

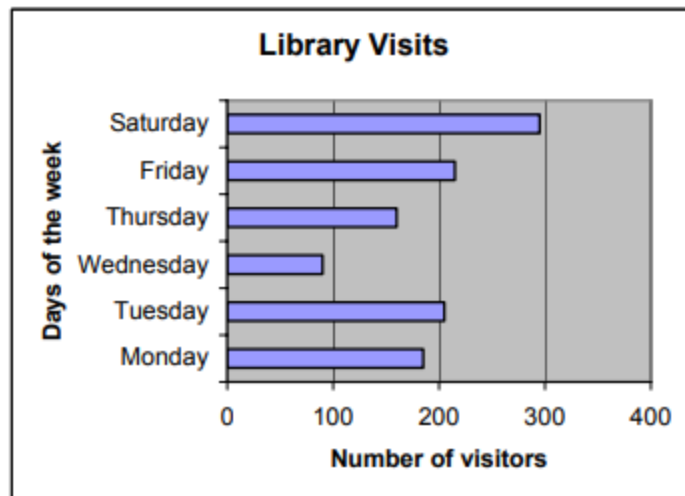
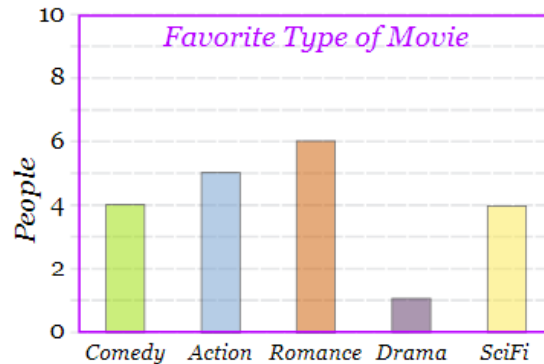
Lesson 4 – How do I display data? Part 2

Week 2: Histograms, Stem and Leaf, Frequency Tables

Bar Graph

A graph drawn using rectangular bars to show how large each value is.

The bars can be horizontal or vertical.



1. On which day did the library receive the most visitors?
2. Approximately how many visitors came to the library that day?
3. Why do you think that day had the most visitors?
4. Approximately how many visitors came to the library on Monday?
5. Describe the pattern you see in the number of visitors from Wednesday to Saturday.
6. Create one question that could be answered from the graph.

Pareto Graph

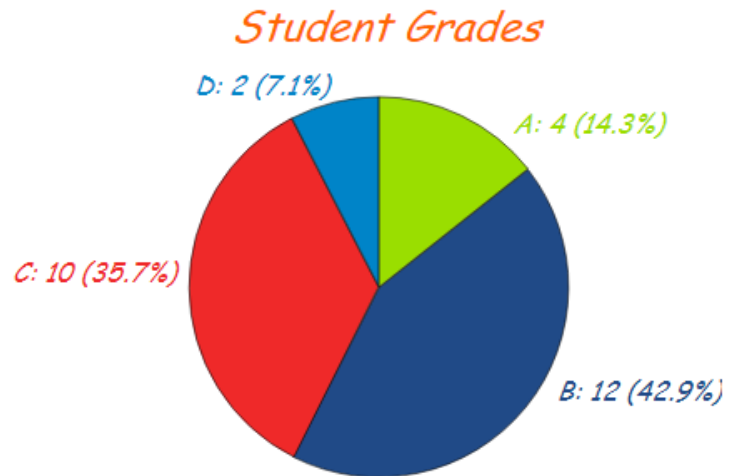
A Pareto chart is a bar graph. The lengths of the bars represent frequency or cost (time or money) and are arranged with longest bars on the left and the shortest to the right. In this way the chart visually depicts which situations are more significant. This cause analysis tool is considered one of the seven basic quality tools.



Circle/Pie Chart

A Pie Chart (or Pie Graph) is a special chart that uses "pie slices" to show relative sizes of data.

The chart is divided into sectors, where each sector shows the relative size of each value.



How to Make Them Yourself

Imagine you survey your friends to find the kind of movie they like best:

Table: Favorite Type of Movie				
Comedy	Action	Romance	Drama	SciFi
4	5	6	1	4

You can show the data by this Pie Chart:

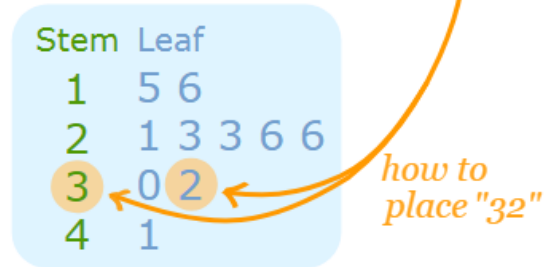
Stem and Leaf

A plot where each data value is split into a "leaf" (usually the last digit) and a "stem" (the other digits).

For example "32" is split into "3" (stem) and "2" (leaf).

The "stem" values are listed down, and the "leaf" values are listed next to them.

15,16,21,23,23,26,26,30,32,41



This way the "stem" groups the scores and each "leaf" indicates a score within that group.

Heights of Ceilings (cm)	
Stem	Leaf
24	1
25	0 3 3 3
26	2 2 8
27	1 7
Key: <u>24</u> 1 = 241 cm	

List the data from least to greatest.

- Find the mean. _____
- Find the median. _____
- Find the mode. _____
- Find the range. _____
- Find the midrange
