

More On Spreadsheets

Chapter 15

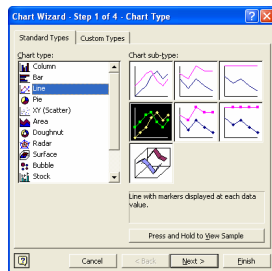
Plotting Data

- Select the data to graph and click the **Chart** button.

	A	B	C	D
1				
2	Labs	Score	Possible	Percent
3	Lab 1	2	5	40.0
4	Lab 2	5	5	100.0
5	Lab 3	38	40	95.0
6	Lab 4	27	30	90.0
7	Lab 5	15	15	100.0
8	Lab 6	8	15	53.3
9	Lab 9	37	40	92.5
10	Lab 10	25	25	100.0
11	Lab 10	20	25	80.0
12	Total	177	200	88.5
13				

Plotting Data

- Choose the type of graph based on how you want to visualize the data.
- As with all software, explore the interface to familiarize yourself with what is available.



Plotting Data

- To plot multiple sets of data, select multiple columns (or rows).
- If the data are not adjacent, hold **Ctrl** while selecting the data.

	A	B	C	D
1				
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4	Lab 2	5	5	100.0
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Exercise: Plotting Names

- Plot the popularity over the years of a given name.
 - <http://www.ssa.gov/OACT/babynames/>

Naming Cells

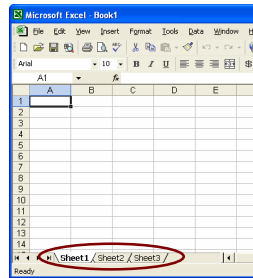
- Can rename cells to make them easier to remember and use in other formulas.
- Column letter and row number name is still usable.
 - In the example to the right, cell can be referred to as **D12** or **LabGrade**

cell name

	A	B	C	D	E
1					
2	Labs	Score	Possible	Percent	
3	Lab 1	2	5	40.0	
4	Lab 2	5	5	100.0	
5	Lab 3	38	40	95.0	
6	Lab 4	27	30	90.0	
7	Lab 5	15	15	100.0	
8	Lab 6	8	15	53.3	
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11	Lab 10	20	25	80.0	
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Using Multiple Sheets

- Certain tasks are better managed using multiple sheets.
- For example, one sheet could have a list of grades, while another sheet has the grade statistics.



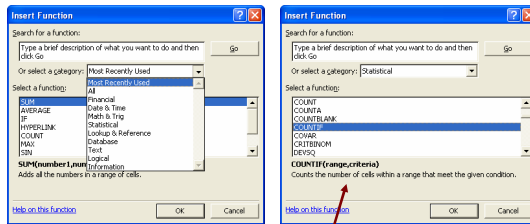
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Referencing Other Sheets

- Referencing a cell on another sheet, general syntax: **<sheet name> ! <cell name or range>**
- Examples:
 Sheet1!D4
 Grades!C1 ← assuming there is a sheet called Grades
 Sheet2!E4:E9
- Cells that have been renamed (like LabGrade) can be referenced with just the name (e.g., LabGrade) regardless of which sheet the cell is located.

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More On Functions



how to use the selected function

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Exercise: Planning A Trip

- Compute the total cost for the following trip assuming 22 MPG (or 5.81 MPL) and 0.948 US cents per Canadian cent.
 - Store the assumptions on the same sheet and name them.

Segment	Time Est.	Miles	Fuel Price Report	Fuel Price
Chicago to Carrington ND	12:02	778 US	Chicago	\$3.99
Carrington to Battleford SK	11:06	620 US	Moorehead MN	\$2.96
Battleford to Fort St. John	11:26	648 CA	Moose Jaw SK	\$1.09
Fort St. John to Waston Lake YK	10:17	555 CA	Medicine Hat AB	\$1.01
Watson Lake to Dawson YK	11:55	601 CA	MI 54 AK Hwyway BC	\$1.21

- US prices are per gallon. Canadian prices are per liter.
- You will find IF and LEFT useful.

