossible to happen, may or may not happen - Today moon will not revolve around the earth

389) Classify the events as certain to happen, impossible to happen, may or may not happen - A ball thrown up in the air will fall down after sometime.

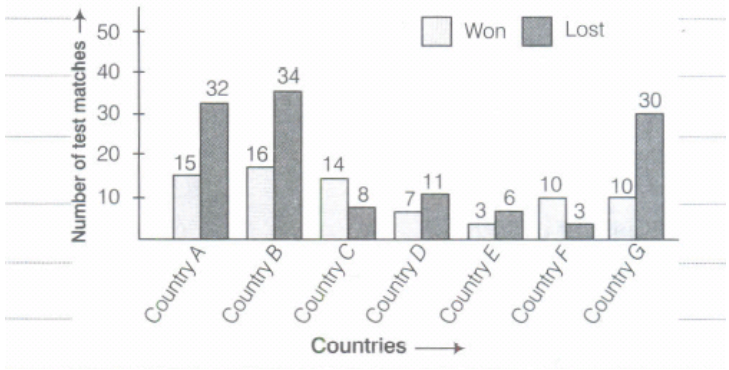
390) The mean of three numbers is 10. The mean of other four numbers is 12. Find the mean of all the numbers.

391) Observe the data and answer the questions that follow: 16,15,16,16,8,15,17 - Which value can be put in the data, so that the mode remains the same?

392) Observe the data and answer the questions that follow: 16,15,16,16,8,15,17 - Atleast how many and which value(s) must be put into, to change the mode to 15?

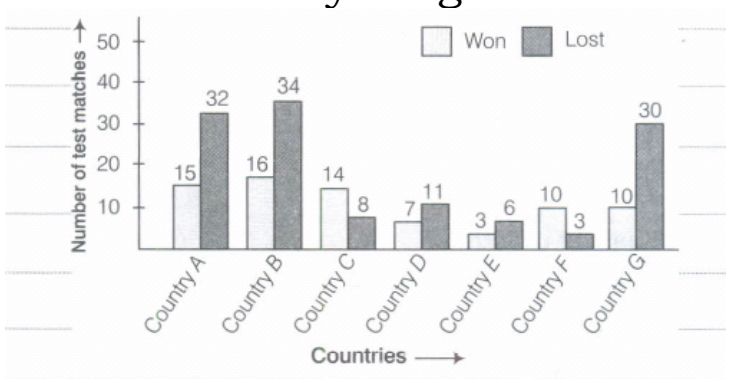
393) Observe the data and answer the questions that follow: 16,15,16,16,8,15,17 - What is the least number of values that must be put into, to change the mode to 17? Name them.

394) The following double bar graph represents test matches results summary for cricket team of country X against different countries



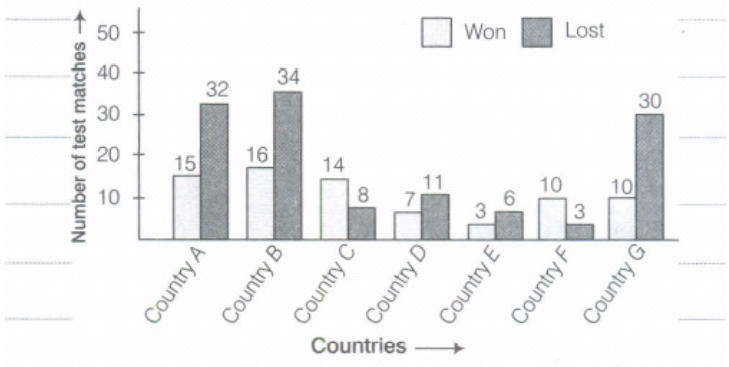
Which country has managed maximum wins against country X?

395) The following double bar graph represents test matches results summary for cricket team of country X against different countries



The difference between the number of matches won and lost is highest for which country against country X?

