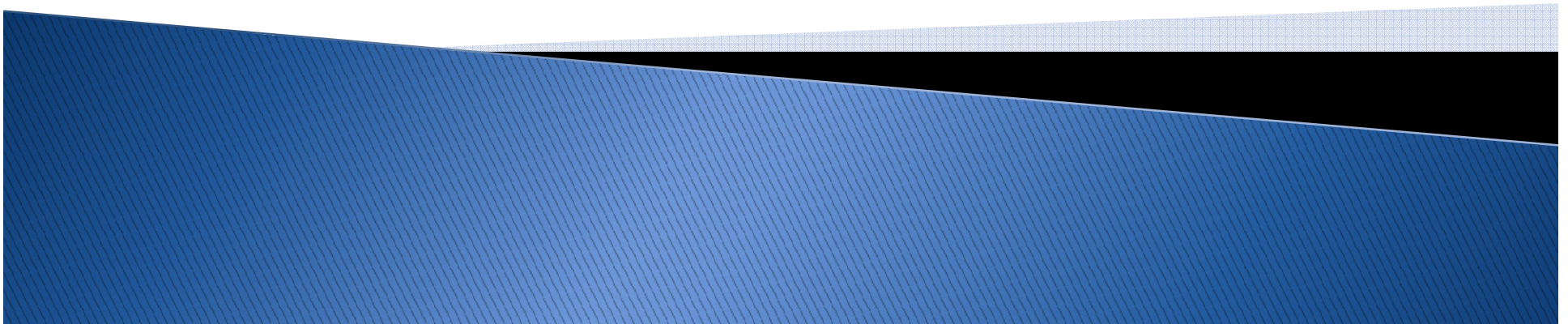


CGN 2420

Formatting a Workbook Using Excel's Ribbon

Instructor: Professor Cora Martinez, PhD
Department of Civil and Environmental Engineering
Florida International University



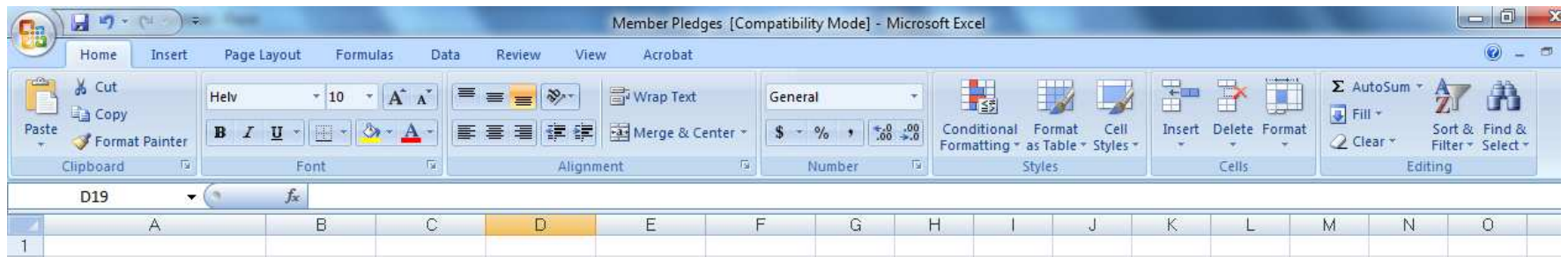
Objectives

- ▶ Use Excel Ribbon to access excel features.
- ▶ Format text, numbers, and dates by controlling:
 - Font style, size and color.
 - Borders and background colors.
 - Text alignment.
 - Special numeric formats and number precision.
- ▶ Copy an existing format using format painter.
- ▶ Use a built-in style or theme to change appearance of a cell.

Objectives (Cont.)

- ▶ Merge a range of cells into a single cell.
- ▶ Delete, insert and hide worksheet columns or rows.
- ▶ Use conditional formatting to highlight cells that meet specified criteria.
- ▶ Apply a built-in table style.
- ▶ Lock cells to prevent unwanted alterations to cell contents

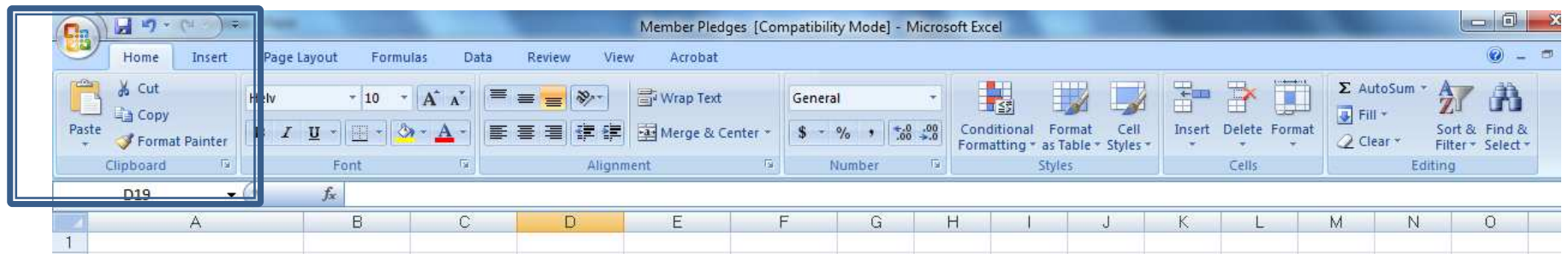
Navigating the Ribbon



In Office 2007, the Home tab of the Ribbon is divided into the following groups:

- ▶ Clipboard
- ▶ Font
- ▶ Alignment
- ▶ Number
- ▶ Styles
- ▶ Cells
- ▶ Editing

Using the Clipboard group



Windows Clipboard is a temporary storage location that allows you to move or duplicate information without retyping it.

- ▶ Paste and Paste Option menu
- ▶ Cut or Copy
- ▶ Format Painter
- ▶ Clipboard expand control

Copying Formats with the Paste Options Button

Using the Paste Options button

	A	B	C	D	E	F	G	H	I	J
1										
2		2008 Sales	Model	R01	R02	R03	Total			
3			X310	3,605	3,996	3,760	11,361			
4			X410	1,875	1,924	2,112	5,911			
5			X510	850	912	750	2,512			
6			Total	6,330	6,832	6,622	19,784			
7										
8										
9		2009 Sales	Model	R01	R02	R03	Total			
10			X310	3,853	3,842	4,035	11,730			
11			X410	2,112	1,801	2,304	6,217			
12			X510	1,025	1,115	912	3,052			
13			Total	6,990	6,758	7,251	20,999			
14										
15										