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Usage: IF, LEFT

- How to use IF:

IF(logical_test,value_if_true,value_if_false)

Checks whether a condition is met, and returns one value if TRUE, and another value if FALSE.

- How to use LEFT:

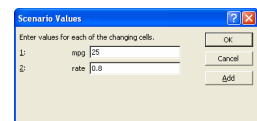
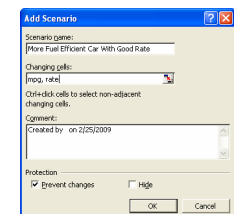
LEFT(text,num_chars)

Returns the specified number of characters from the start of a text string.

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Scenarios

- A scenario lets you speculate on outcomes based on different inputs.
- Choose "Scenarios..." under the Tools menu.
- After creating a scenario, choose "Summary..." to see the possible outcomes.
- NOTE: All cells referenced in a scenario must be on the same sheet.



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Scenario Summary

Scenario Summary	Current Values	Order Exchange Rate	Order Mileage	Miles Fuel Efficient Car With Good Gas
Changing Cells				
Rate	0.940	0.8	0.940	0.8
Miles	22	22	25	25
Result Cells				
Total Cost	\$536.18	\$484.47	\$470.96	\$426.33

Notes: Current Values column represents values of changing cells at time Scenario Summary Report was created. Changing cells for each scenario are highlighted in gray.

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Filtering

- Lets you select only certain rows from a list.
 - For example, how many times did you make a stop for gas?

When	Seg. No.	Where	Reason	Buy \$	Amt.	Mi.	Remark
8/4/07 5:45	1	Al's house IL	Last pick-up		0.00		We're Off!
8/4/07 6:40	1	Toll Booth IL	Alex Fumbles	All tolls	X 2.85		
8/4/07 8:05	1	DriveThru Joe IL	Espresso				Only driver
8/4/07 9:00	1	Beck's WI	Gas & Go	Gas	A 34.50	241	
8/4/07 9:55	1	Madison WI	Snacks				
8/4/07 12:05	1	St. Paul MN	Gas & Go, Eat	Gas	P 28.95	191	Subway
8/4/07 14:45	1	St. Cloud MN	Stretch/Photo				Pretty Here
8/4/07 15:30	1	Sauk Center MN	Snacks				
8/4/07 16:55	1	Fergus Falls MN	Gas & Go	Gas	P 29.22	205	
8/4/07 19:45	1	Fargo ND	Photo in ND				Pat's First
8/4/07 20:25	1	Valley City ND	Snapper				Junie Food
8/4/07 22:00	1	Carrington ND	Stay Night	Camp	C 21.45		Great Start
8/5/07 7:25	2	Carrington ND	Gas	Gas	A 37.42	252	
8/5/07 7:55	2	Sylveston ND	Photo				It's fat
8/5/07 10:05	2	Minot ND	Gas & Go, Snx	Gas	X 19.64	135	Ice Cream
8/5/07 11:50	2	Portal ND	Photo in CA				AA, Pat, 1st
8/5/07 12:25	2	Estevan SK	Lunch				
8/5/07 13:55	2	Weyburn SK	Gas & Go, Eat	Gas	A 33.82	151	I Scream!
8/5/07 15:45	2	Moose Jaw SK	Snacks				

- Under *Data*, choose *Filter* and then *AutoFilter*

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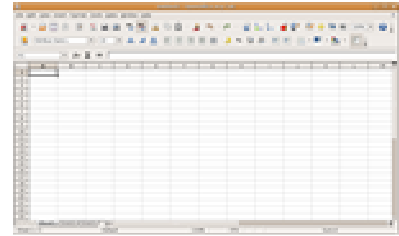
Excel Tricks

- "10 obscure Excel tricks that can expedite common chores"
 - <http://articles.techrepublic.com.com/5100-10878-11-6147543.html>

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Spreadsheet Software

- OpenOffice.org Calc
- Microsoft Excel
- Gnumeric



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