Student Worksheet

"DATA REPRESENTATIONS"



ACTIVITY 5

Allocation Time : 10 minutes

Learning Activity Goals : Students can state the characteristics of tables, bar charts, line charts, and pie charts

Instruction :

1. Make groups of 6 students
2. Do division among group members so that each student observes one type of table or chart
3. Observe every information provided and fill in the questions provided!
4. Exchange the information you get with your group members!

After knowing the reasons why we need to organize and present data in a certain form, now we will study what forms of data presentation are.

Column-Row Table

Given a data regarding the company's car sales as follows. In 2011, the number of cars sold was 28,335 units. In 2012, the number of cars sold was 25,946 units. In 2013, the number of cars sold was 30,823 units. In 2014, the number of cars sold was 76,105 units. Meanwhile, in 2015, the number of cars sold was 55,162 units.

Pay attention to the table of the data!

Year	Number of cars sold
2011	28,335
2012	25,946
2013	30,823
2014	76,105
2015	55,162

Row and column tables are one type of data presentation that is simple and consists of one variable/component/factor. One of the characteristics of a row and column table is that the data is arranged in an orderly manner, for example from top to bottom, or from left to right.

Can you find other characteristic of the row and column table? Mention the characteristics of row and column table!

By: Kamila Kurnia Sari

LIVEWORKSHEETS

Student Worksheet

"DATA REPRESENTATIONS"



Answer:

Contingency Table

Class\Gender	Male	Female
7A	13	17
7B	15	16
7C	12	17
7D	14	18
8A	11	19
8B	15	17
8C	10	20
8D	12	19
9A	14	17
9B	15	18
9C	14	19
9D	16	18

The contingency table includes the type of data presentation in the table. The contingency table is also part of the row and column table type that has a special feature, that is presenting data that has two variables/components/factors. If the first factor consists of a category and the second factor consists of b categories, then the table is called a contingency table $a \times b$ where a represents the number of rows and b represents the number of columns.

Can you find any other characteristic of the contingency table? Mention the characteristic of the contingency table!

By: Kamila Kurnia Sari

LIVEWORKSHEETS

Student Worksheet

"DATA REPRESENTATIONS"



Answer:

Frequency Distribution Table

Table of math score of class VII A:

Score	Frequency
51-60	5
61-70	8
71-80	10
81-90	7
91-100	10
Total	**40**

A frequency distribution table is a type of row and column table for data grouped into specific categories. If a quantitative data is grouped into several categories or groups, a frequency distribution table will be obtained. So one of the characteristics of the frequency distribution table is that the data is grouped.

Can you find any other characteristic of the frequency distribution table? Mention the characteristics of the frequency distribution table!

By: Kamila Kurnia Sari

LIVEWORKSHEETS

Student Worksheet

"DATA REPRESENTATIONS"



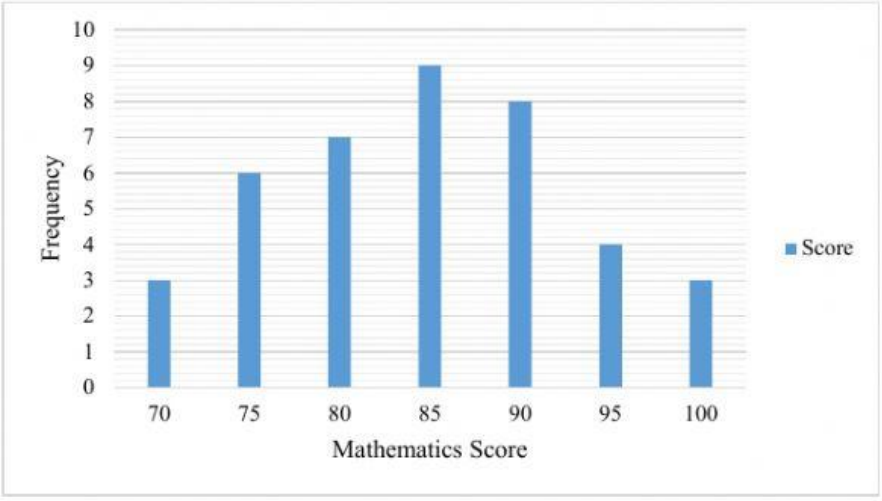
Answer:

Bar Chart

The data for the final 7th grade math test is as follows:

85	90	70	75	90	80	85	95	100	75
70	75	80	80	85	95	100	75	85	90
75	85	80	85	90	70	85	90	80	85
90	90	75	80	80	85	95	90	95	100

To find out how many students scored 70,75, 80, 85, 90, 95 and 100 of course we will have difficulty. An easy way to find out the number of students for each grade is to present the data in the form of a bar chart as shown below:



Student Worksheet

"DATA REPRESENTATIONS"



Bar charts present data with vertical or horizontal bars that have the same width. Between one bar with another bar does not coincide with each other. Bar charts can be two-dimensional or three-dimensional. One of the characteristics of a bar chart is the presentation of data using bars arranged on a horizontal axis and a vertical axis that intersects perpendicularly.

Can you find any other characteristic of the bar chart? Mention the characteristics of the bar chart!

