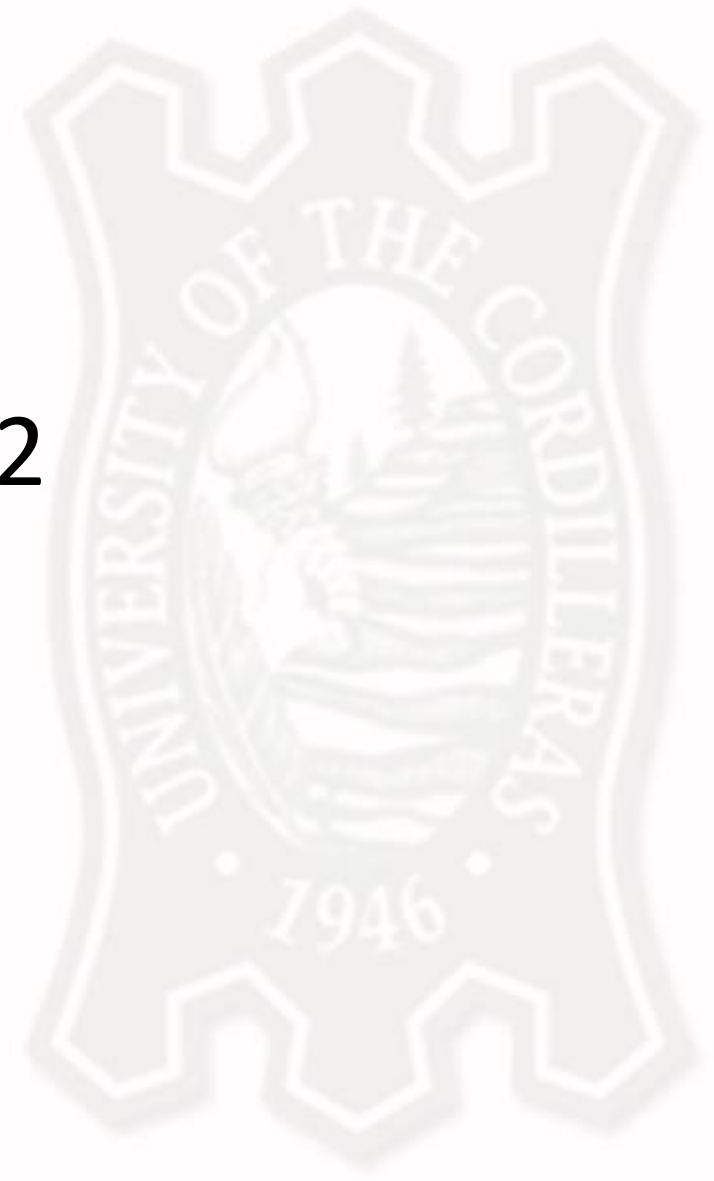


# Excel Tutorial 2

## Formatting a Workbook



**College of  
Information Technology  
and Computer Science**

**CENTER OF EXCELLENCE  
in Information Technology**

# Objectives

- Format text, numbers, and dates
- Change font colors and fill colors
- Merge a range into a single cell
- Apply a built-in cell style
- Select a different theme



# Objectives

- Apply a built-in table style
- Add conditional formats to tables with highlight rules and data bars
- Hide worksheet rows
- Insert print titles, set print areas, and insert page breaks
- Enter headers and footers

# Formatting Workbooks

- **Formatting** is the process of changing a workbook's appearance by defining the fonts, styles, colors, and decorative features
- A **theme** is a collection of formatting that specifies the fonts, colors, and graphical effects used throughout the workbook
- As you work, **Live Preview** shows the effects of formatting options on the workbook's appearance before you apply them

The screenshot shows the Microsoft Excel interface. The 'Font' tab is selected in the ribbon. The 'Font list' (the dropdown arrow next to the font name) is highlighted with a red box. The 'Font Size arrow' (the dropdown arrow next to the font size) is also highlighted with a red box. The spreadsheet area shows a table with columns C through G and rows 1 through 10. The text '2009 sales of the X310 heart rate monitor' is entered in cell C10.

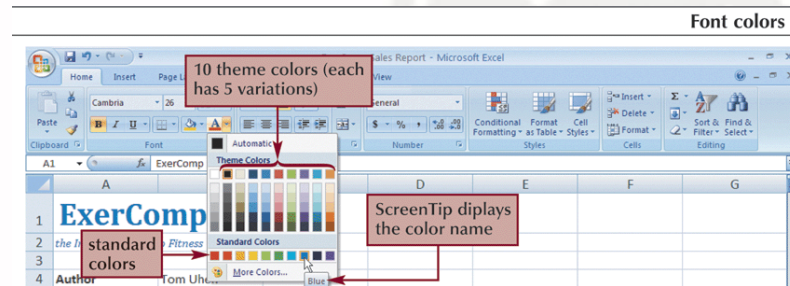
- 
- The screenshot shows the 'Font' ribbon in Microsoft Excel. The 'Font' group is highlighted with a red box and labeled 'Font arrow'. The 'Font Size' group is highlighted with a red box and labeled 'Font Size arrow'. The font family dropdown menu is highlighted with a red box and labeled 'theme fonts'. The font size dropdown menu is highlighted with a red box and labeled 'theme and non-theme fonts'. The font family dropdown menu shows a list of fonts, including 'Cambria', 'Calibri', 'Arial', 'Arial Black', 'Arial Rounded MT Bold', 'Arial Unicode MS', 'AvantGarde', 'Baskerville Old Face', 'Batang', and 'BatangChe'.