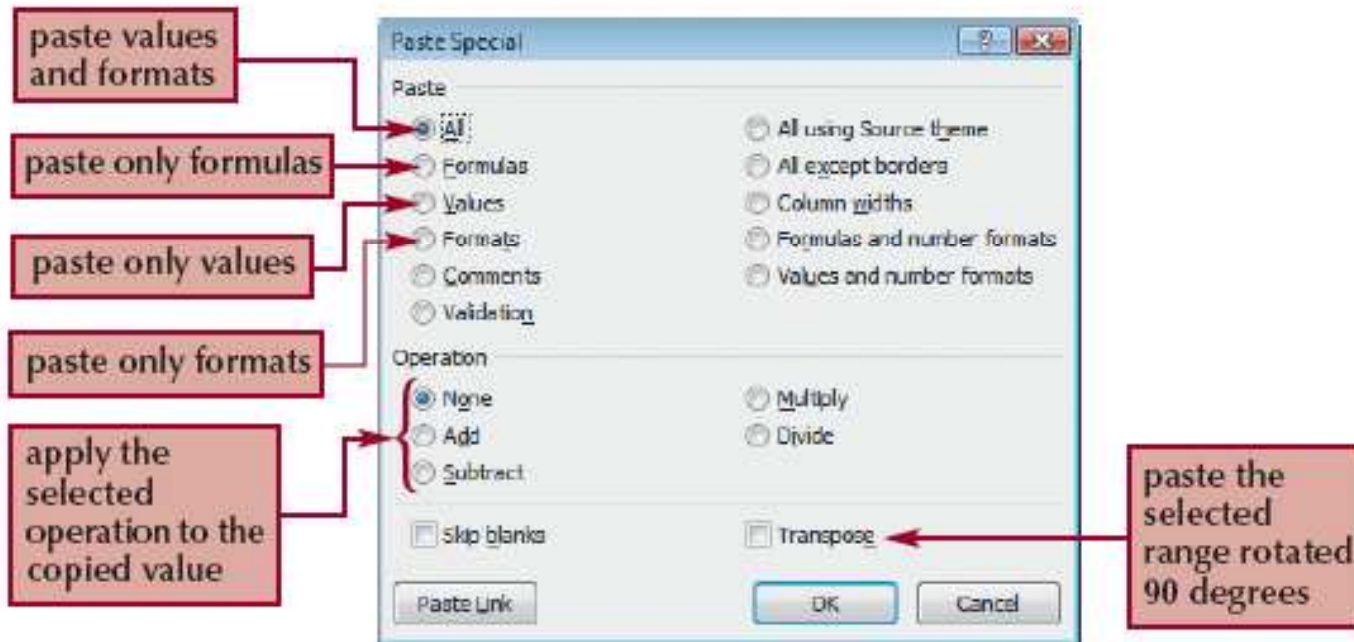
paste only the formats

- Keep Source Formatting
- Use Destination Theme
- Match Destination Formatting
- Values Only
- Values and Number Formatting
- Values and Source Formatting
- Keep Source Column Widths
- Formatting Only
- Link Cells

Paste Options button

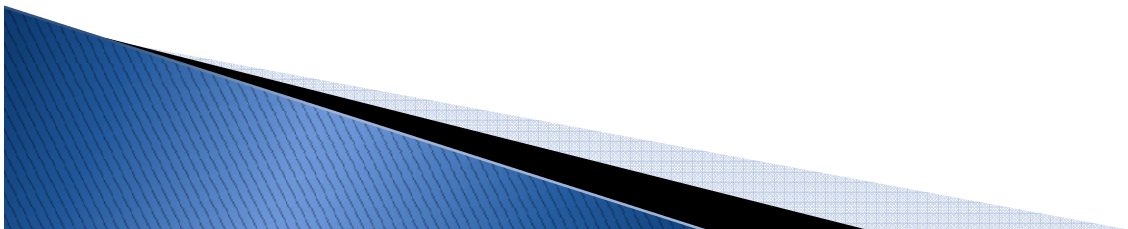
Copying Formats with Paste Special

▶ Paste Special dialog box

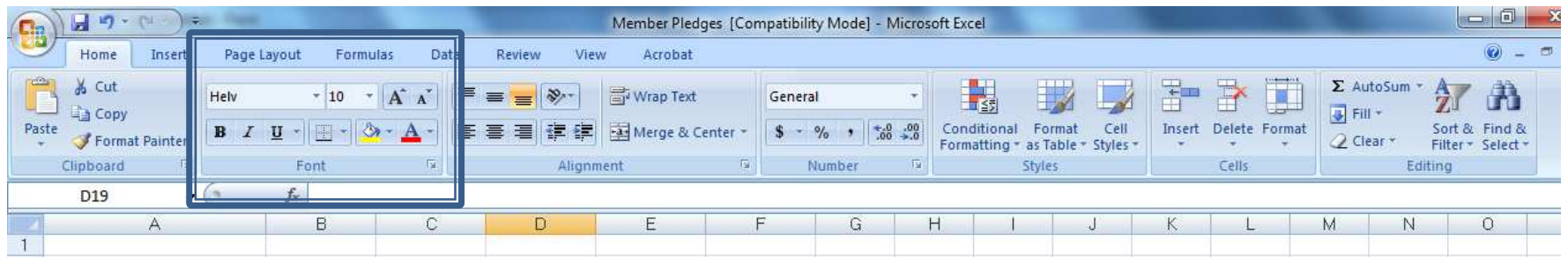


Copying Formats with the Format Painter

- ▶ The Format Painter copies the formatting from one cell or range to another cell or range, without duplicating any of the data.
- ▶ Select the range containing the format you wish to copy.
- ▶ Click the Format Painter button on the Home tab.
- ▶ Click the cell to which you want to apply the format.



Using the Font group



Many of the formatting options available through the Font group in Excel 2007 are very similar to Word processors.

- ▶ Font typeface and point size
- ▶ Bolt, Underline and Italic attributes
- ▶ Border application
- ▶ Cell background color and font color

Formatting Text

The image shows a screenshot of the Microsoft Excel interface. The title bar reads "Comp Sales Report - Microsoft Excel". The ribbon is set to the "Font" tab. The font dropdown menu is open, showing "Calibri" selected with a size of "11". The menu is divided into "Theme Fonts" and "All Fonts".

Annotations with red boxes and arrows point to specific elements:

- Font arrow:** Points to the font name dropdown (currently showing "Calibri").
- Font Size arrow:** Points to the font size dropdown (currently showing "11").
- theme fonts:** Points to the "Theme Fonts" section of the dropdown menu, which includes "Cambria (Headings)" and "Calibri (Body)".
- theme and non-theme fonts:** Points to the "All Fonts" section of the dropdown menu, which lists various fonts like "ABIGAIL", "Agency FB", "Albertus MT", "Arial", "Arial Black", etc.

The spreadsheet content is partially visible, showing columns C through G and rows 1 through 17. The text "2009 sales of the X310 heart rate monitor" is visible in cell C5.

