

Office Excel 2010

Lab 1

Creating and Editing a Worksheet

Objectives

1. Create new worksheets.
2. Enter and edit data.
3. Modify column widths and row heights.
4. Use proofing tools.
5. Copy and paste cell contents.



Objectives

6. Create formulas.
7. Insert and delete rows and columns.
8. Format cells and cell content.
9. Hide and unhide rows and columns.
10. Create a basic chart.



Objectives

11. Format values as a date.
12. Preview and print a worksheet.
13. Display and print formulas.
14. Change worksheet orientation and scale content.



Concept Preview

1. Data
2. AutoCorrect
3. Column Width
4. Spelling Checker
5. Thesaurus
6. Range
7. Formula

Concept Preview

8. Relative Reference
9. Function
10. Recalculation
11. Alignment
12. Row Heights
13. Number Formats



Outline

- Creating a Workbook
- Exploring the Excel Window
 - Moving Around the Worksheet
 - Developing a Worksheet
- Entering and Editing Data
- Adding Text Entries
 - Clearing an Entry
 - Editing an Entry
 - Using AutoCorrect
 - Adding Number Entries



Outline

- Adding Text Entries
 - Clearing an Entry
 - Editing an Entry
 - Using AutoCorrect
 - Adding Number Entries
- Modifying Column Widths
 - Dragging the Column Boundary
 - Using a Specified Value
 - Using AutoFit



Outline

- Saving, Closing, and Opening a Workbook
- Using Proofing Tools
 - Checking Spelling
 - Using the Thesaurus
- Copying and Pasting Cell Contents
 - Copying and Pasting Data
 - Selecting a Range
 - Using the Fill Handle
 - Inserting Copied Cell Content
 - Cutting and Pasting Data



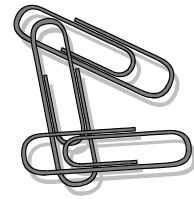
Outline

- Working with Formulas
 - Entering Formulas
 - Copying Formulas with Relative References
 - Summarizing Data
 - Using Pointing to Enter a Formula
 - Recalculating the Worksheet
- Inserting and Deleting Rows and Columns
 - Inserting Rows
 - Deleting Columns



Outline

- Formatting Cells and Cell Content
 - Changing Cell Alignment
 - Changing Row Height
 - Indenting Cell Content
 - Merging Cells
 - Changing Fonts and Font Sizes
 - Applying Text Effects
 - Clearing Formats
 - Using Format Painter
 - Formatting Numbers
 - Adding Font Color
 - Adding Fill Color
 - Adding and Removing Cell Borders



Outline

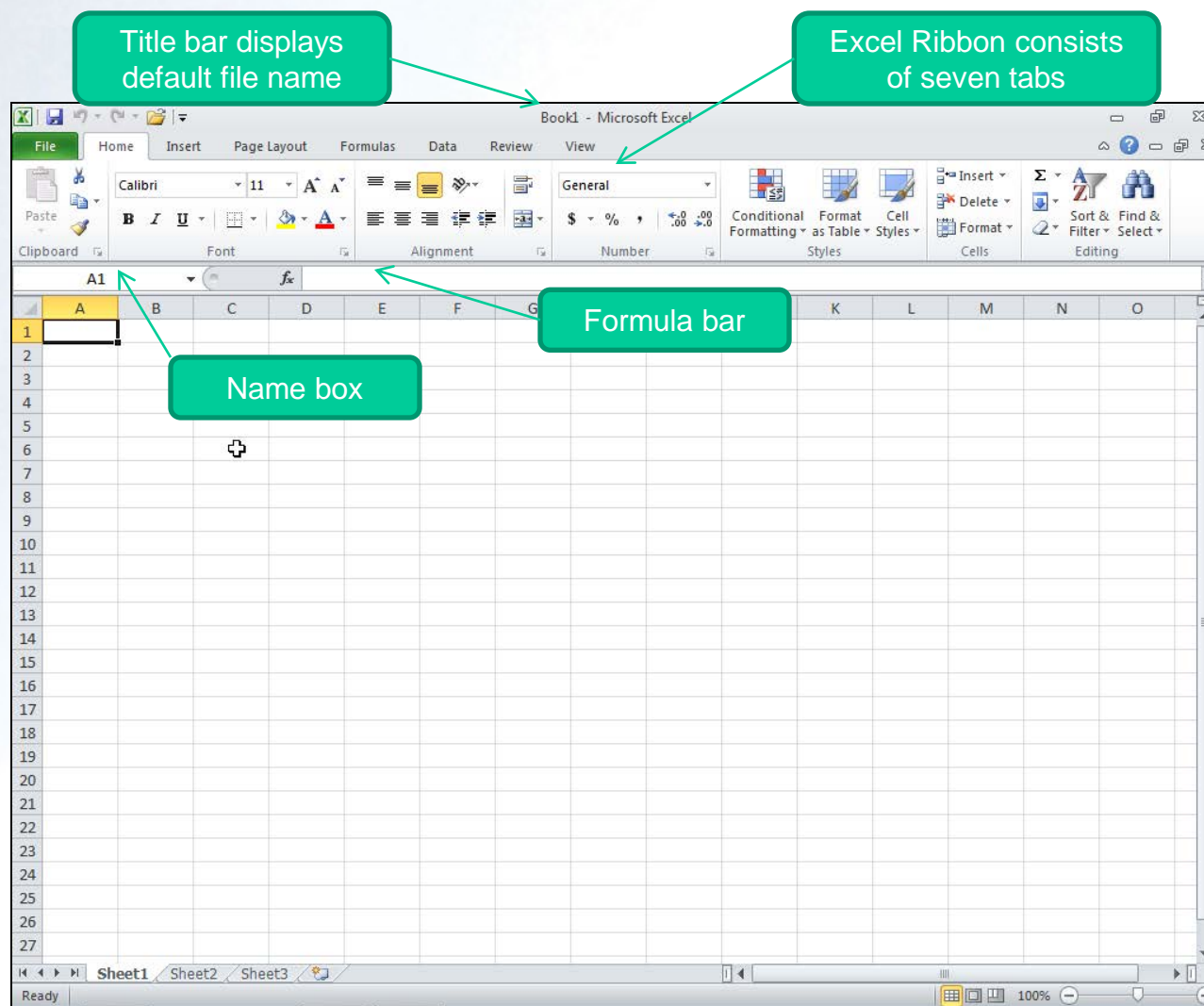
- Hide and Unhide Rows and Columns
- Creating a Simple Chart
 - Specifying the Data to Chart
- Formatting Values as Dates
- Documenting a Workbook