- **Serif fonts**
- **Sans serif fonts**
- **Theme font**
- **Non-theme font**

- **Font Style**
- **Font Size**
  - Measured in **points**

# Working with Color

- **Theme colors** are the 12 colors that belong to the workbook's theme
- **Standard** and **custom colors**
- Apply a color by selecting a cell or range of cells, clicking the Font Color or Fill Color button arrow, and then selecting an appropriate color



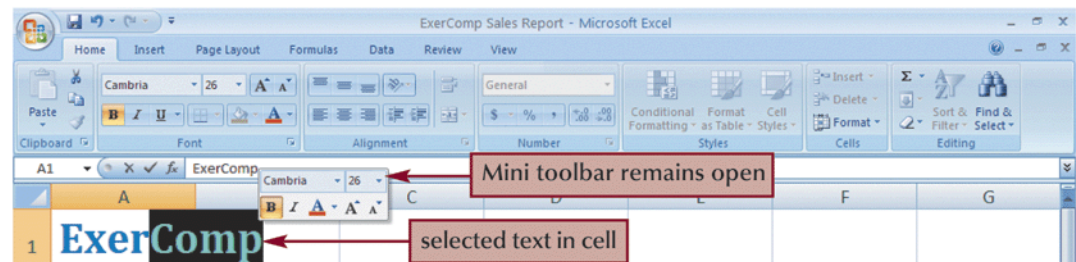


# Formatting Text Selections

- The **Mini toolbar** appears when you select text and contains buttons for commonly used text formats

Figure 2-5

Mini toolbar used to format text

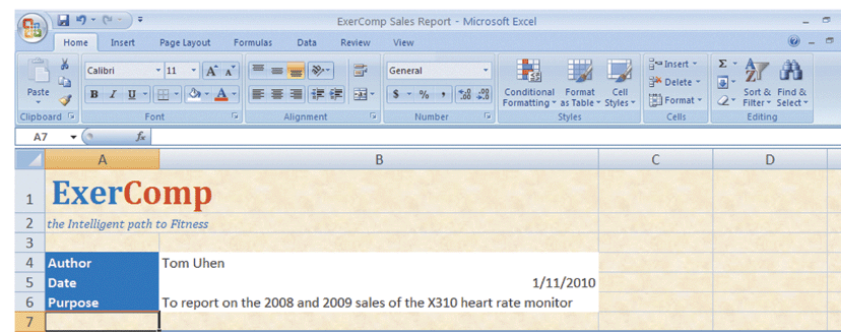


# Setting a Background Image

- You can use a picture or image as the background for all the cells in a worksheet
- Click the **Page Layout** tab on the Ribbon
- Click the **Background** button
- Locate the background, and then click the **Insert** button

Background image added to the Documentation sheet

Figure 2-6





# Formatting Data

- By default, values appear in the **General number format**, which, for the most part, displays numbers exactly as you enter them
- The Number group on the Home tab has buttons for formatting the appearance of numbers
- **Comma style** button
- **Decrease Decimal** button
- **Percent Style** button
- **Increase Decimal** button
- **Accounting Number Format** button

# Formatting Data

Figure 2-8 Worksheet after formatting numbers

	A	B	C	D	E	F	G
6	Units Sold	Region	2008 Sales	2009 Sales	Increase	% Increase	
7		R01	3,605	3,853	248	6.88%	
8		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%	
13		R07	3,554	3,875	321	9.03%	
14		R08	3,844	3,844	-	0.00%	
15		Total	30,136	31,174	1,038	3.44%	
16							
17	Revenue	Region	2008 Sales	2009 Sales	Increase	% Increase	
18		R01	\$ 104,364.75	\$ 115,397.35	\$ 11,032.60	10.57%	
19		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%	
25		R08	111,283.80	115,127.80	3,844.00	3.45%	
26		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

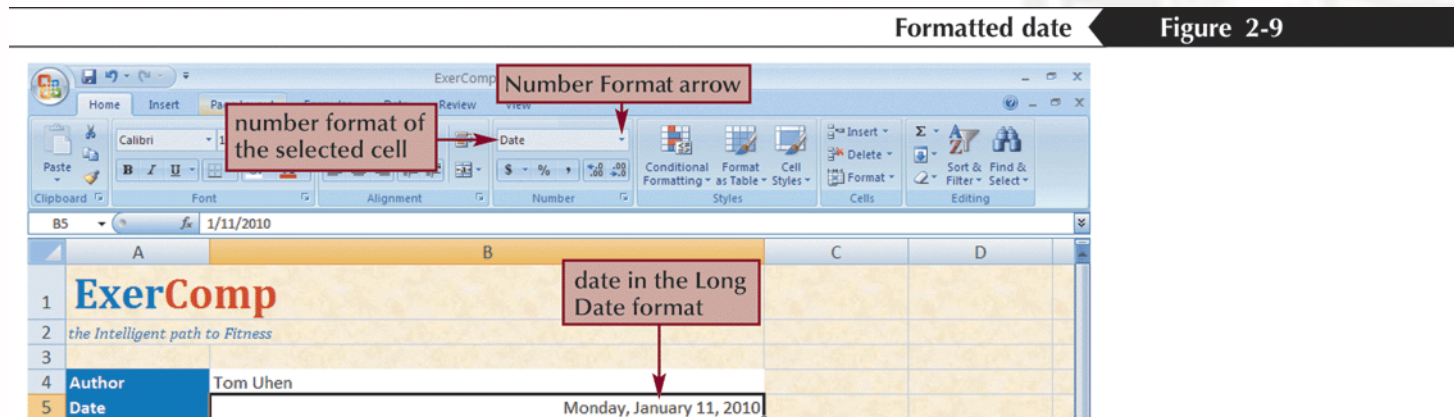
first and last rows display the currency symbol

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 measure the interval between the specified date and time and January 1, 1900 at 12:00 a.m.