Working with Color

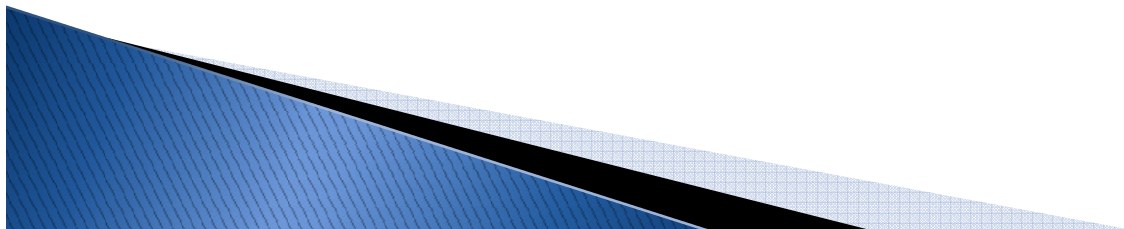
Font colors

The screenshot displays the Microsoft Excel interface with the font color palette open. The palette is divided into 'Automatic', 'Theme Colors', and 'Standard Colors' sections. A red box with the text '10 theme colors (each has 5 variations)' points to the 'Theme Colors' section. Another red box with the text 'standard colors' points to the 'Standard Colors' section. A third red box with the text 'ScreenTip displays the color name' points to a tooltip that says 'Blue' which appears over the blue color swatch in the 'Standard Colors' section. The background shows a spreadsheet with the text 'ExerComp' in cell A1.

10 theme colors (each has 5 variations)

standard colors

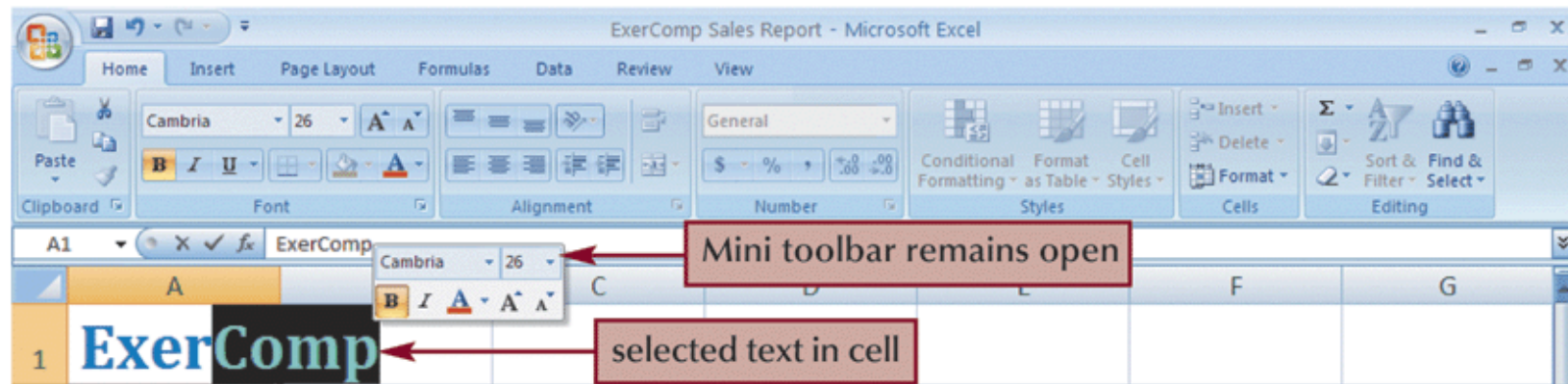
ScreenTip displays the color name



Formatting Text Selections

- ▶ The Mini toolbar appears when you select part of the cell text. This bar contains buttons for commonly used text formats.

▶ Mini toolbar used to format text



Adding Cell Borders

- ▶ You can add borders to the left, top, right, or bottom of a cell or range, around an entire cell, or around the outside edges of a range using the Border button arrow.

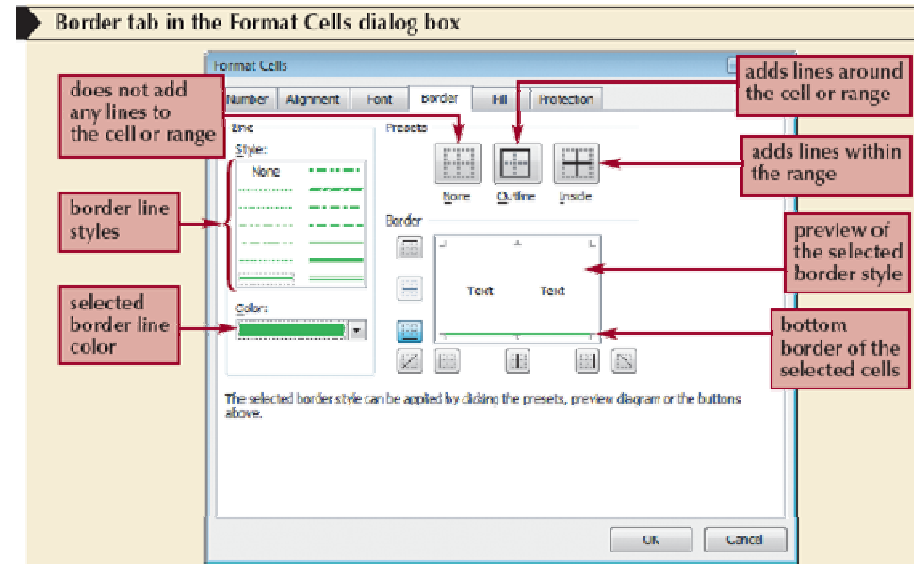
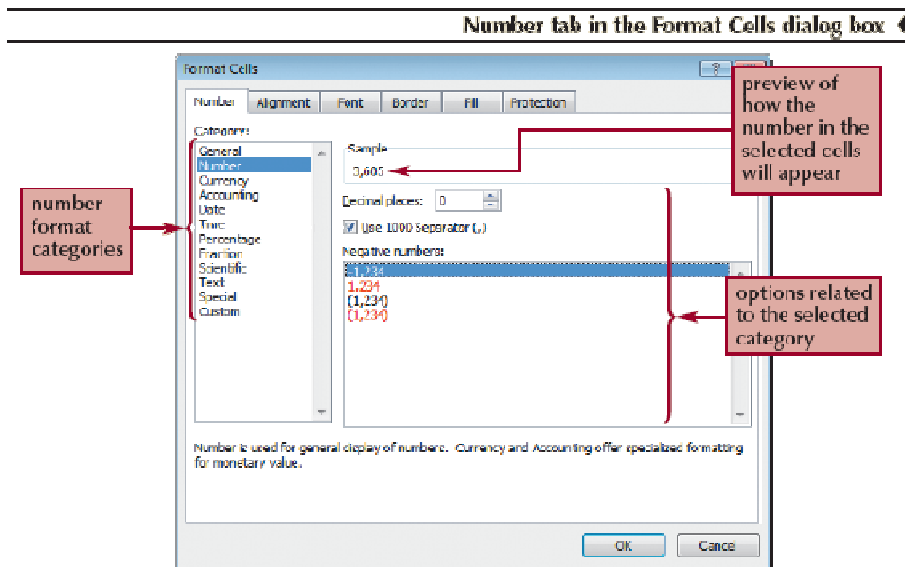
Borders added to cells

