

10.2 Displaying Data 1

There are lots of types of graphs that can be used to display/organize data that's been collected.

There are usually two types of data that's collected: **numerical** (e.g. weight) or **categorical** (e.g. favorite ice cream flavors).

Types of Graphs:

1. Pictographs
2. Line Plots
3. Stem and Leaf Plots
4. Histograms
5. Bar Graphs
6. Circle Graphs (a.k.a. Pie Charts)
7. Line Graphs
8. Scatter Plots

(Note: The last two in this list will be covered in section 10.3.)

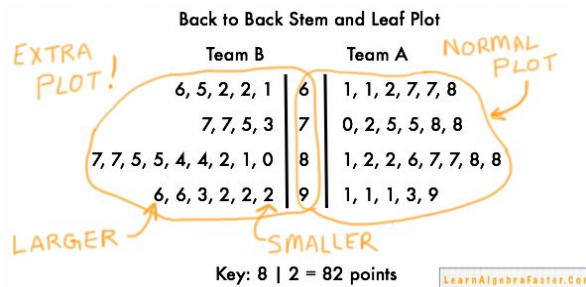
3. **Stem and Leaf Plots** (or Graphs)--In this graph, you can still see frequencies of the data, and each piece of data is listed.

Stem	Leaf
6	1
7	
8	4 6 8
9	2 9 9 9
10	
11	3 4
12	1 2 4 4 7 9
13	8
14	4 7 8
15	1

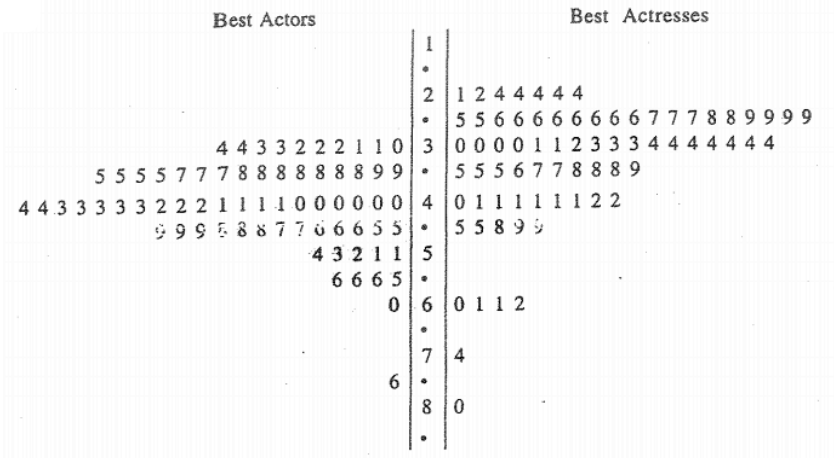
Key: 6 | 1 = 61

Infant Mortality Rates in Western Africa

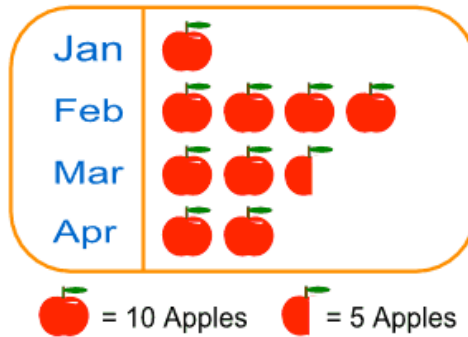
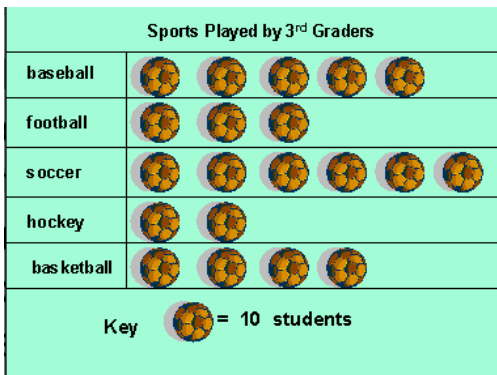
Stem	Leaf
5	1
6	
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8	4 6 8
9	2 9
10	
11	3 4
12	1 2 4
13	8
14	4 7 8
15	1



