



INDIAN SCHOOL AL WADI AL KABIR

Department: Mathematics

Class IX

Worksheet – STATISTICS (DTQ)

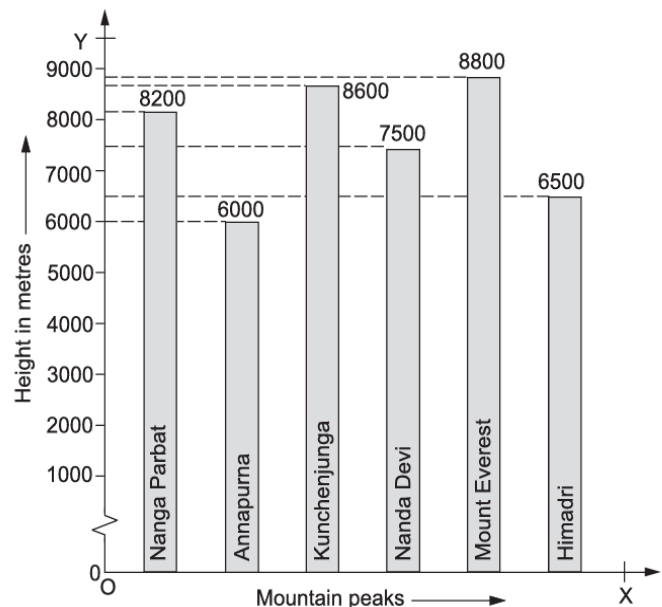
Questions of 2 mark each

- Q.1.**
- In a frequency distribution, the mid-value of the class is 20 and width of the class is 12. Find the lower limit of the class.
 - The width of each of six continuous classes in a frequency distribution is 6 and lower class limit of the lowest class is 15. What is the upper class limit of the highest class?

- Q.2.** Given below is a bar graph showing the heights of six mountain peaks. Read the bar graph and answer the following questions:

(i) Which is the highest peak and what is its height?

(ii) Write down the ratio of the heights of the highest peak and the lowest peak.



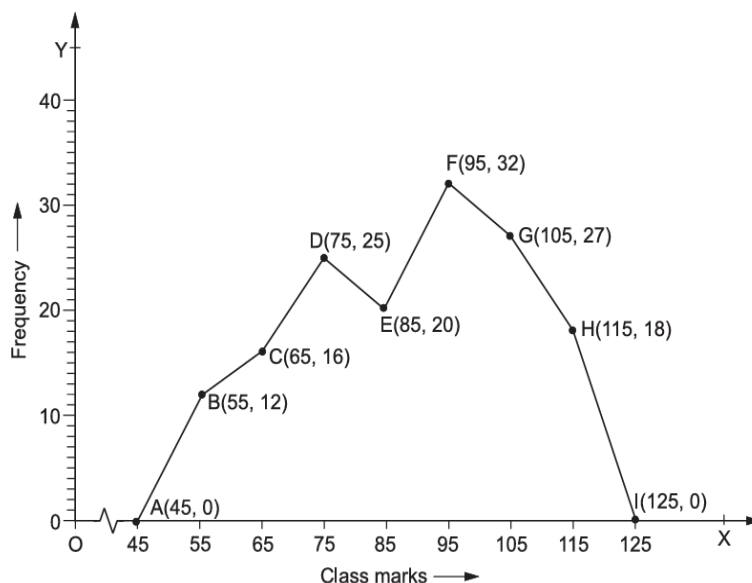
- Q.3** Convert the given frequency distribution into a continuous grouped frequency distribution:

Class intervals	Frequency
150-153	7
154-157	7
158-161	15
162-165	10
166-169	5

Q.4. The below frequency polygon represents the daily pocket expenses of 150 students in a school.

Read the frequency polygon and answer the following questions:

- (i) What is the class mark of the class interval having highest daily pocket expenses?
- (ii) How many students have daily expense above ₹100.



Questions of 3 marks each

Q.5. The water-tax bills (in ₹) of 30 houses in a locality are given below:

144, 184, 130, 195, 132, 134, 196, 114, 212, 174, 188, 210, 202, 145, 175, 154, 174, 178, 166, 146, 135, 115, 120, 114, 140, 188, 176, 166, 210, 208.

Construct a grouped frequency distribution table with class size 10.

