**Formulas:** All formulas and calculations begin with an equal sign = That tells Excel you're doing math.

			- · · · -	
	А	В	С	C
1				
2				
3				
4	23		=A4+B4	
5				
-				

Per capita =amount/population

А	В	С	D
	Population	Thefts	Per Capita
Happyville	12000	17	=C2/B2
Lottsograft	200000	240	
Backwood	142	5	
	Lottsograft	Happyville 12000 Lottsograft 200000	Lottsograft 200000 240

Per 100 or per 1000 – just multiple the above formula by 100 or 1000 by using the \*

Percent change =(new-base)/base or (new-old)/old

	A	В	С	D	E	I	F
1							_
2		Score	Score	Score			
3		Game1	Game 2	Game 3	% change		
4	Sam	23	12	35	=(D4-C4)/	C4	
5	Judy	4	5	9			
6	Bev	12	99	111			
7	Ed	4	34	38			
8	Total	43	150	193			
9							

The two-step method:

Add a column to compute the difference Add a column to compute the difference/base

<u>Copying formulas</u>: Excel is handy because you need to type a formula once. Then you can copy it down and Excel will adjust it based on the row number. Copy a formula by putting your mouse over the lower right corner of the square.

Click and drag the thin plus sign to the bottom.

D		E	
opulation			
	54585	=D2-C2	]
	12951		
	80582		-
	22928		
	8996		
	2145		
	40948		

<u>Percent of total:</u> = part/whole Sometimes you will use the same total for every row – as in the example below. So you don't want Excel to adjust your formula. In the example below, we want to divide each row by the total. Anchor the total by using \$ signs.

	A	В	С	D	E	
1						
2		Score	Score	Score		
3		Game1	Game 2	Game 3	% of Total	
4	Sam	23	12	35	=D4/\$D\$8	
5	Judy	4	5	9		
6	Bev	12	99	111		
7	Ed	4	34	38		
8	Total	43	150	193		
0						

<u>Functions</u>: Excel has several special functions to do things such as total a bunch of numbers or average a bunch of numbers. In most cases, the format for those formulas is =function(start:finish) In the following example, I used SUM to add up a column of numbers.

	А	В	С	D	
1					
2		Score	Score	Score	
3		Game1	Game 2	Game 3	
4	Sam	23	12	35	
5	Judy	4	5	9	
6	Bev	12	99	111	
7	Ed	4	. 34	38	
8	Total	=SUM(B4:	B7)		
~					

Other functions include: =average(start:finish) =median(start:finish)

<u>Formats</u>: To make your numbers look like currency or percents, highlight the numbers you want to format, then click one of these: (the two funny zero buttons on the end increase and decrease decimal points)

	\$	%	,	•.0 00.	.00. ♦.0
--	----	---	---	------------	-------------

**SORTING:** First rule --- save your file. Second, highlight everything you want to be sorted (not titles and totals 'cause you don't want them mixed in with everything else).

	А	В	С	D	E	F
1						
2		Score	Score	Score		
3		Game1	Game 2	Game 3	% change	
4	Sam	23	12	35	192%	
5	Judy	4	5	9	80%	
6	Bev	12	99	111	12%	
7	Ed	4	34	38	12%	
8	Total	43	150	193	29%	
9						
40						

Then go to the DATA tab and click the SORT button.

es -	Data	Review	v	View
esh	D Conr Prop Edit I	erties	A Z↓ Z↓ A↓	AZA Sort
C	onnectior	ns 👘		S

You'll get a box that lets you specify your sort parameters:

1	Sort						? 🗙
J	<sup>.</sup> ⊉ <sub>2</sub> j <u>A</u> dd	Level X Delete Level	Copy Level	1 Uptions		My data h	as <u>h</u> eaders
1	Column		Sort On		Order		
1	Sort by	July 1, 2002 Population 🗸	Values	~	Largest to	Smallest	~
l							
ł							
						ОК	Cancel

Choose the column you want to sort by. Choose VALUES in the second box – unless you want to do some funky sorting, such as sorting by color. In the last box chose how you want to sort. Back in the day, these were known as "ascending" and "descending."

Note the checkbox that says "My data has headers." This can be useful if your spreadsheet is set up such that the first row is headers and the second row is data. If you check this box, your sort-by dropdown will give you header names. If you don't, you'll get the column letters.

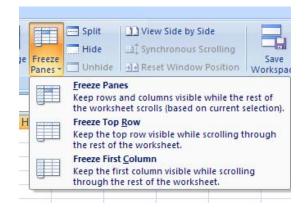
FREEZING: Sometimes spreadsheets are too long or too wide to read all your

information. That's where FREEZE PANES comes in handy.

Go to the VIEW tab and click FREEZE PANES



You get several options:



You can freeze the top row or first column. To freeze both, click on the cell at the intersection where you want your freeze to begin and click FREEZE PANES. Freeze panes also will freeze a column that is not the first column or freeze a row that is not the first row. To turn any of these off, go back and choose UNFREEZE PANES.

Graphs: To make a graph, highlight both the numbers and headers of the items you want to graph. Then click the INSERT TAB and click on the type of chart you would like to make. Excel will step you through the process by asking questions about your chart.

## For more information...Click FI for help