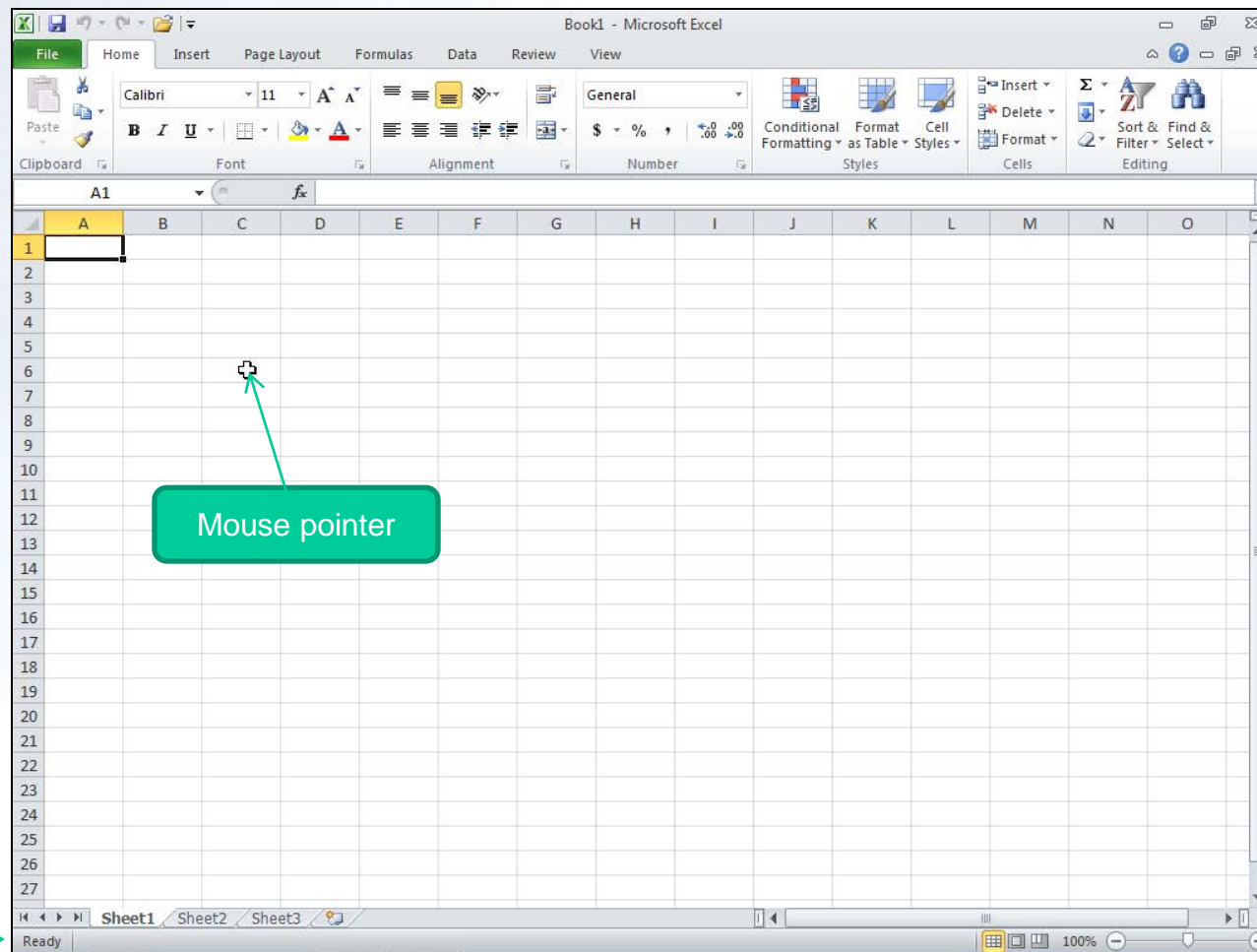
Outline

- Previewing and Printing a Worksheet
 - Displaying and Printing Formulas
 - Changing Worksheet Orientation and Scaling Content
- Exiting Excel 2010
- FAQs
- Discussion Questions

Creating a Workbook



Creating a Workbook cont.