# Aligning Cell Content

- In addition to left and right alignments, you can change the vertical and horizontal alignments of cell content to make a worksheet more readable
- Alignment buttons are located on the Home tab

Figure 2-10

## Alignment buttons

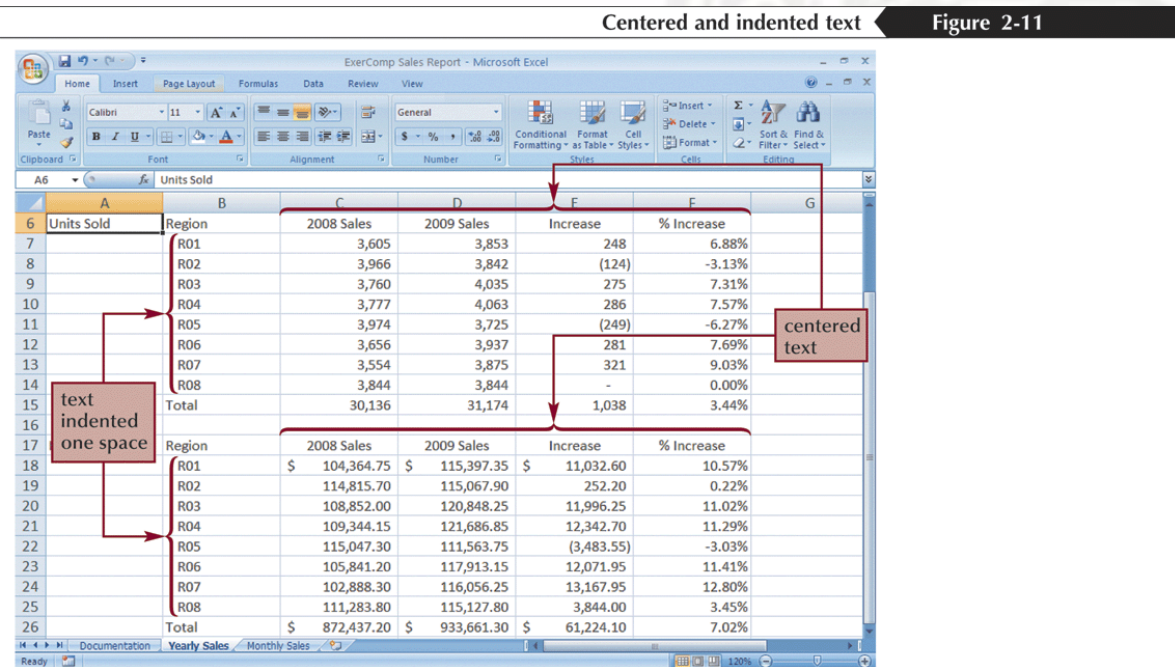
Button	Description
	Aligns the cell content with the cell's top edge
	Vertically centers the cell content within the cell
	Aligns the cell content with the cell's bottom edge
	Aligns the cell content with the cell's left edge
	Horizontally centers the cell content within the cell
	Aligns the cell content 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 you click the Increase Indent button in the Alignment group on the Home tab