Q.6. The following table shows the average daily earnings of 40 general stores in a market, during a certain week:

Daily earning (in rupees)	700-750	750-800	800-850	850-900	900-950	950-1000
No. of stores	6	9	2	7	11	5

Draw a histogram to represent the above data.

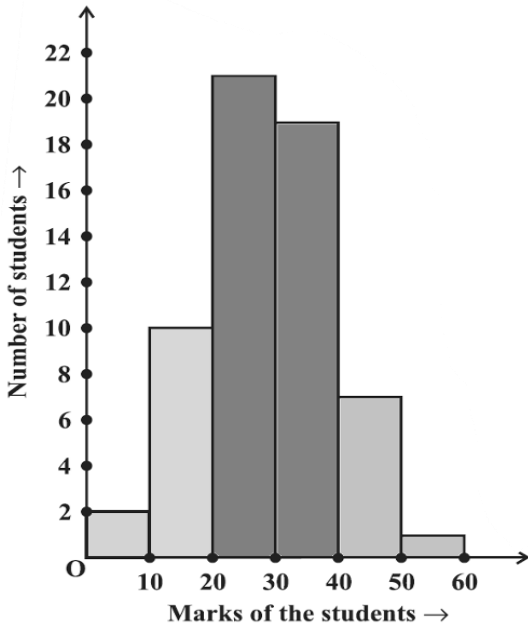
Q.7. Construct a histogram for the following frequency distribution:

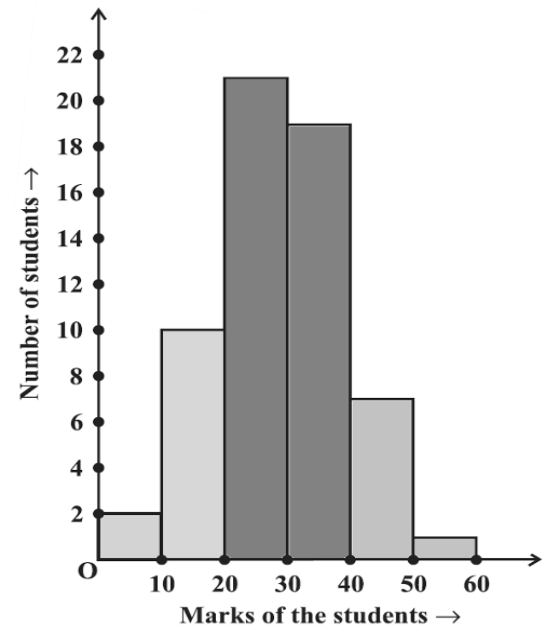
Class interval	5-12	13-20	21-28	29-36	37-44	45-52
Frequency	15	6	24	18	4	9

Q.8. Draw a histogram to represent the following data:

Class interval	10-14	14-20	20-32	32-52	52-80
Frequency	8	9	6	25	21

Questions of 5 marks each

Q.9.	The ages (in years) of 330 patients treated in a hospital on a particular day are given below:						
	Age in years	10-20	20-30	30-40	40-50	50-60	
	No. of patients	90	40	60	20	120	
Draw a histogram and a frequency polygon on the same graph to represent the above data.							
Q.10.	In a study of diabetic patients in a village, the following observations were noted.						
	Age (in years)	20-30	30-40	40-50	50-60	60-70	70-80
	No. of patients	2	5	12	19	9	4
(i) Represent the above data by a frequency polygon.							
(ii) What is the class mark of the age group which has highest number of diabetic patients?							
Case study-based (4 marks)							
Q.11.	Amal is a Mathematics teacher in Hyderabad. After Periodic test, she asks students to collect the Mathematics marks of all the students of Class IX A, B and C. A student collected marks from some students. Rekha scored the least mark 6 in the class and Ram scored highest marks 59 in the class. She prepares the frequency distribution table using the collected marks and draws Histogram using the table as shown in adjoining figure.						
	Read the histogram and answer the following questions:						
	(i) What is the total number of students from whom marks where collected? (ii) What is the width of the each class? (iii) What is the lower limit of the class interval having highest frequency? (iv) How many students have got marks below 20?						
							



ANSWERS							
Q.1	(i) 14, (ii) 51	Q.2	(i) Mount Everest, height=8800 m (ii) 22 : 15	Q.4	(i) 95 (ii) 27+18= 45	Q10.	(ii) 55
Q.11	(i) 60, (ii) 10 (iii) 20, (iv) 12						