Understanding Data Displays - Independent Practice Worksheet

Complete all the questions.

1. Students went on a picnic. They recorded a list of the number of animals that were in each pen. The result was 12, 16, 10, 19, 17, 10, 11, 11, 12, 12, 11, 12, 13, 12, 14, 15, and 18. Create a data display. What are some observations that can be made from the data display?

2. In a hospital the nurses have recorded the waiting times for patients who arrive at the hospital office and request to immediately see a doctor. The following data was collected over a 1-month period (the waiting times are in minutes):
   2, 5, 10, 12, 4, 4, 5, 17, 11, 8, 9, 8, 12, 21, 6, 8, 7, 13, 18, 3

   (i) Find the minimum number, first quartile, median, third quartile and maximum value for the data values.

3. 43 people were standing in a line. They were given random gifts. The value of each gift was listed on the bottom of each gift. The values are listed below:
   73, 45, 62, 90, 59, 20, 48, 50, 78, 38, 52, 91, 57, 47, 46, 51, 62, 58, 39, 50, 72, 73, 63, 52, 41, 37, 28, 46, 71, 75, 36, 28, 44, 90, 51, 28, 60, 18, 82, 40, 82, 85, 34

   Display the data by drawing a histogram with correct intervals.

4. There are 55 workers in the automobile factory. Their average income is above their expectations. The following list shows their average daily income in dollars.
   34, 28, 22, 36, 27, 18, 52, 39, 42, 29, 35, 31, 27, 22, 27, 34, 19, 20, 57, 49, 54, 42, 46, 25, 17, 37, 42, 53, 41, 51, 35, 24, 33, 41, 53, 60, 18, 44, 38, 41, 48, 27, 39, 19, 30, 12, 54, 48, 26, 18, 37, 37, 61, 50, 67

   Draw a histogram to display this data.
5. There are 60 students in the science class. Many students are failing in science, due to their poor performance on test. The data shows their scores out of 60:

45, 12, 45, 8, 12, 18, 26, 41, 48, 23, 47, 11, 7, 15, 31, 28, 6, 5, 27, 38, 32, 21, 36, 45, 15, 9, 49, 37, 43, 14, 30, 17, 14, 26, 34, 24, 18, 16, 35, 11, 27, 14, 30, 22, 31, 40, 17, 24, 37, 13, 6, 23, 43, 27, 32, 32, 29, 35, 34, 20, 50

Draw histograms with the correct intervals.

6. The number of days that 20 different employees came to the office for one month is as follow:

23, 12, 21, 20, 28, 30, 19, 8, 20, 18, 22, 29, 19, 25, 16, 26, 24, 10, 22, 18.

Draw a histogram with correct intervals to show the data.

7. The weather man recorded the temperature of the city in Celsius everyday for a period of 50 days. The data was as follows:

21, 6, 8, 28, 32, 40, 6, 41, 4, 15, 26, 33, 42, 10, 30, 2, 11, 39, 9, 27, 34, 14, 35, 22, 29, 31, 43, 2, 23, 37, 44, 18, 24.0

Draw a histogram to display this.

8. David measures the length of the trees in his backyard and got the following values in cm:

1, 1, 1, 4, 4, 5, 5, 5, 6, 7, 8, 8, 8, 9, 9, 9, 9, 9, 9, 9
10, 10, 11, 12, 12, 13, 14, 14, 15, 15, 16, 16, 16, 16, 17, 17, 17, 18, 18, 19, 19, 19, 20, 20

(i) Find the minimum number, first quartile, median, third quartile and maximum value for the data values.
9. The teacher measures the distance that students can vertically jump in inches. The data is as follow:-
8, 9, 8, 7, 10, 9, 6, 4, 9, 8, 7, 8, 10, 9, 8, 6, 9, 7, 8, 8
(i) Find the minimum number, first quartile, median and maximum value for the data values

10. Many patients are suffering from pneumonia, due to flooding. The data shows the number of patients suffering from pneumonia in each city.
23, 50, 38, 42, 63, 75, 12, 33, 26, 39, 35, 47, 43, 52, 56, 59, 64, 77, 15, 21, 51, 54, 72, 36, 65, 52, 60, 27, 34, 47, 48, 55, 58, 59, 62, 51, 48, 50, 41, 57, 65, 54, 43, 56, 44, 30, 46, 67, 53
Draw a histogram with the correct intervals to visualize this data.