Region	2008 Sales	2009 Sales	Increase	% Increase
R01	3,605	3,853	248	6.88%
R02	3,966	3,842	(124)	-3.13%
R03	3,760	4,035	275	7.31%
R04	3,777	4,063	286	7.57%
R05	3,974	3,725	(249)	-6.27%
R06	3,656	3,937	281	7.69%
R07	3,554	3,875	321	9.03%
R08	3,844	3,844	-	0.00%
Total	30,136	31,174	1,038	3.44%

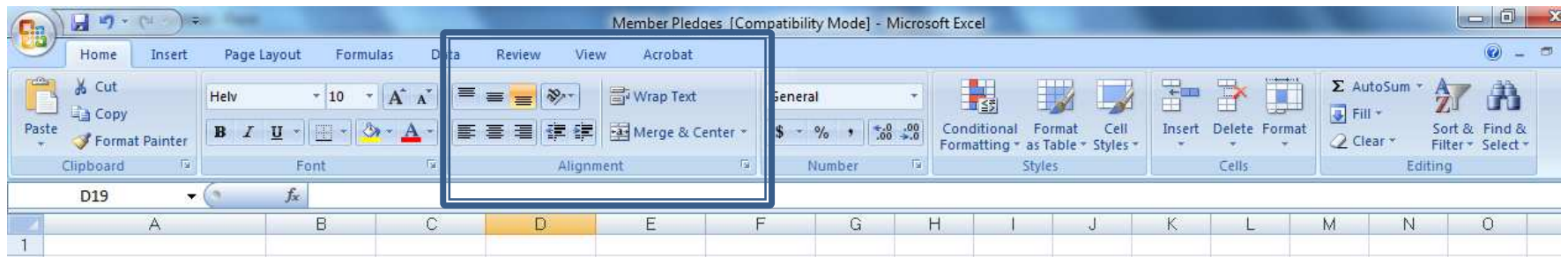
Region	2008 Sales	2009 Sales	Increase	% Increase
R01	\$ 104,364.75	\$ 115,397.35	\$ 11,032.60	10.57%
R02	114,815.70	115,067.90	252.20	0.22%
R03	108,852.00	120,848.25	11,996.25	11.02%
R04	109,344.15	121,686.85	12,342.70	11.29%
R05	115,047.30	111,563.75	(3,483.55)	-3.03%
R06	105,841.20	117,913.15	12,071.95	11.41%
R07	102,888.30	116,056.25	13,167.95	12.80%
R08	111,283.80	115,127.80	3,844.00	3.45%
Total	\$ 872,437.20	\$ 933,661.30	\$ 61,224.10	7.02%

Working with the Format Cells Dialog Box

- ▶ The Format Cells dialog box has six tabs, each focusing on a different set of formatting options.



Using the Alignment group














The alignment group on the Ribbon's Home tab provides access to:

- ▶ Horizontal and vertical alignment
- ▶ Cell indentation control
- ▶ Rotate cell content
- ▶ Wrap text
- ▶ Merge cells and Center text

Aligning Cell Content (Cont.)

Alignment buttons

Button	Description
	Aligns the cell content with the cell's top edge
	Vertically centers the cell content within the cell
	Aligns the cell content with the cell's bottom edge
	Aligns the cell content with the cell's left edge
	Horizontally centers the cell content within the cell
	Aligns the cell content with the cell's right edge
	Decreases the size of the indentation used in the cell
	Increases the size of the indentation used in the cell
	Rotates the cell content to an angle within the cell
	Forces the cell text to wrap within the cell borders
	Merges the selected cells into a single cell

Indenting Cell Content

- ▶ You increase the indentation by roughly one character each time when you click the Increase Indent button.

Centered and indented text

The screenshot shows an Excel spreadsheet titled "ExerComp Sales Report - Microsoft Excel". The spreadsheet contains two tables of sales data. The first table (rows 6-15) shows sales by region for 2008 and 2009, with columns for "Units Sold", "Region", "2008 Sales", "2009 Sales", "Increase", and "% Increase". The second table (rows 17-26) shows sales by region for 2008 and 2009, with columns for "Region", "2008 Sales", "2009 Sales", "Increase", and "% Increase".

Annotations in the image include:

- A red box labeled "text indented one space" with arrows pointing to the "Region" column in both tables.
- A red box labeled "centered text" with arrows pointing to the "Increase" and "% Increase" columns in both tables.

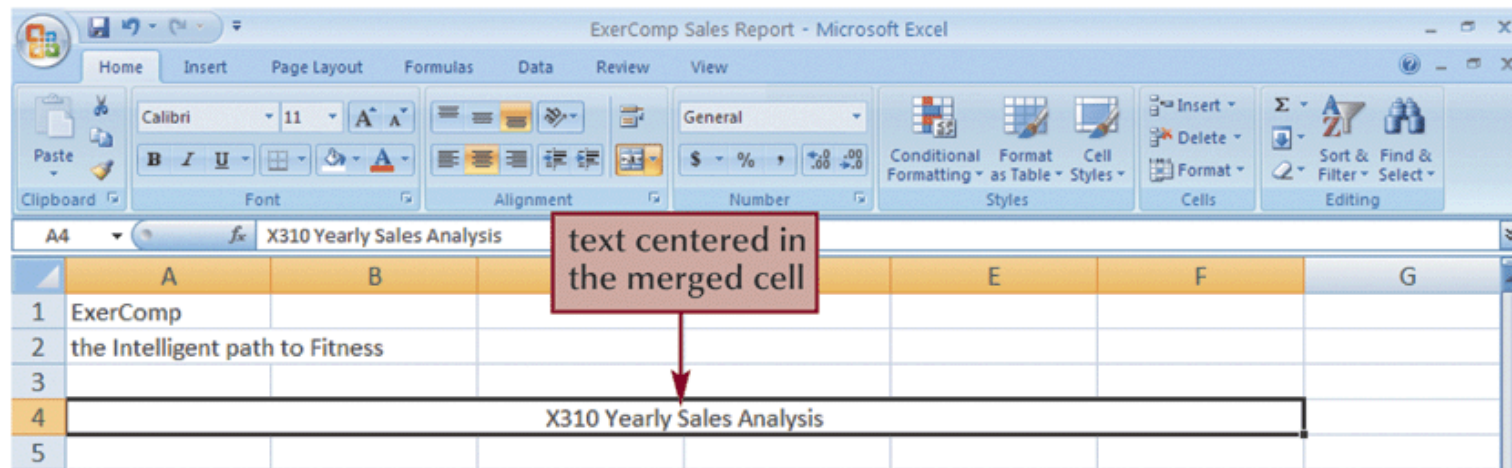
Units Sold	Region	2008 Sales	2009 Sales	Increase	% Increase
	R01	3,605	3,853	248	6.88%
	R02	3,966	3,842	(124)	-3.13%
	R03	3,760	4,035	275	7.31%
	R04	3,777	4,063	286	7.57%
	R05	3,974	3,725	(249)	-6.27%
	R06	3,656	3,937	281	7.69%
	R07	3,554	3,875	321	9.03%
	R08	3,844	3,844	-	0.00%
	Total	30,136	31,174	1,038	3.44%