Answer:

Line Chart

Rupiah Exchange Rate against US Dollar

Month	Rupiah Exchange
January	9,800
February	9,900
March	10,000
April	10,100
May	10,300
June	10,200
July	10,000
August	10,500
September	10,900
October	11,000
November	11,400
December	11,700

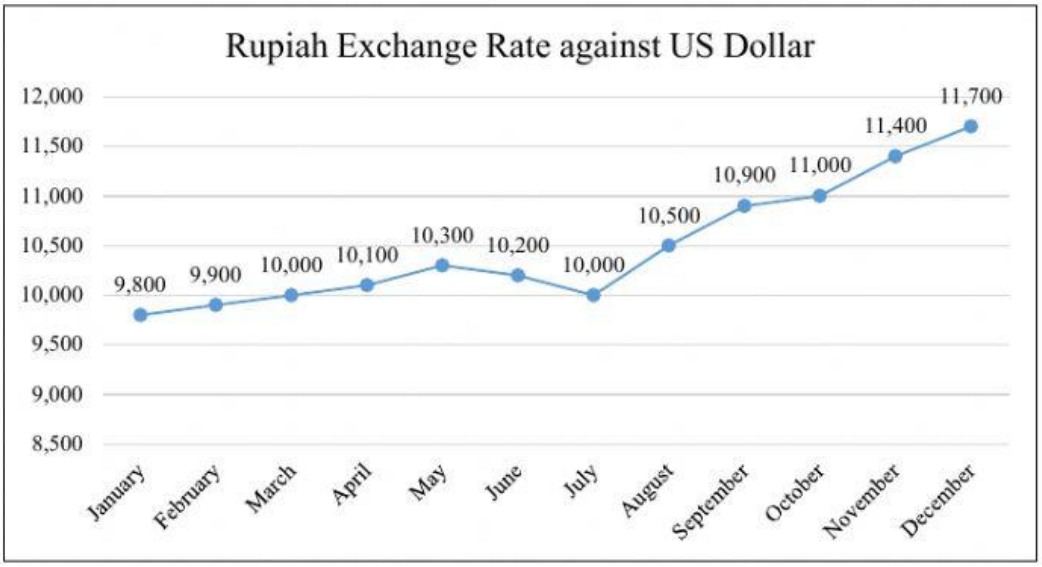
By: Kamila Kurnia Sari

LIVEWORKSHEETS

Student Worksheet

"DATA REPRESENTATIONS"





Line charts are represented by pairs of numbers represented by points on the number plane. Usually the data presented in the line diagram is continuous data, for example the production of a factory every month, the number of residents every day and the temperature conditions every hour. One of the characteristics of a line chart is the presentation of data by using points connected by line segments on the horizontal axis and the vertical axis that intersect perpendicularly.

Can you find any other characteristic of the line chart? Mention the characteristics of the line chart!

Answer:

By: Kamila Kurnia Sari

LIVEWORKSHEETS

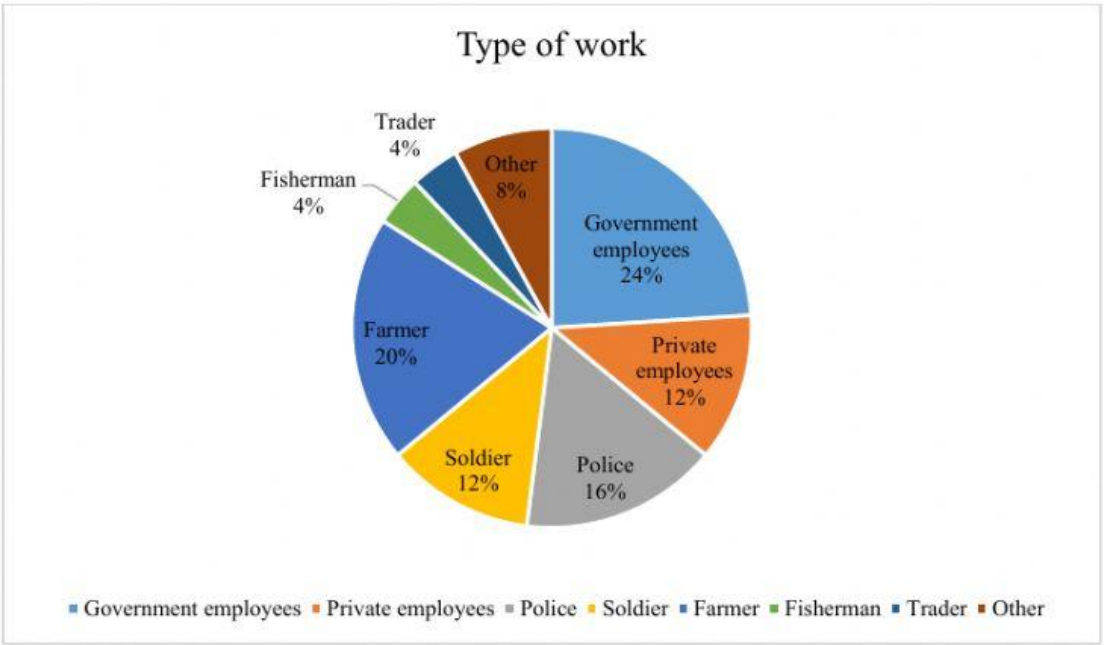
Student Worksheet

"DATA REPRESENTATIONS"



Pie Chart

No	Type of work	Frequency
1.	Government employees	12
2.	Private employees	6
3.	Police	8
4.	Soldier	6
5.	Farmer	10
6.	Fisherman	2
7.	Trader	2
8.	Other	4
Total		50



Pie charts use the area of a circle to show a whole (100%) or the sum of all values (measures). Pie charts can be presented in two or three dimensions. One of the characteristics of a pie chart is that the parts of the circle area show the parts or percent of the whole, and the area of a part shows the number of measurements (data).

Can you find any other characteristic of the pie chart? Mention the characteristics of the pie chart!

By: Kamila Kurnia Sari

LIVEWORKSHEETS

Student Worksheet

"DATA REPRESENTATIONS"



Answer:

By: Kamila Kurnia Sari

LIVEWORKSHEETS