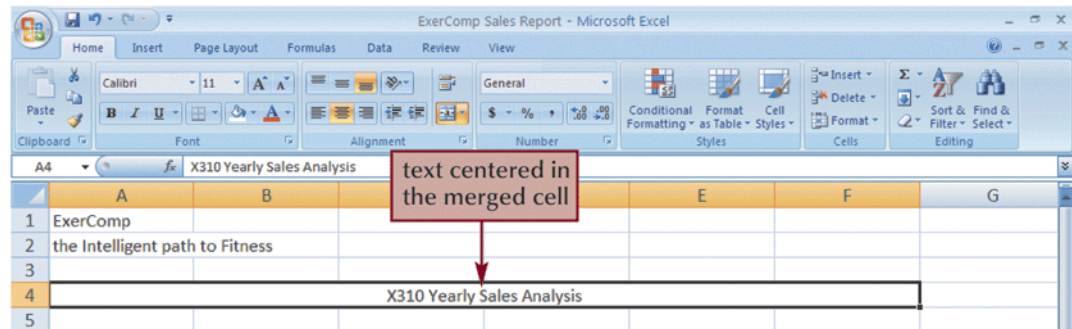




# Merging Cells

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

Figure 2-12 Merged range with centered text



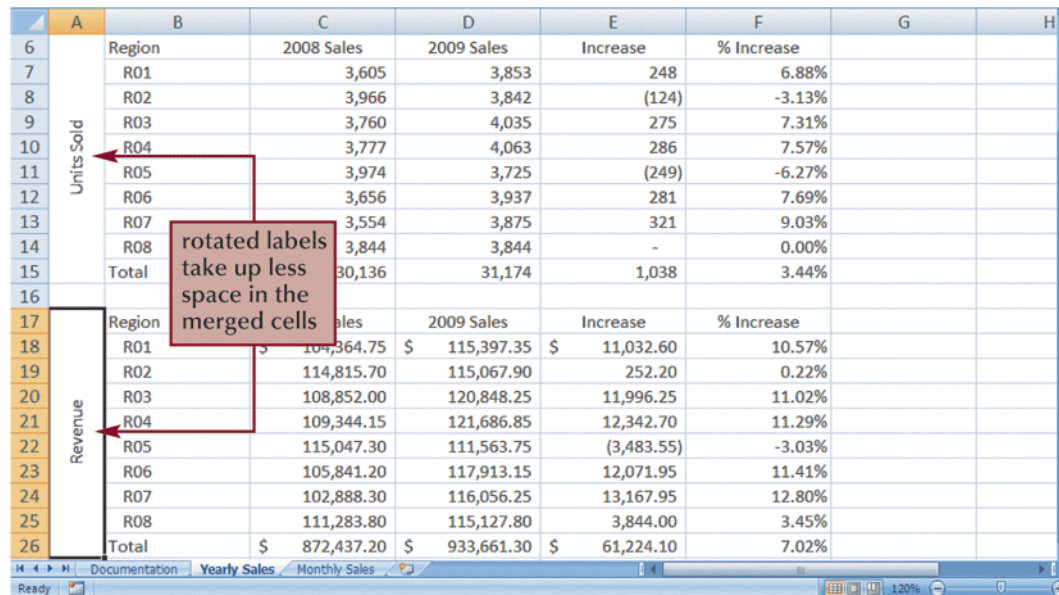
# Rotating Cell Content

- To save space or to provide visual interest to a worksheet, you can rotate the cell contents so that they appear at any angle or orientation
- Select the range
- In the Alignment group, click the **Orientation** button and choose a proper rotation

# Rotating Cell Content

Merged and rotated cell text

Figure 2-13



rotated labels take up less space in the merged cells

	A	B	C	D	E	F	G	H
6		Region	2008 Sales	2009 Sales	Increase	% Increase		
7		R01	3,605	3,853	248	6.88%		
8		R02	3,966	3,842	(124)	-3.13%		
9		R03	3,760	4,035	275	7.31%		
10		R04	3,777	4,063	286	7.57%		
11		R05	3,974	3,725	(249)	-6.27%		
12		R06	3,656	3,937	281	7.69%		
13		R07	3,554	3,875	321	9.03%		
14		R08	3,844	3,844	-	0.00%		
15		Total	30,136	31,174	1,038	3.44%		
16								
17		Region	2008 Sales	2009 Sales	Increase	% Increase		
18		R01	\$ 104,364.75	\$ 115,397.35	\$ 11,032.60	10.57%		
19		R02	114,815.70	115,067.90	252.20	0.22%		
20		R03	108,852.00	120,848.25	11,996.25	11.02%		
21		R04	109,344.15	121,686.85	12,342.70	11.29%		
22		R05	115,047.30	111,563.75	(3,483.55)	-3.03%		
23		R06	105,841.20	117,913.15	12,071.95	11.41%		
24		R07	102,888.30	116,056.25	13,167.95	12.80%		
25		R08	111,283.80	115,127.80	3,844.00	3.45%		
26		Total	\$ 872,437.20	\$ 933,661.30	\$ 61,224.10	7.02%		



# 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**

Figure 2-14 Borders added to cells

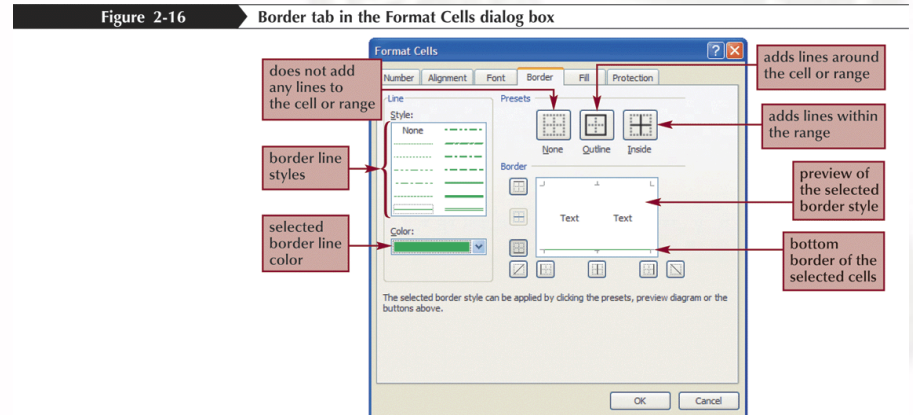
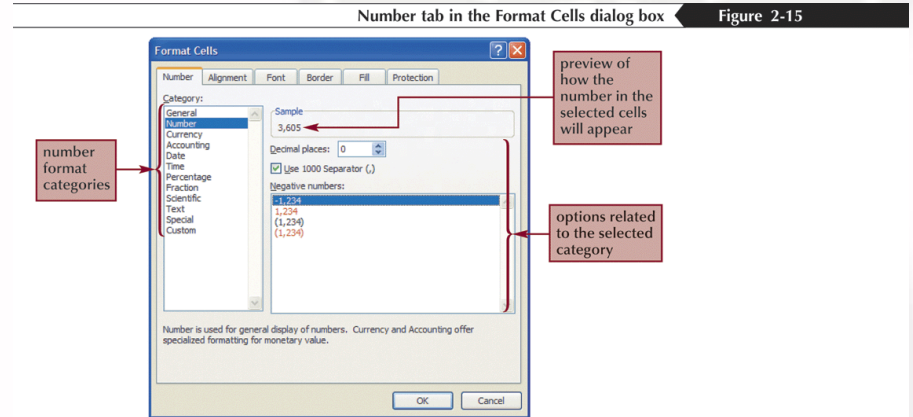
Region	2008 Sales	2009 Sales	Increase	% Increase
R01	3,605	3,853	248	6.88%
R02	3,966	3,842	(124)	-3.13%
R03	3,760	4,035	275	7.31%
R04	3,777	4,063	286	7.57%
R05	3,974	3,725	(249)	-6.27%
R06	3,656	3,937	281	7.69%
R07	3,554	3,875	321	9.03%
R08	3,844	3,844	-	0.00%
Total	30,136	31,174	1,038	3.44%