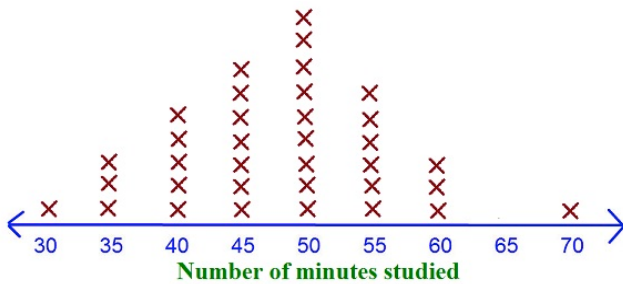
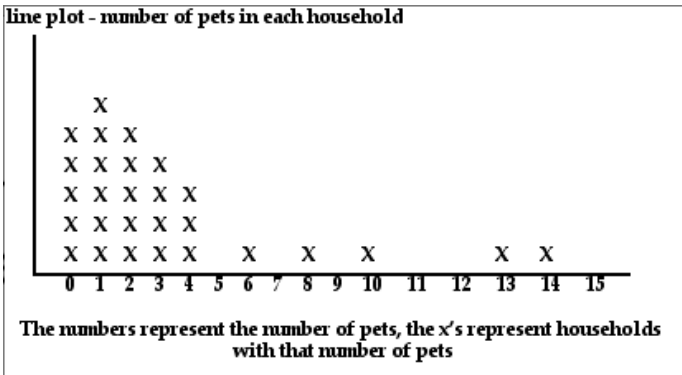
Ages of Academy Award Winners 1928-2000



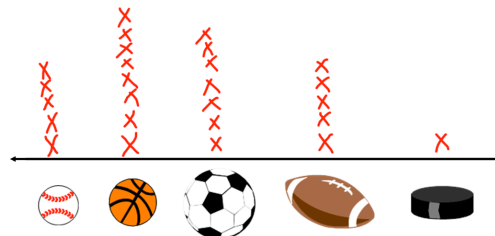
1. **Pictograph**--(like a bar graph) It uses icons or pictures to represent frequency of data; on horizontal axis, plot the types of things considered and on the vertical axis, plot the frequencies of those things from the data collected.



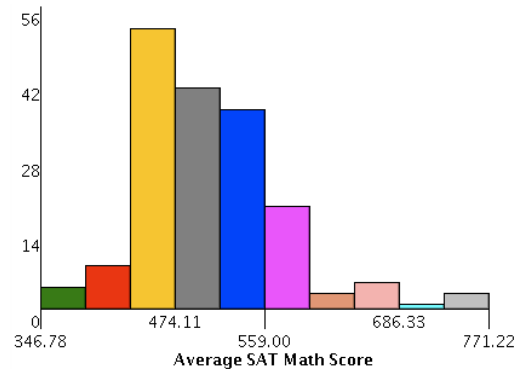
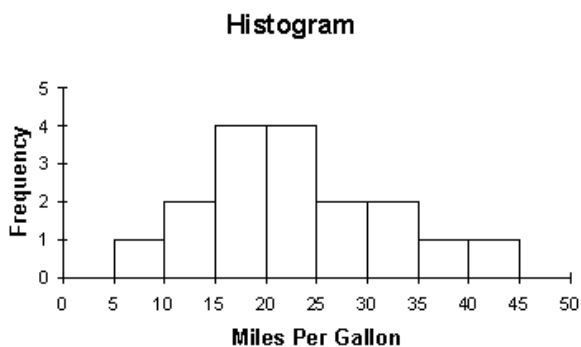
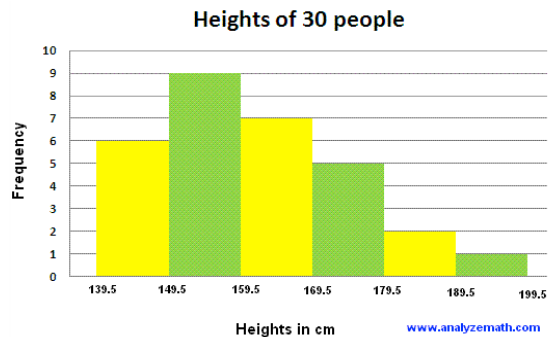
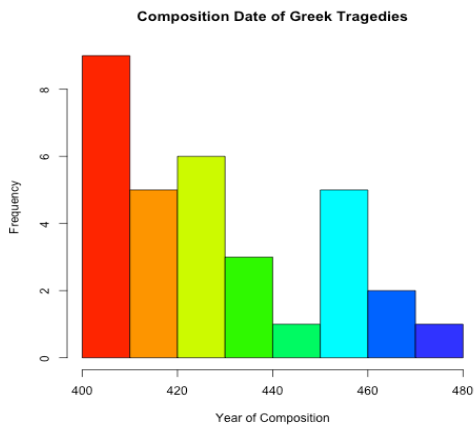
2. **Line Plots**--Each piece of data collected shows up on the 2-d graph as a point; it's easy to read frequencies in this way.