Region	2008 Sales	2009 Sales	Increase	% Increase
R01	\$ 104,364.75	\$ 115,397.35	\$ 11,032.60	10.57%
R02	114,815.70	115,067.90	252.20	0.22%
R03	108,852.00	120,848.25	11,996.25	11.02%
R04	109,344.15	121,686.85	12,342.70	11.29%
R05	115,047.30	111,563.75	(3,483.55)	-3.03%
R06	105,841.20	117,913.15	12,071.95	11.41%
R07	102,888.30	116,056.25	13,167.95	12.80%
R08	111,283.80	115,127.80	3,844.00	3.45%
Total	\$ 872,437.20	\$ 933,661.30	\$ 61,224.10	7.02%

Merging Cells

- ▶ One way to align text over several columns or rows is to merge, or combine, several cells into one cell.

Merged range with centered text



Rotating Cell Content

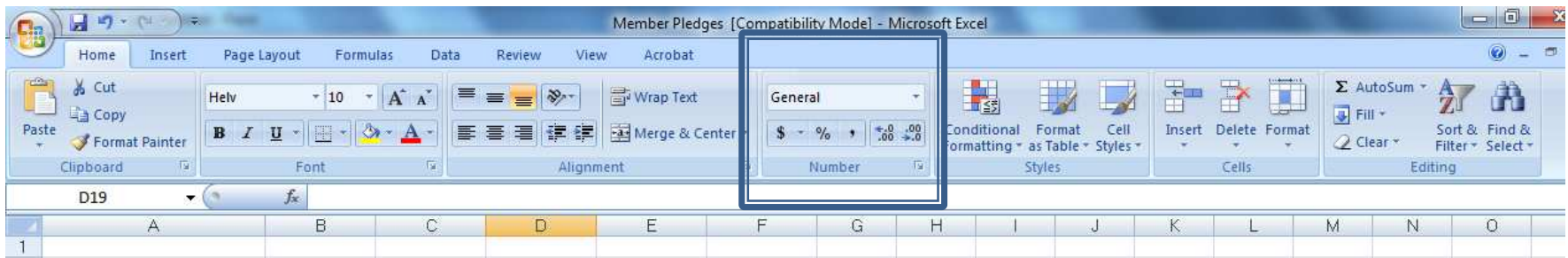
Merged and rotated cell text

The image shows a screenshot of an Excel spreadsheet with two tables. The first table, starting at row 6, has a vertical label 'Units Sold' in cell A6:A15. The second table, starting at row 17, has a vertical label 'Revenue' in cell A17:A26. A callout box with a red border and text 'rotated labels take up less space in the merged cells' points to the labels in both tables. The spreadsheet interface includes a ribbon with 'Documentation', 'Yearly Sales', and 'Monthly Sales' tabs, and a status bar at the bottom showing 'Ready' and '120%' zoom.

Region	2008 Sales	2009 Sales	Increase	% Increase
R01	3,605	3,853	248	6.88%
R02	3,966	3,842	(124)	-3.13%
R03	3,760	4,035	275	7.31%
R04	3,777	4,063	286	7.57%
R05	3,974	3,725	(249)	-6.27%
R06	3,656	3,937	281	7.69%
R07	3,554	3,875	321	9.03%
R08	3,844	3,844	-	0.00%
Total	30,136	31,174	1,038	3.44%

Region	2008 Sales	2009 Sales	Increase	% Increase
R01	\$ 104,364.75	\$ 115,397.35	\$ 11,032.60	10.57%
R02	114,815.70	115,067.90	252.20	0.22%
R03	108,852.00	120,848.25	11,996.25	11.02%
R04	109,344.15	121,686.85	12,342.70	11.29%
R05	115,047.30	111,563.75	(3,483.55)	-3.03%
R06	105,841.20	117,913.15	12,071.95	11.41%
R07	102,888.30	116,056.25	13,167.95	12.80%
R08	111,283.80	115,127.80	3,844.00	3.45%
Total	\$ 872,437.20	\$ 933,661.30	\$ 61,224.10	7.02%

Formatting Numbers



The number group on the Ribbon's Home tab provides access to numeric formats, including:

- ▶ Currency and accounting format
- ▶ Percentage
- ▶ Thousands separator (comma)
- ▶ Increase and decrease decimals
- ▶ Named formats

Formatting Numbers (cont.)

Worksheet after formatting numbers

Units Sold	Region	2008 Sales	2009 Sales	Increase	% Increase
	R01	3,605	3,853	248	6.88%
	R02	3,966	3,842	(124)	-3.13%
	R03	3,760	4,035	275	7.31%
	R04	3,777	4,063	286	7.57%
	R05	3,974	3,725	(249)	-6.27%
	R06	3,656	3,937	281	7.69%
	R07	3,554	3,875	321	9.03%
	R08	3,844	3,844	-	0.00%
	Total	30,136	31,174	1,038	3.44%