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





# 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



# Copying Formats with the Paste Options Button

Using the Paste Options button

Figure 2-17

	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	1025	1,115	912	3,052			
13			Total	6,990	6,758	7,251	20,999			
14										
15										

pastes only the formats

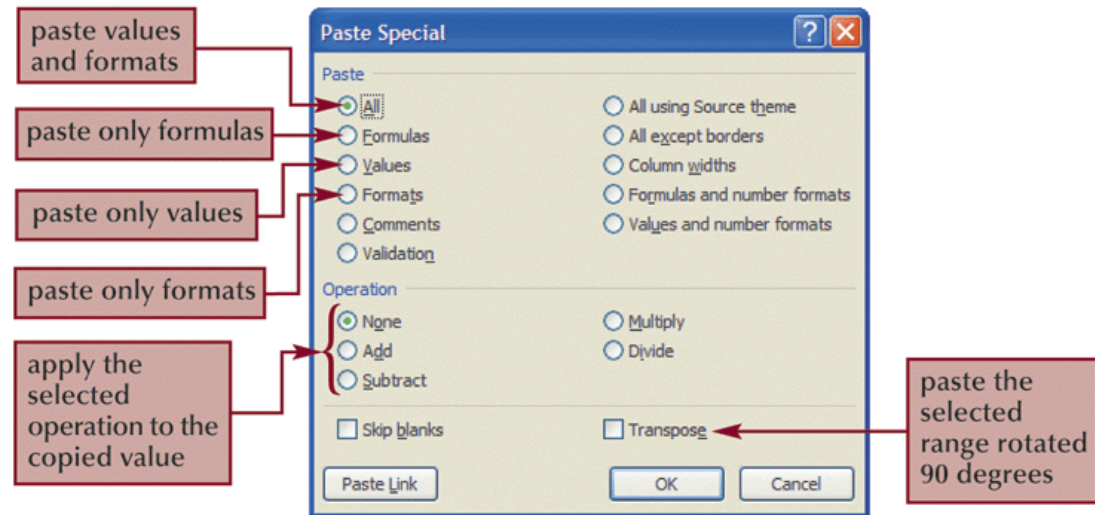
- ☐ Keep Source Formatting
- ☐ Use Destination Theme
- ☐ Match Destination Formatting
- ☐ Values Only
- ☐ Values and Number Formatting
- ☐ Values and Source Formatting
- ☐ Keep Source Column Widths
- ☒ Formatting Only
- ☐ Link Cells

Paste Options button



# Copying Formats with Paste Special

Figure 2-18 Paste Special dialog box



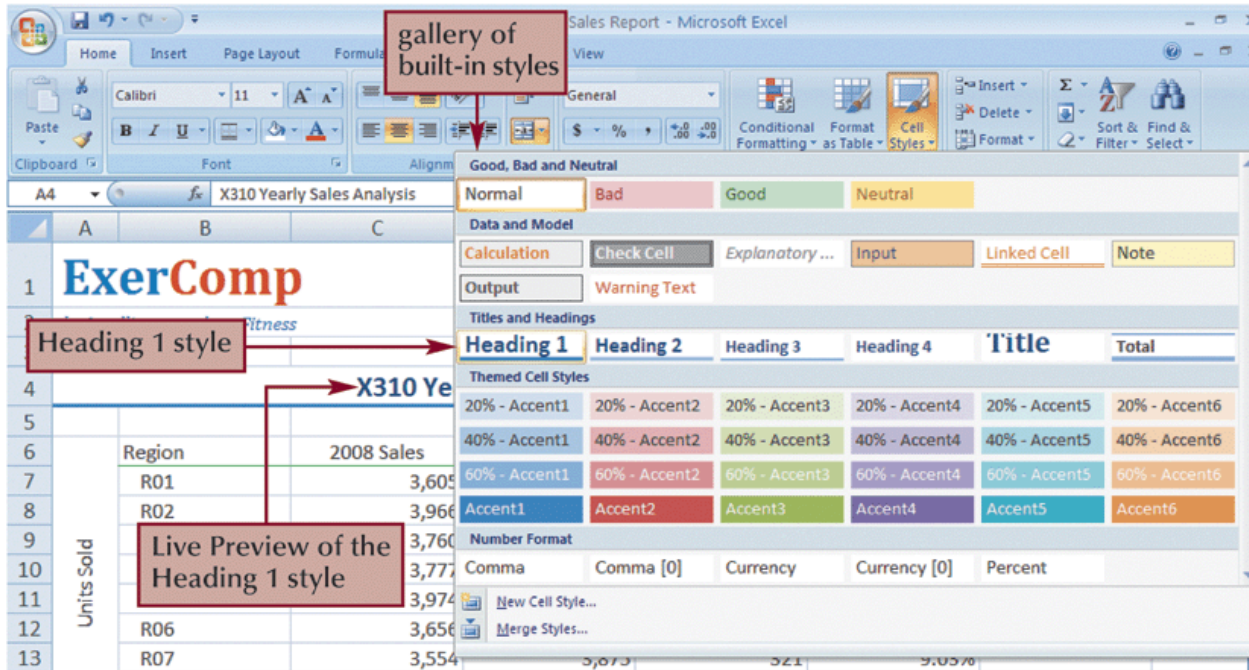
# Applying Styles

- A **style** is a collection of formatting
- Select the cell or range to which you want to apply a style
- In the Styles group on the Home tab, click the Cell Styles button
- Point to each style in the Cell Styles gallery to see a Live Preview of that style on the selected cell or range
- Click the style you want to apply to the selected cell or range