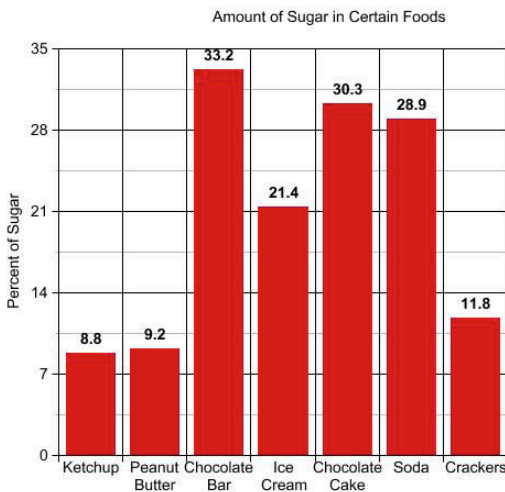
Title: Favorite Sport



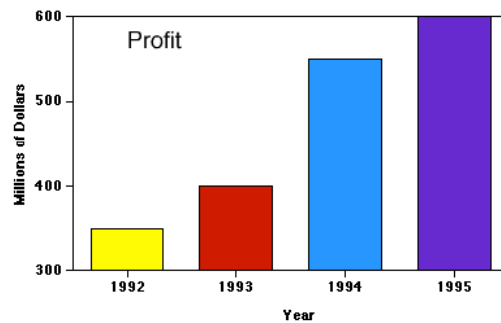
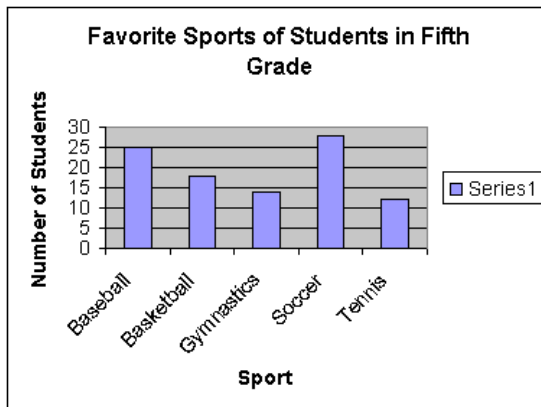
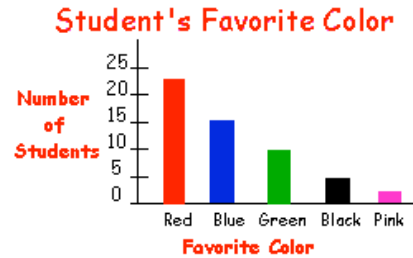
4. **Histograms**--used to display grouped data in separate, continuous intervals; plot frequency of the data (usually on the vertical axis); each interval (usually on horizontal axis) is of SAME length. Note: It's up to the creator of the graph to decide how wide each interval should be.



5. **Bar Graphs**--useful for making comparisons over time; looks much like a histogram but bars are typically separated with some space and it's used for discrete data, whereas histograms are used for continuous data.

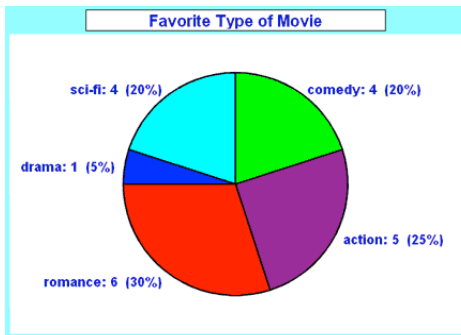


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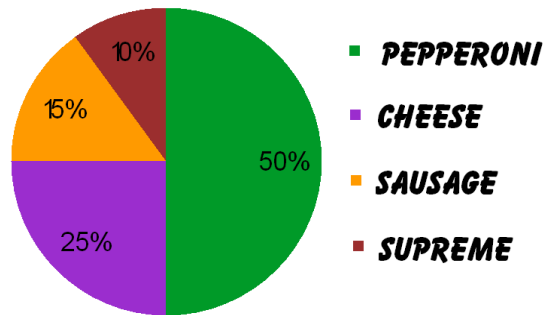


6. **Circle Graphs** (or Pie Charts)--used for comparing parts to whole.

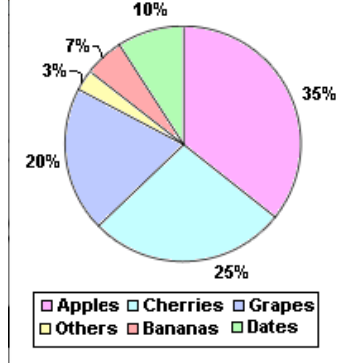
angle of a wedge = 360 degrees * (part/whole)



FAVORITE PIZZA TOPPINGS



People who like different fruits



Milton Family's Budget (Title)