Revenue	Region	2008 Sales	2009 Sales	Increase	% Increase
	R01	\$ 104,364.75	\$ 115,397.35	\$ 11,032.60	10.57%
	R02	114,815.70	115,067.90	252.20	0.22%
	R03	108,852.00	120,848.25	11,996.25	11.02%
	R04	109,344.15	121,686.85	12,342.70	11.29%
	R05	115,047.30	111,563.75	(3,483.55)	-3.03%
	R06	105,841.20	117,913.15	12,071.95	11.41%
	R07	102,888.30	116,056.25	13,167.95	12.80%
	R08	111,283.80	115,127.80	3,844.00	3.45%
	Total	\$ 872,437.20	\$ 933,661.30	\$ 61,224.10	7.02%

units include commas and no decimal places

percentages include two decimal places and symbol

first and last rows display the currency symbol

revenues include commas and two decimal places

Formatting Dates and Times

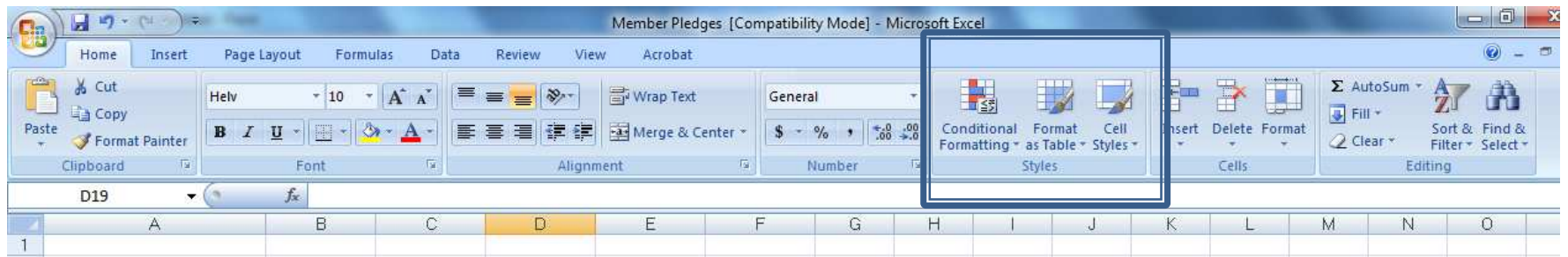
- ▶ Although dates and times in Excel appear as text, they are actually numbers that can be used to measure interval between the specified dates.

Formatted date ◀

The screenshot shows the Microsoft Excel interface. The 'Number' tab is selected in the ribbon, and the 'Date' dropdown menu is open. A red box labeled 'Number Format arrow' points to the 'Date' dropdown. Another red box labeled 'number format of the selected cell' points to the 'Date' dropdown. In the spreadsheet, cell B5 contains the date 'Monday, January 11, 2010'. A red box labeled 'date in the Long Date format' points to this date. The spreadsheet also shows the 'ExerComp' logo and the author 'Tom Uhen'.

	A	B	C	D
1	ExerComp			
2	<i>the Intelligent path to Fitness</i>			
3				
4	Author	Tom Uhen		
5	Date			

Using the Styles group



The Styles group on the Ribbon's Home tab can be used to:

- ▶ Apply pre-defined styles to cells
- ▶ Create and modify styles
- ▶ Create a table within a worksheet
- ▶ Apply conditional formatting to highlight parts of a data set

Applying Styles (Cont.)

Cell Styles gallery

gallery of built-in styles

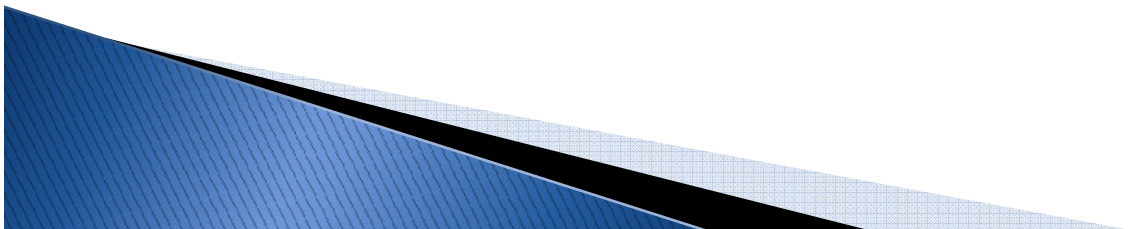
Heading 1 style

Live Preview of the Heading 1 style

Region	2008 Sales
R01	3,605
R02	3,966
	3,760
	3,777
	3,974
R06	3,656
R07	3,554

Applying a Table Style to an Existing Table

- ▶ You can treat a range of data as a distinct object in a worksheet known as an Excel table.
- ▶ Select the range to which you want to apply the table style.
- ▶ In the Styles group on the Home tab, click the Format as Table button.
- ▶ Click a table style in the Table Style gallery.



Applying a Table Style to an Existing Table (Cont.)

Banded rows effect applied manually and with a table style

	A	B	C	D	E
1	Region	2008 Sales	2009 Sales	Difference	
2	R01	3,605	3,853	248	
3	R02	3,966	3,842	-124	
4	R03	3,760	4,035	275	
5	R04	3,777	4,063	286	
6	R05	3,974	3,725	-249	
7	R06	3,656	3,937	281	
8	R07	3,554	3,875	321	
9	R08	3,844	3,844	0	
10	Total	30,136	31,174	1,038	
11					

fill color is pink

fill color is changed to white, retaining the banded rows effect

fill color remains pink, losing the banded rows effect

original table with banded rows

	A	B	C	D	E
1	Region	2008 Sales	2009 Sales	Difference	
2	R01	3,605	3,853	248	
3	R02	3,966	3,842	-124	
4	R03	3,760	4,035	275	
5	R07	3,554	3,875	321	
6	R08	3,844	3,844	0	
7	Total	18,729	19,449	720	
8					

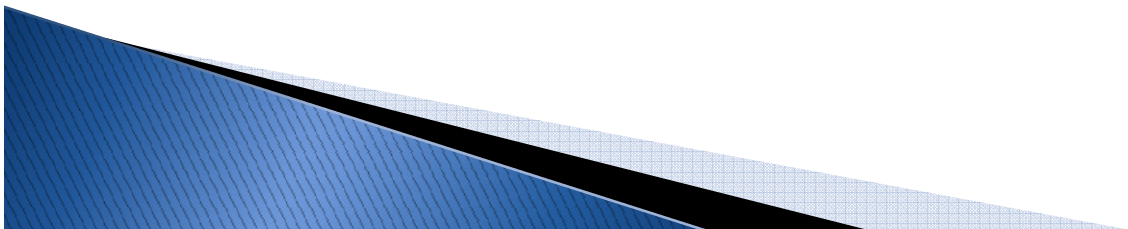
table formatted with a table style retains banded rows after rows are deleted