396) The following double bar graph represents test matches results summary for cricket team of country X against different countries



Number of wins of country E is the same as number of losses of which country against country X?

397) In a public library, the following observations were recorded by the librarian in a particular week

DAYS	Mon	Tue	Wed	Thurs	Fri	Sat
NEWSPAPER READERS	400	600	350	550	500	350
MAGAZINE READERS	150	100	200	300	250	200

(a) On which day, the number of readers in the library was maximum?
(b) What is the mean number of magazine readers?

398) The table below compares the population (in hundreds) of 4 town over two years

TOWNS	A	B	C	D
2007	2900	6400	8300	4600
2009	3200	7500	9200	6300

a) In which town was the population growth maximum?
b) In which town was the population growth least?

399) After threw a die 250 times and got the following table. Draw a bar graph for this data

Number on the die	Tally marks
1	
2	
3	
4	
5	
6	

400) Throw a die 100 times and record the data. Find the number of times 1, 2, 3, 4, 5, 6 occur

401) Find atleast 2 numbers between $\frac{1}{3}$ and $\frac{1}{6}$

402) In a readymade garment shop the number of shirts sold per days during the month of December are given below:
32, 40, 33, 30, 35, 40, 32, 33, 40, 36, 30, 32, 30, 36, 34, 33, 40, 32, 33, 40, 32, 35, 35, 30, 32, 33, 34, 33, 35
Make a frequency distribution table for above data.

403) On the basis of following frequency table find the mean marks:

Marks	20	30	40	50	60	70
No. of students	12	45	48	5	32	40

404) (a) What is the mean of first four counting numbers?
(b) What is mode of 3,1,2,3,4,3,5,3, 1, 6, 3, 9, 3?
(c) What is mean of 98, 99, 100, 0, 1 and 2?

405) In a packet there are five flashcards 1, 2, 3, 4 and 5.
What is the probability of drawing a flash card bearing 2?

406) A container has 3 red balls, 6 white balls. If a ball is pulled without seeing them.
(a) What is the probability of getting a red ball?
(b) What is the probability of getting a white ball?

407) The ages in years of 10 teachers in a school are 32, 41, 28, 54, 35, 26, 23, 33, 38, 40.
(a) What is the age of the oldest teacher and that of the youngest teacher?
(b) What is the range of the ages of the teachers?
(c)What is the mean age of these teachers?

408) If the mean of five observations x, x + 2, x + 4, x + 6, x + 8, is 11. Find the mean of first three observations.

409) The mean of 40 observations was 160. It was detected on re-checking that the value of 165 was wrongly copied as 125 for computation of mean. Find the correct mean.

410) For the following data make a frequency distribution table and answer the following questions:
40, 38, 40, 37, 35, 33, 38, 31, 35, 40, 38, 38, 33, 40, 35, 31,30,37, 33, 30, 32, 38.
(a) What is the range of given data?
(b) What is the mode of given data?

411) In a block the number of girl students in seven primary schools are as follows:
37, 38, 35, 40, 45, 52, 40
(a) Find the mean of the given data.
(b) Which mathematical concept is used in this problem?
(c) What is its value?

412) In different cities the average weight (in gram) of protein food provided per child under the age of 15 years is as follows:
80, 90, 75, 110, 90, 80, 85, 90, 110, 80, 75, 80, 110, 90, 85, 80, 75, 90, 85, 110, 90, 90, 75, 110, 85
(a) On the basis of given data make a frequency distribution table.
(b) Which mathematical concept is used in this problem?
(c) What is its value?

