

# Data, Charts, and Graphs Study Guide

<p><b>Range:</b> greatest minus the least</p> <p><b>Mean:</b> average (see below)</p> <p><b>Median:</b> the middle number</p> <p><b>Mode:</b> most frequently repeated number</p> <p><b>Minimum:</b> least number</p> <p><b>Maximum:</b> greatest number</p>	<p><b>Gap:</b> a space in the data</p> <p><b>Cluster:</b> data that groups together</p> <p><b>Outlier:</b> data point that doesn't fit with most of the data points</p> <p><b>Trend:</b> the direction data takes</p> <p><b>Increase:</b> goes upward</p> <p><b>Decrease:</b> goes downward</p>
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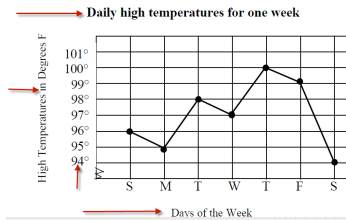
**Mean:** the average of a data set. Use the "ACDC" method!

You get the mean by adding up the data, counting the data points, then dividing the sum by the data points.

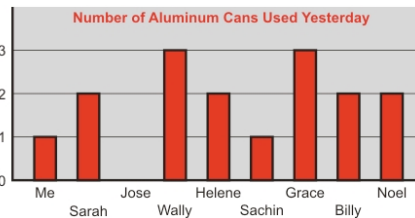
For example: A student earns these grades: 85, 82, 97, and 64.

1. **Add** up the data (get the sum):  $85 + 82 + 97 + 64 = 328$
  
2. **Count** the data points:  $85, 82, 97, 64$   
*1 2 3 4 data points*
  
3. **Divide** the sum by the count:  $328 \div 4 = 82$
  
4. **Check** The mean (or average) is **82**.

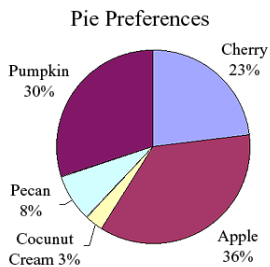
## What are Graphs Used For?



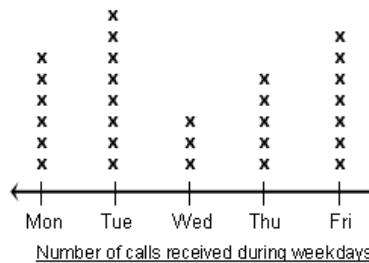
**Line Graph**  
Show changes over time



**Bar Graph**  
Compare things



**Circle Graph**  
Show parts of a whole



**Line Plot**  
Count Things