	A	B	C	D	E
1	Region	2008 Sales	2009 Sales	Difference	
2	R01	3,605	3,853	248	
3	R02	3,966	3,842	-124	
4	R03	3,760	4,035	275	
5	R07	3,554	3,875	321	
6	R08	3,844	3,844	0	
7	Total	18,729	19,449	720	
8					

table formatted manually loses banded rows after rows are deleted

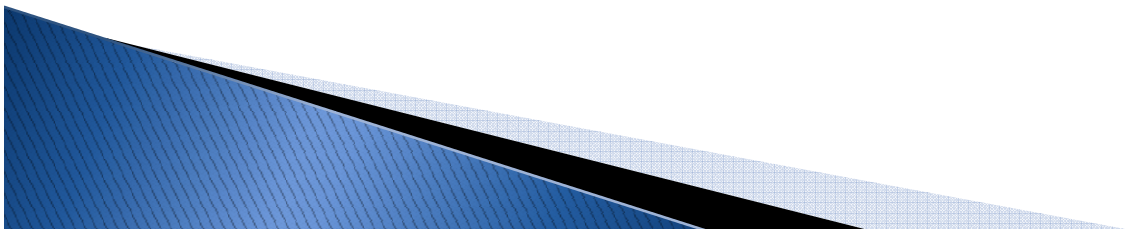
Introducing Conditional Formats

- ▶ Select the range in which you want to highlight cells that match a specified rule.
- ▶ In the Styles group, click the Conditional Formatting button, point to Highlight Cells Rules or Top/Bottom Rules, and then click the appropriate rule.
- ▶ Select the appropriate options in the dialog box, and then click the OK button.



Adding Data Bars

- ▶ A data bar is a horizontal bar added to the background of a cell to provide a visual indicator of the cell's value.
- ▶ Select the cell(s).
- ▶ In the Styles group on the Home tab, click the **Conditional Formatting** button, point to **Data Bars**, and then click the **DataBar** option you wish to apply.



Adding Data Bars (Cont.)

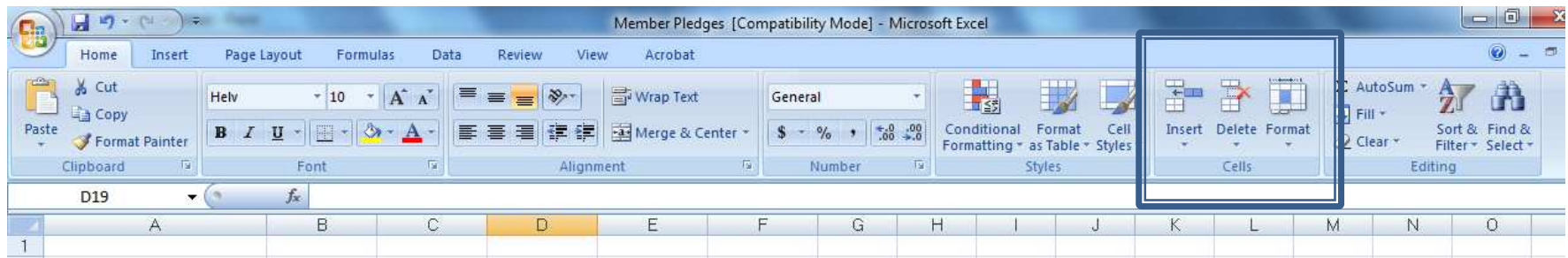
▶ Data bars added to the regional monthly sales data

January sales for the R01 region are lower than expected

Month	R01	R02	R03	R04	R05	R06	R07	R08	Total
Jan	288	345	326	307	364	310	316	352	2,608
Feb	278	304	294	297	310	278	275	294	2,330
Mar	294	320	297	304	316	291	297	307	2,426
Apr	288	313	300	300	320	284	275	295	2,375
May	284	329	304	297	313	288	275	310	2,400
Jun	313	339	316	315	326	307	288	329	2,533
Jul	313	332	320	310	313	300	304	336	2,528
Aug	294	339	315	339	339	304	307	323	2,560
Sep	284	310	310	304	316	284	281	304	2,393
Oct	284	326	304	297	316	281	281	300	2,389
Nov	339	364	326	320	364	345	294	336	2,688
Dec	346	345	348	387	377	384	361	358	2,905
Total	3,605	3,966	3,760	3,777	3,974	3,656	3,554	3,844	30,136

Month	R01	R02	R03	R04	R05	R06	R07	R08	Total
Jan	352	364	345	352	336	361	325	342	2,777
Feb	297	276	310	313	288	300	297	300	2,431

Using the Cells group



The Cells group on the Ribbon's Home tab provide access to buttons allowing you to:

- ▶ Insert cells, rows and columns
- ▶ Delete cells, rows and columns
- ▶ Resize rows and columns
- ▶ Hide and unhide rows, columns and worksheets
- ▶ Protect sheet

Inserting a Column or Row

- ▶ Select the column(s) or row(s) where you want to insert the new column(s) or row(s); Excel will insert the same number of columns or rows that you select.
- ▶ Use Ribbon options Home/Cell/ Insert or
- ▶ Right-click the mouse and then click Insert on the shortcut menu.

Inserting a Column or Row (Cont.)

New column inserted in the worksheet

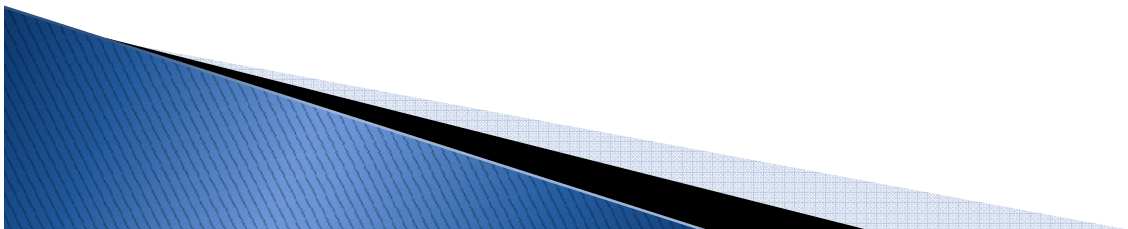
	A	B	C	D	E	F	G
1	Last	First	Address	Phone	Date	DVDs	Price per DVD
2	Dawes	Gregory	402 Elm St. Merrill, MI 48637	(989) 555-3433	3/13/2010	7	\$17.29
3	Garcia	Susan	1025 Drake Ave. Exeter, NH 03833	(603) 555-1091	3/14/2010	25	\$15.79
4	Torbet	Dr. Lilla	5 North Ln. Oswego, NY 13126	(315) 555-7823	3/17/2010	32	\$12.99
5	Rhoden	Tony	24 Mountain Dr. Auburn, ME 04210	(207) 555-9915	3/24/2010	20	\$15.79
6							
7							

New row inserted in the worksheet

	A	B	C	D	E	F	G	H	I
1	Last	First	Address	Phone	Date	DVDs	Price per DVD		
2	Ferris	Andrew	135 College Ave. Bar Harbor, ME 04609	(207) 555-0101	3/5/2010	2	\$17.29		
3	Dawes	Gregory	402 Elm St. Merrill, MI 48637	(989) 555-3433	3/13/2010	7	\$17.29		
4	Garcia	Susan	1025 Drake Ave. Exeter, NH 03833	(603) 555-1091	3/14/2010	25	\$15.79		
5	Torbet	Dr. Lilla	5 North Ln. Oswego, NY 13126	(315) 555-7823	3/17/2010	32	\$12.99		
6	Rhoden	Tony	24 Mountain Dr. Auburn, ME 04210	(207) 555-9915	3/24/2010	20	\$15.79		
7									

Deleting and Clearing a Column or Row

- ▶ Clearing data from a worksheet removes the data but leaves the blank cells.
- ▶ Deleting data from the worksheet removes both the data and the cells.