413) Find the mode of the following data
2, 3, 4, 2, 5, 2, 6, 3, 8, 8, 4, 2, 3, 5

414) Find the mode of the following data:
5,1,3,2,6,4,1,2,6,5,4,1,2,3,2,4,2,1,2,7,4,1,2,3,5,4,2

415) Discuss with your friends and give:
Two situations where mean would be an appropriate representative value to use,

416) Discuss with your friends and give
Two situations where mode would be an appropriate representative value to use

417) The heights of 5 girls in a group are: 142 em, 150 em, 146 em, 154 em and 148 em. Find the mean height

418) Find the median and mode of the following data
110, 140, l30, 120, 140, 120, 120, l30, 120, 110

2 x 4 = 8

419) Following are the marks obtained by 25 students in class test (out of 25 marks) in Maths :
18, 13, 18, 16, 8, 5, 13, 5, 18, 18,2,16, 13, 8, 17, 18 5, 2, 13, 8, 19, 16, 8, 20.
How many students obtained marks more than the mean marks?

420) The mean marks (out of 100) of a group of students is 60. If their marks are 85, 62, 36, 48, 72, x, 75 and 39, then find the value of x.

30 x 5 = 150

421) The bar graph in figure shows the result of a survey to test water resistant watches made by different companies. Each of these companies claimed that their watches were water resistant. After a test, the above results were revealed.
(a) Can you work out a fraction of the number of watches that leaked to the number tested for each company?
(b) Could you tell on this basis which company has better watches?

422) Think of some situations, at least 3 examples of each, that are certain to happen, some that are impossible and some that may or may not happen i.e. situations that have some chance of happening.

423) Sale of Mathematics and Hindi books in the years 1999, 2000, 2001 and 2002 are given below:

YEARS	1999	2000	2001	2002
MATHEMATICS	450	400	410	540
HINDI	490	480	540	610

In which year was the difference in the sale of the two subjects books least?

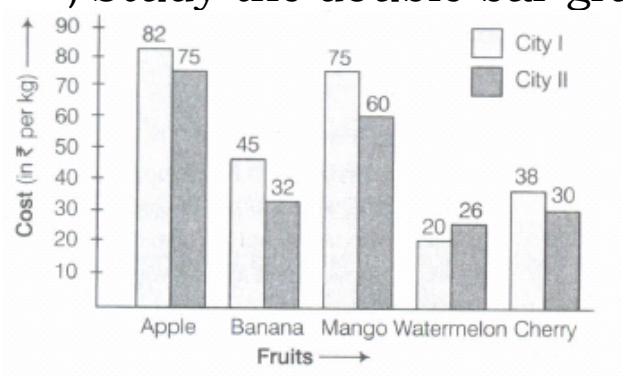
424) Sale of Mathematics and Hindi books in the years 1999, 2000, 2001 and 2002 are given below:

YEARS	1999	2000	2001	2002
MATHEMATICS	450	400	410	540
HINDI	490	480	540	610

Can you say that the demand for Mathematics book rose faster?

425) The mean of 10 observations was calculated as 40. It was detected on rechecking that the value of 45 was wrongly copied as 15. Find the correct mean.

426) Study the double bar graph given below and answer the questions that follow:



(a) What information does the above double graph depict?
(b) Name the fruits for which cost of 1 kg is greater in city I as compared to city II.
(c) What is the difference of rates for apples in both the cities?
(d) Find the ratio of the cost of mangoes per kg in city I to the cost of mangoes per kg in city II.

427) Number of children in six different classes are given below. Represent the data on a bar graph

Class	Number of children
V	125
VI	110
VII	100
VIII	95
IX	90
X	70

(a) Find the average number of children in the classes.
(b) Find the ratio of student of Class VI to the students of Class VIII

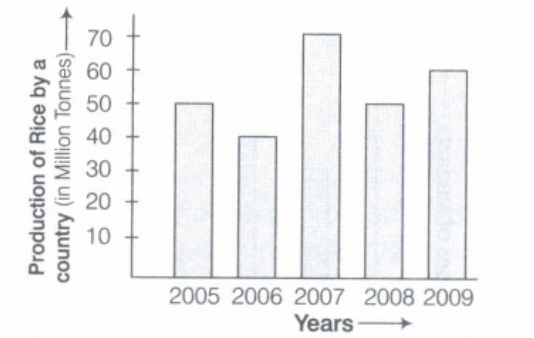
428) Rahul scored of 97,73 and 80, respectively in his first three examinations. If he scored 70 in the fourth examination, then find how much average score increased/decreased.