# Applying Styles

Cell Styles gallery

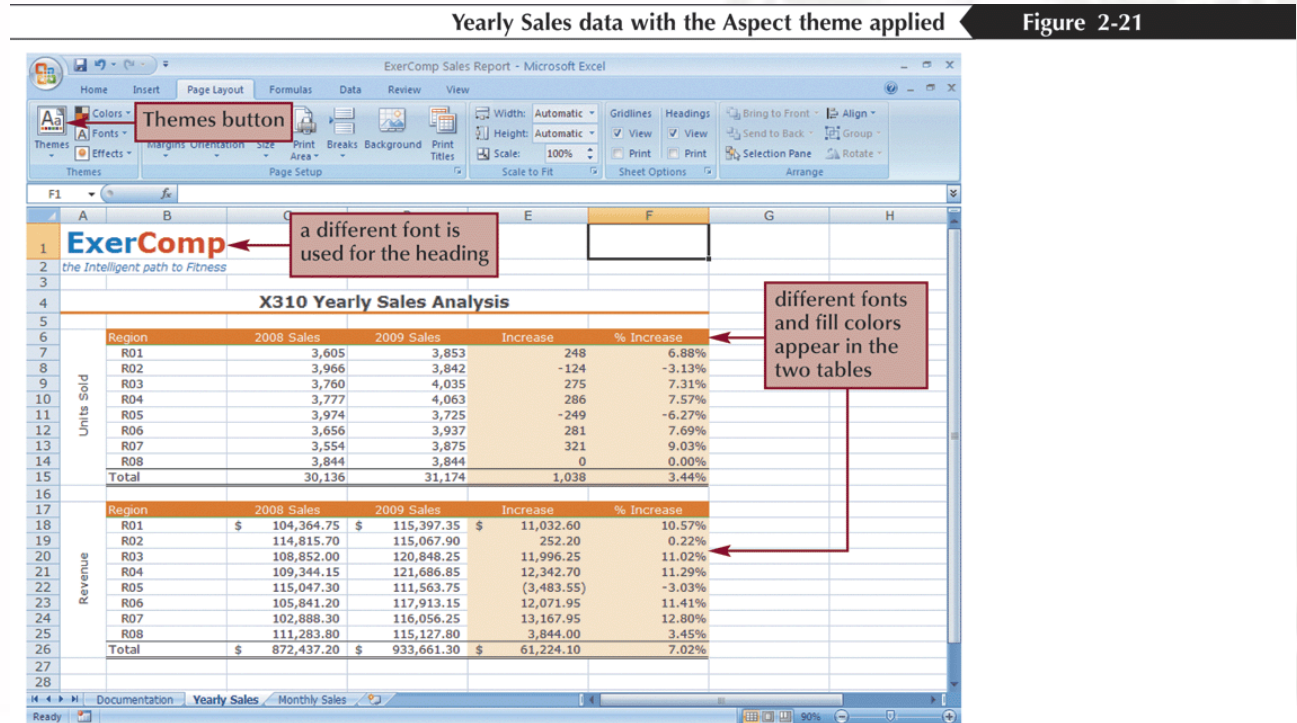
Figure 2-19





# Working with Themes

- The appearance of these fonts, colors, and cell styles depends on the workbook's current theme



# Applying a Table Style to an Existing Table

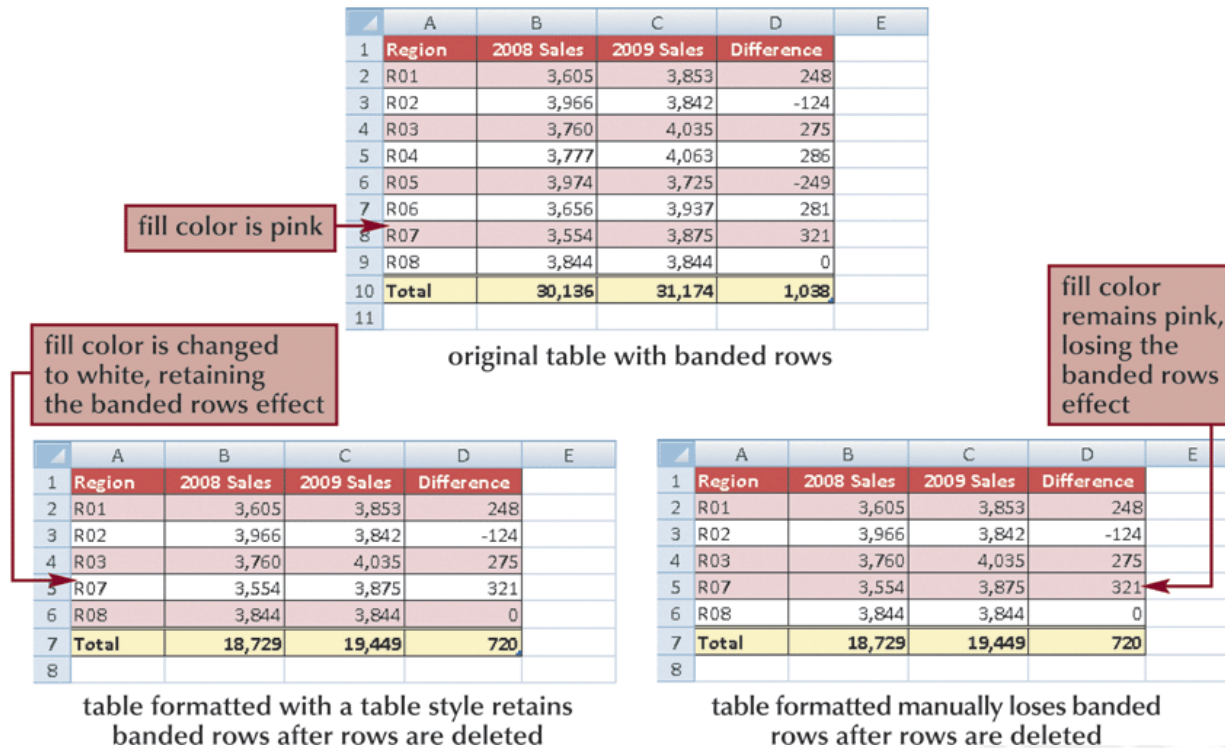
- You can treat a range of data as a distinct object in a worksheet known as an **Excel table**
- Select the range to which you want to apply the table style
- In the Styles group on the Home tab, click the Format as Table button
- Click a table style in the Table Style gallery