Inserting or Deleting a Cell range

Cells inserted within a cell range

	A	B	C	D	E	F	G	H	I
1									
2		A	B	C	D	E			
3		A	B	C	D	E			
4		A	B	C	D	E			
5		A	B	C	D	E			
6		A	B	C	D	E			
7		A	B	C	D	E			
8		A	B	C	D	E			
9		A	B	C	D	E			
10									
11									
12									
13									

selected range

new cells are inserted within the range, shifting the existing cells to the right

	A	B	C	D	E	F	G	H	I
1									
2		A	B	C	D	E			
3		A			B	C	D	E	
4		A			B	C	D	E	
5		A			B	C	D	E	
6		A			B	C	D	E	
7		A			B	C	D	E	
8		A			B	C	D	E	
9		A	B	C	D	E			
10									
11									
12									
13									

inserted cells

existing cells shifted right two columns

	A	B	C	D	E	F	G	H	I
1									
2		A	B	C	D	E			
3		A	B	C	D	E			
4		A	B	C	D	E			
5		A	B	C	D	E			
6		A	B	C	D	E			
7		A	B	C	D	E			
8		A	B	C	D	E			
9		A	B	C	D	E			
10									
11									
12									
13									

selected range

new cells are inserted within the range, shifting the existing cells down

	A	B	C	D	E	F	G	H	I
1									
2		A	B	C	D	E			
3		A				E			
4		A				E			
5		A	B	C	D	E			
6		A	B	C	D	E			
7		A	B	C	D	E			
8		A	B	C	D	E			
9		A	B	C	D	E			
10			B	C	D	E			
11			B	C	D	E			
12									
13									

inserted cells

existing cells shifted down two rows

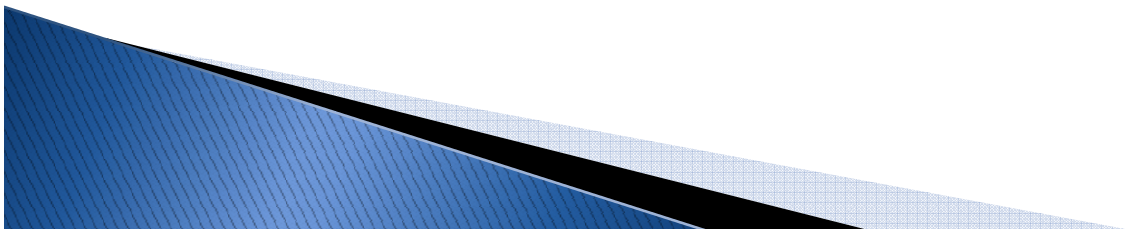
Changing Column Width and Row Height

- ▶ Autofitting eliminates any empty space by matching the column to the width of its longest cell entry or the row to the height of its tallest cell entry.
- ▶ Double-click the right border of a column heading or the bottom border of a row heading to AutoFit the column or row to the cell contents (or select one or more column or rows, click the Home tab on the Ribbon, click the Format button in the Cells group, and then click AutoFit Column Width or AutoFit Row Height).

Changing Column Width and Row Height (Cont.)

Or

- ▶ Drag the right border of the column heading left to decrease the column width or right to increase the column width.
- ▶ Drag the bottom border of the row heading up to decrease the row height or down to increase the row height.

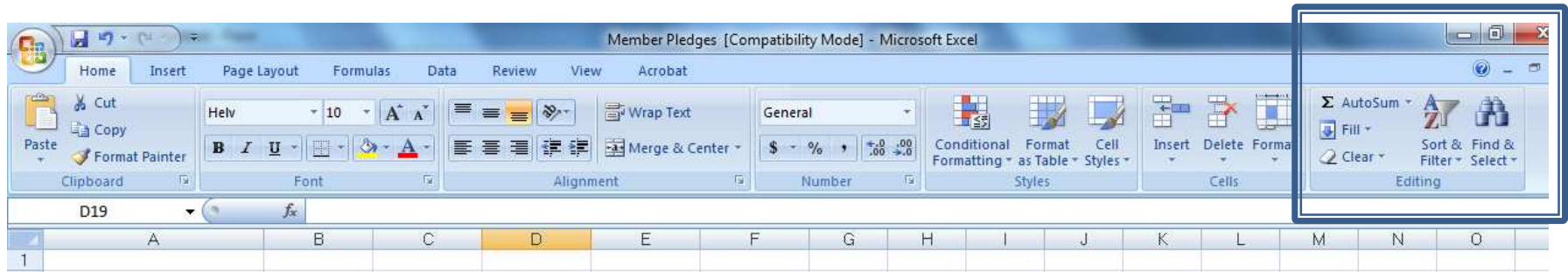


Protecting Worksheets

Protecting the worksheet limits user's access to the calculations in locked cells.

- ▶ Cells with Normal style are, by default, locked.
- ▶ Select cells to be unlocked.
- ▶ Use Format cells window to unlocked them.
- ▶ To protect worksheet use Home/Cells/Format/Protect Sheet.
- ▶ Enter a password (password will be used to unprotect the sheet again).

Using the Editing group



The Editing group on the Ribbon's Home tab provide access to buttons allowing you to:

- ▶ Insert functions
- ▶ Fill cells, rows and columns
- ▶ Clear cells, rows and columns
- ▶ Sort and filter data
- ▶ Use commands Find and Select

Using Find and Replace

- ▶ You can use the Find command to locate numbers and text in the workbook and the Replace command to overwrite them.

Find and Replace dialog box

The screenshot shows the 'Find and Replace' dialog box with the following callout boxes:

- search value**: Points to the 'Find what:' text box containing 'Ave.'
- replace value**: Points to the 'Replace with:' text box containing 'Avenue'
- limits the search to the current sheet**: Points to the 'Within:' dropdown menu set to 'Sheet'
- replaces all occurrences of the search value**: Points to the 'Replace All' button
- replaces the current occurrence of the search value**: Points to the 'Replace' button
- highlights all occurrences of the search value**: Points to the 'Find All' button
- finds the next occurrence of the search value**: Points to the 'Find Next' button

The dialog box also includes options for 'Match case', 'Match entire cell contents', and 'Look in:' (set to 'Formulas').