429) Age (in years) of 6 children of two groups are recorded as below

AGE(IN YEARS)	
Group A	Gropu B
7	7
7	9
9	11
8	12
10	12
10	12

(a) Find the mode and range for each group.
(b) Find the range and mode, if the two groups are combined together

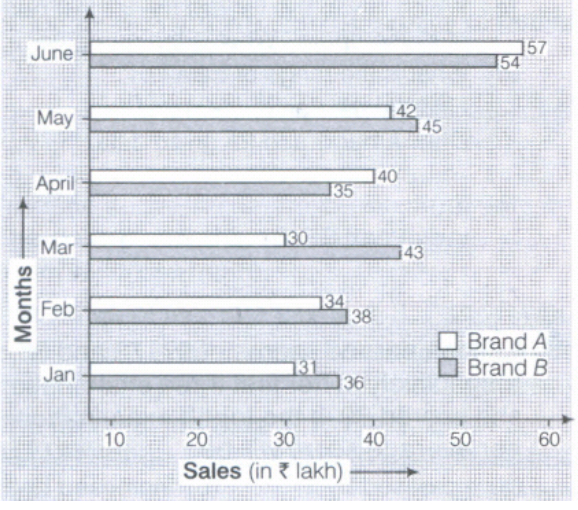
430) Study the bar graph given below and answer the questions that follow:



(a) What information does the above bar graph represent?
(b) In which year was production the least?
(c) After which year was the maximum rise in the production?
(d) Find the average production of rice during the 5 years.
(e) Find difference of rice productions between the years 2006 and 20'08.

431) The following are weights (in kg) of 12 people. 70,62,54,57,62,84,75,59,62,65,78,60
(a) Find the mean of the weights of the people.
(b) How many people weigh above the mean weight?
(c) Find the range of the given data

432) Study the double bar graph shown below and answer the questions that follow:



(a) What information is represented by the above double bar graph?
(b) In which month, sales of brand A decreased as compared to the previous month?
(c) What is the difference in sales of both the brands for the month of June?
(d) Find the average sales of brand 8 for the six months,
(e) List all months for which the sales of brand 8 was less than that of brand A.
(f) Find the ratio of sales of brand A as compared to brand 8 for the month of January.

433) Vipin, a Class VII student received cash award of Rs. 5000 in the singing competition. His father advised him to made a budget plan for spending this amount. He made following plan:

S.NO	HEAD	AMOUNT
1	Donation in temple	150
2	Tuition fee to needy child	200
3	Welfare of senior citizens	300
4	Welfare of street children	300
5	Saving in bank	1500
6	Books for family library	500
7	Picnic for family	650
8	Gift to grand parents	600
9	Tea party to friends	800
Total		5000

Make a bar graph for the above data,
(i) find the mode and median of above distribution of money,
(ii) which values are depicted in his plan?

434) Observe the following data:

GOVERNMENT SCHOOL,
CHANDPUR

Daily Attendance		Date: 15.04.2009
Class	Total Students	Number of students present on that day
VI	90	81
VII	82	76
VIII	95	91
IX	70	65
X	63	61

(a) Draw a double bar graph choosing an appropriate scale. What do you infer from the bar graph?
(b) Which class has the maximum number of students?
(c) In which class, the difference of total students and number of students present is minimum?
(d) Find the ratio of number of students present to the total number of students of Class IX,
(e) What percent of students of Class VI were absent?