# Applying a Table Style to an Existing Table

Banded rows effect applied manually and with a table style

Figure 2-23



# Selecting Table Style Options

- After you apply a table style, you can choose which table elements you want included in the style

Revised table style **Figure 2-25**

selected table elements

table styles show formatting for selected elements

banded rows removed

header row formatted

last column formatted

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	2,593
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	2,906
Total	3,605	3,966	3,760	3,777	3,974	3,656	3,554	3,844	30,136

# Introducing Conditional Formats

- A **conditional format** applies formatting only when a cell's value meets a specified condition
- Select the range or ranges to which you want to add data bars.
- In the Styles group on the Home tab, click the Conditional Formatting button, point to Data Bars, and then click a data bar color

*or*

- 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

Figure 2-27 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	2,906
<b>Total</b>	<b>3,605</b>	<b>3,966</b>	<b>3,760</b>	<b>3,777</b>	<b>3,974</b>	<b>3,656</b>	<b>3,554</b>	<b>3,844</b>	<b>30,136</b>

Month	R01	R02	R03	R04	R05	R06	R07	R08	Total
Jan	352	364	345	352	336	361	325	342	2,777
Feb	297	326	310	313	288	300	297	300	2,431





# Hiding Worksheet Data

- Hiding rows, columns, and worksheets is an excellent way to conceal extraneous or distracting information
- In the Cells group on the Home tab, click the **Format** button, point to **Hide & Unhide**, and then click your desired option



# Changing the Page Orientation to Landscape

- Click the **Page Layout** tab on the Ribbon
- In the Page Setup group, click the **Orientation** button, and then click **Landscape**

# Defining the Print Area

- By default, all parts of the active worksheet containing text, formulas, or values are printed
- You can select the cells you want to print, and then define them as a **print area**
- Select the range, in the Page Setup group on the Page Layout tab, click the **Print Area** button, and then click **Set Print Area**

# Inserting Page Breaks

- Excel prints as much as fits on a page and then inserts a **page break** to continue printing the remaining worksheet content on the next page
- **Manual page breaks** specify exactly where the page breaks occur

# Setting and Removing Page Breaks

## **To set a page break:**

- Select the first cell below the row where you want to insert a page break
- In the Page Setup group on the Page Layout tab, click the Breaks button, and then click Insert Page Break

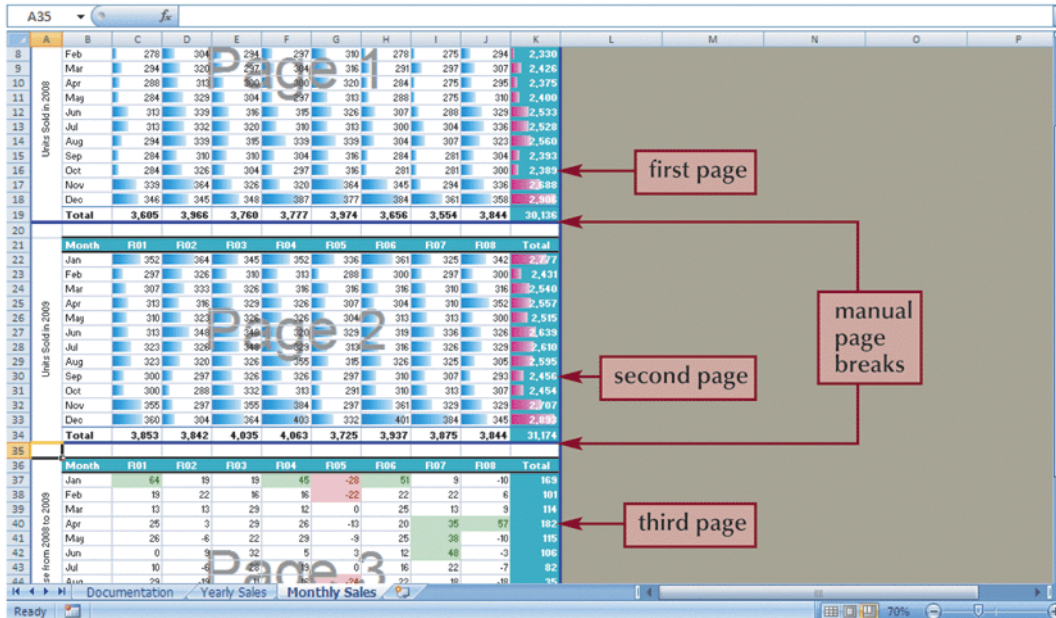
## **To remove a page break:**

- Select any cell below or to the right of the page break you want to remove
- In the Page Setup group on the Page Layout tab, click the Breaks button, and then click Remove Page Break (or click Reset All Page Breaks to remove all the page breaks from the worksheet)

