Microsoft Excel:
Sorting and Filtering

SORTING
Microsoft Excel can automatically sort data that is conjoining (together) using these buttons, Sort Ascending (from A to Z) and Sort Descending (from Z to A), respectively. As long as the data is touching Excel will keep rows together.

*If you select a set of cells, Excel will sort only within the selection.*

The **Sort** dialog box shown above can be found under **Data->Sort**. This sort will only affect data cells that are touching or a selection of cells. This Sort window allows you to sort up to three levels.

Excel usually assumes you have a header row, a first row of titles for your data. If you do not have a header row, you can sort without one, by choosing the option **No header row**.

When there is a header row, the headers appear in the drop down boxes, if there is no header row Excel will list the column letters such as Column A, Column B.

Notice there is an **Options...** button. The sorting options can sort **Case sensitive** and even change the orientation such that it sorts from left to right instead of the normal top to bottom sort.
FILTERS
Excel has a method of sorting that will hide information that does not match your criteria. This can be accessed through the Data menu, Filter → AutoFilter. Excel will place a drop-down arrow next to each cell in the first row.

When you click on any of the drop down arrows you will see a list similar to this one. All, Top 10..., Custom... and a list of each of the unique cells in that column.

When you choose your Filter, Excel will only show the rows that match what have specified from the drop down list. The status bar will show how many records were found.

CUSTOM Filters
The Custom... option will allow you to apply the following filters:

- equals
- does not equal
- is greater than
- is greater than or equal to
- is less than
- is less than or equal to
- begins with
- does not begin with
- ends with
- does not end with
- contains
- does not contain
Examples

Be careful of the AND/OR relationships. If you ask Excel to show the rows where the City equals Micanopy and the City equals Gainesville, you will get no results, because one cell cannot equal both. But if you ask for the same using the OR, you will get both cities.

You never use the AND with two equals.

The OR works well with Ranges, greater than this AND less than that. Begins with this AND ends with that.
### SUBTOTAL Worksheet Function

The SUBTOTAL worksheet function will perform common functions on filtered lists. The syntax is “SUBTOTAL(function_num,ref1,ref2,...)”. Function_num is the number 1 to 11 that specifies which function to use in calculating subtotals within a list.

<table>
<thead>
<tr>
<th>Function Num</th>
<th>Function</th>
<th>Function Num</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>AVERAGE</td>
<td>7</td>
<td>STDEV</td>
</tr>
<tr>
<td>2</td>
<td>COUNT</td>
<td>8</td>
<td>STDEVP</td>
</tr>
<tr>
<td>3</td>
<td>COUNTA</td>
<td>9</td>
<td>SUM</td>
</tr>
<tr>
<td>4</td>
<td>MAX</td>
<td>10</td>
<td>VAR</td>
</tr>
<tr>
<td>5</td>
<td>MIN</td>
<td>11</td>
<td>VARP</td>
</tr>
<tr>
<td>6</td>
<td>PRODUCT</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Ref1, ref2, are 1 to 29 ranges or references for which you want the subtotal.

SUBTOTAL will ignore any hidden rows that result from a list being filtered. This is important when you want to subtotal only the visible data that results from a list that you have filtered. Often displaying the totals above your filtered lists works best, see the example below.