435) Below is a list of 10 tallest buildings in India. This list ranks buildings in India that stand at least 150 m (492 ft) tall, based on standard height measurement. This includes spires and architectural details but does not include antenna marks. Following data is given as per the available information till 2009. Since, new buildings are always under construction, go online to check new taller buildings. Use the information given in the table about skyscrapers to answer the following questions:

NAME	CITY	HEIGHT	FLOORS	YEARS
Planet	Mumbai	181m	51	2009
UB Tower	Bengaluru	184m	20	2006
Ashok Towers	Mumbai	193m	49	2009
The Imperial i	Mumbai	249m	60	2009
The Imperial II	Mumbai	249m	60	2009
RNA Mirage	Mumbai	180m	40	2009
Oberoi Woods Tower I	Mumbai	170m	40	2009
Oberoi Woods Tower II	Mumbai	170m	40	2009
Oberoi Woods Tower III	Mumbai	170m	40	2009
MVRDC	Mumbai	156m	35	2002

(a) Find the height of each storey of the three tallest buildings and write them in the following table:

BUILDINGS	HEIGHT	NUMBER OF STOREYS	HEIGHT OF EACH STOREY

(b) The average height of one storey for the buildings given in (a) is.....

(c) Which city in this list has the largest percentage of skyscrapers? What is the percentage?

(d) What is the range of data?

(e) Find the median of the data.

(f) Draw a bar graph for given data.

436) A survey of 150 girls showed that 63 like tea while 87 dislike it. Out of these girls,C? r1e girl is chosen at random. What is the~obability that the chosen girls (i) like tea? (ii) dislike tea?

437) In a survey of 100 ladies, it was found that 36 like coffee while 64 dislike it. Out of these ladies, one is chosen at random. What is the probability that the chosen lady (i) likes coffee (ii) dislikes coffee?

438) The mean of four numbers is 32. If one more number is added to the collection, the new average of the five numbers becomes 31. find the mean value of fifth observation

439) Find the mean of
(a) first five prime numbers.
(b) first ten composite numbers
(c) first five multiples of 6.
(d) All the factors of 24

440) The mean marks of seven students are 55. The marks of 6 students are 52, 54, 55, 53, 56 and 54. Find the marks of seventh student

441) The letters written on paper slips of the word MEDIAN are put in a bag. If one slip is drawn randomly, what is the probability that it bears the letter D?

442) Classify the following events as certain to happen 'impossible to happen, may or may not happen:
(a) Getting a two digit number on throwing a die
(b) Getting head and tail when a coin is tossed once
(c) Sum of two numbers is odd.
(d) Ramesh wins a lottery
(e) Getting a number between 1 and 6.

443) The mean of three numbers is 20 and the mean of other four numbers is 26. Find the mean of all the numbers.

444) The following table shows the weight of 12 Players:

WEIGHT (IN KG)	48	50	52	54	58
NUMBER OF PLAYERS	4	3	2	2	1

Find the mode and mean weight.

445) Find atleast 5 numbers between $\frac{1}{2}$ and $\frac{1}{3}$

446) The following data gives the number of students of Delhi state who went abroad for study during some years :

Year	**Number of students**
1995	1400
1996	1600
1997	1250
1998	1000
1999	2000
2000	2200

Represent the above data with the help of a bar graph.

447) In a school, there are five sections of class VII. The number of students in each section is given below. Construct a bar graph representing this data:

Section	A	B	C	D	E
Number of students	40	48	52	45	30

448) The population of four major cities in India in a particular year is given below:

City	Mumbai	Kolkata	Delhi	Chennai
Number of students	120	130	150	80

Construct a bar graph to represent the above data.

449) The results of pass percentage of Class X and XII in C.B.S.E.examination for 5 years are given in the following table:

year	**X**	**XI**
1994-95	90	95
1995-96	95	80
1996-97	90	85
1997-98	80	90
1998-99	98	95

Draw bar graphs to represent the data.

450) The cards bearing letter of the word "MATHEMATICS" are placed in a bag. A card is taken out from the bag without looking into the bag (at random).
(a) How many outcomes are possible when a letter is taken out of the bag at random?
(b) What is the probability of getting:
(i) M?
(ii) Any vowel?
(iii) Any consonant?
(iv) X?

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