# Setting and Removing Page Breaks

Worksheet in Page Break Preview

Figure 2-35





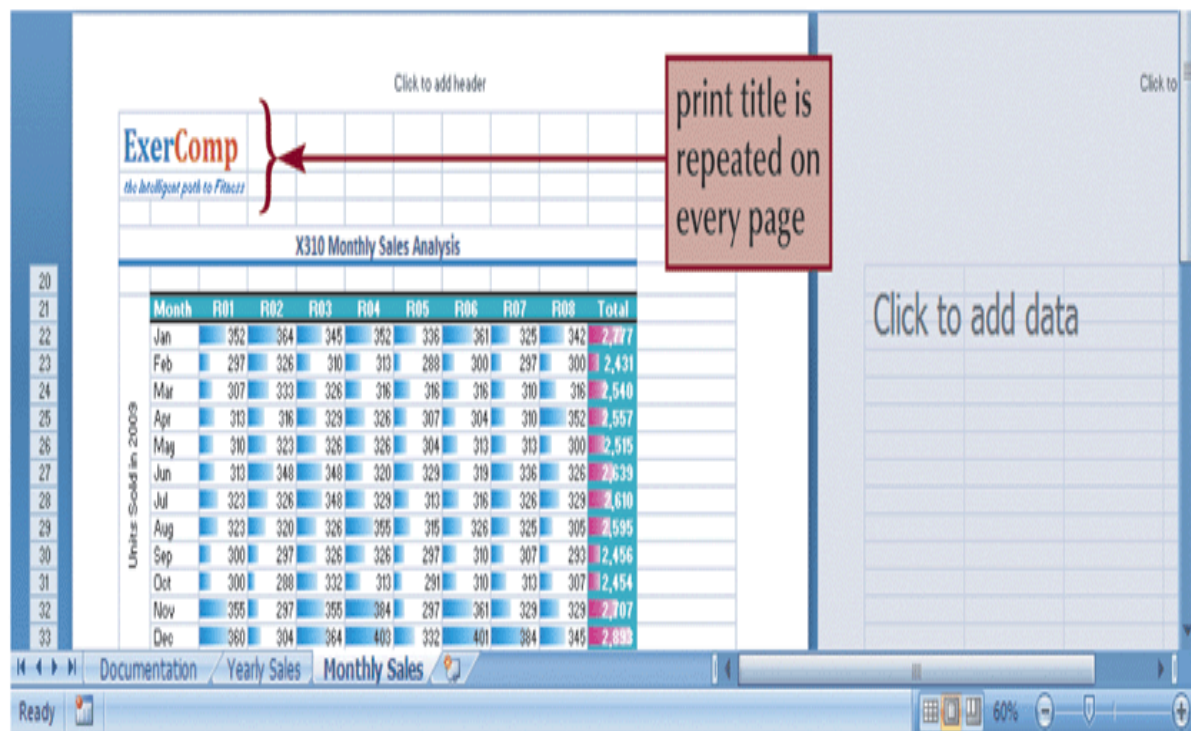
# Adding Print Titles

- You can repeat information, such as the company name, by specifying which rows or columns in the worksheet act as **print titles**, information that prints on each page
- In the Page Setup group on the Page Layout tab, click the **Print Titles** button
- Click the **Rows to repeat at top** box, move your pointer over the worksheet, and then select the range
- Click the **OK** button

# Adding Print Titles

Figure 2-36

Second page of the printout



College of  
Information Technology  
and Computer Science

CENTER OF EXCELLENCE  
in Information Technology

# Adding Headers and Footers

- A **header** is the text printed in the top margin of each page
- A **footer** is the text printed in the bottom margin of each page
- Scroll to the top of the worksheet, and then click the left section of the header directly above cell A1 to display the Header & Footer Tools contextual tab

# Adding Headers and Footers

Page header

Figure 2-37

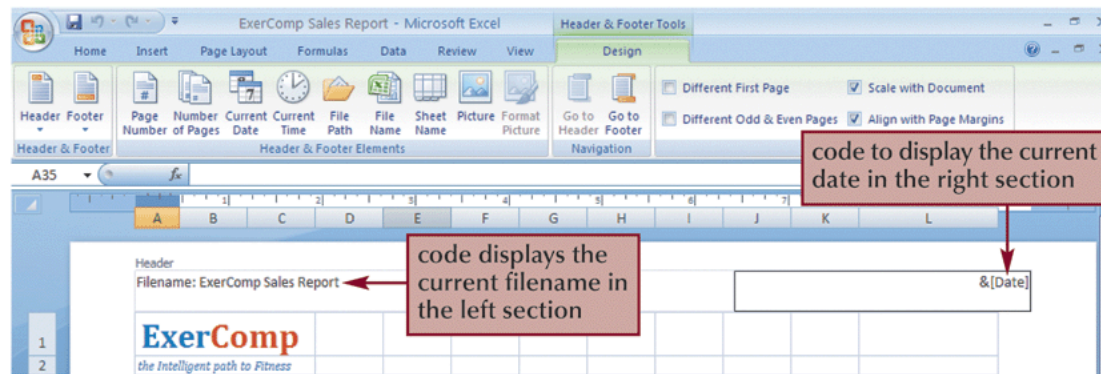


Figure 2-38

Page footer