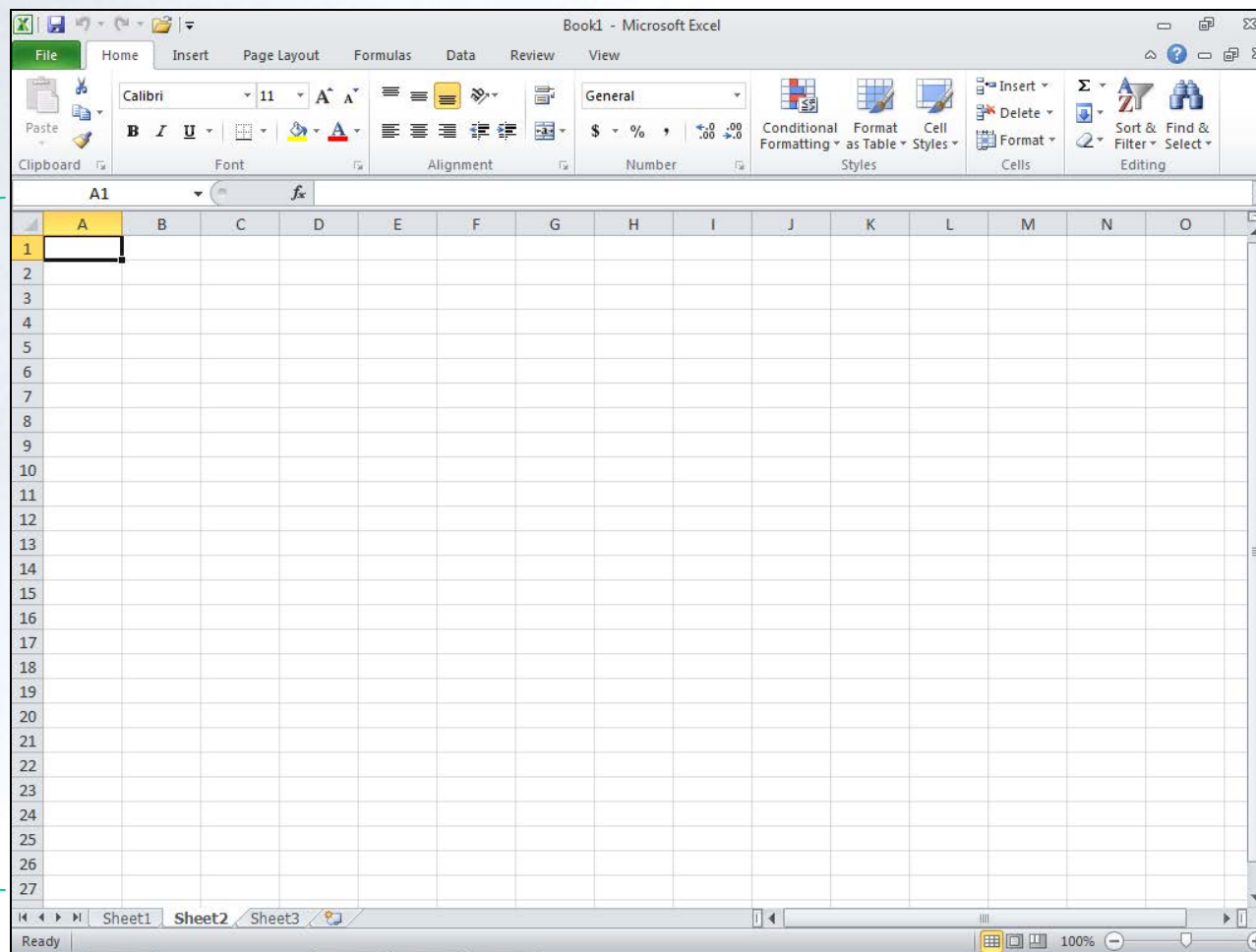


Workbook window

Mouse pointer

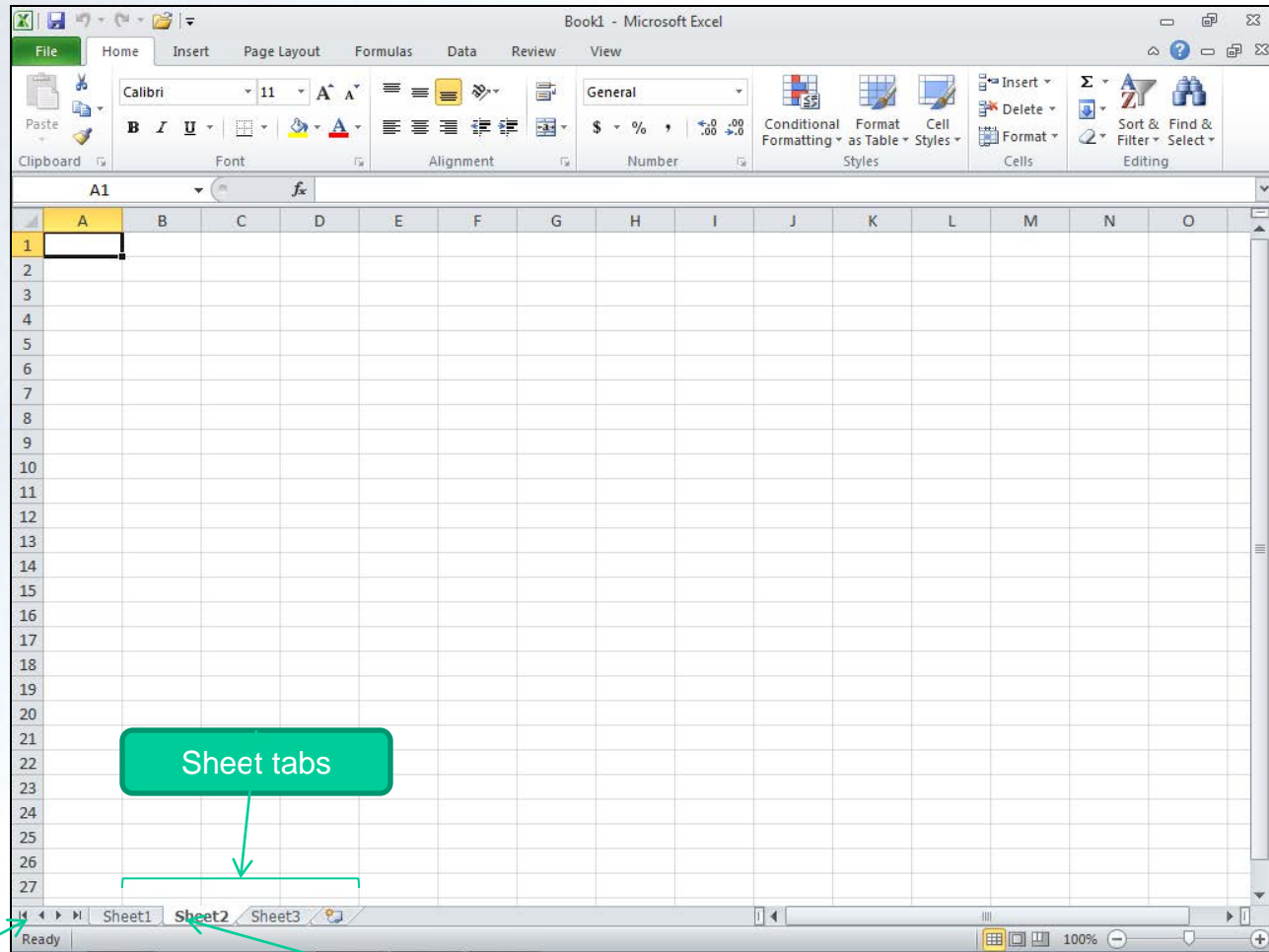
Status bar

Exploring the Excel Window



Blank
worksheet in
Sheet2

Exploring the Excel Window cont.



Sheet tabs

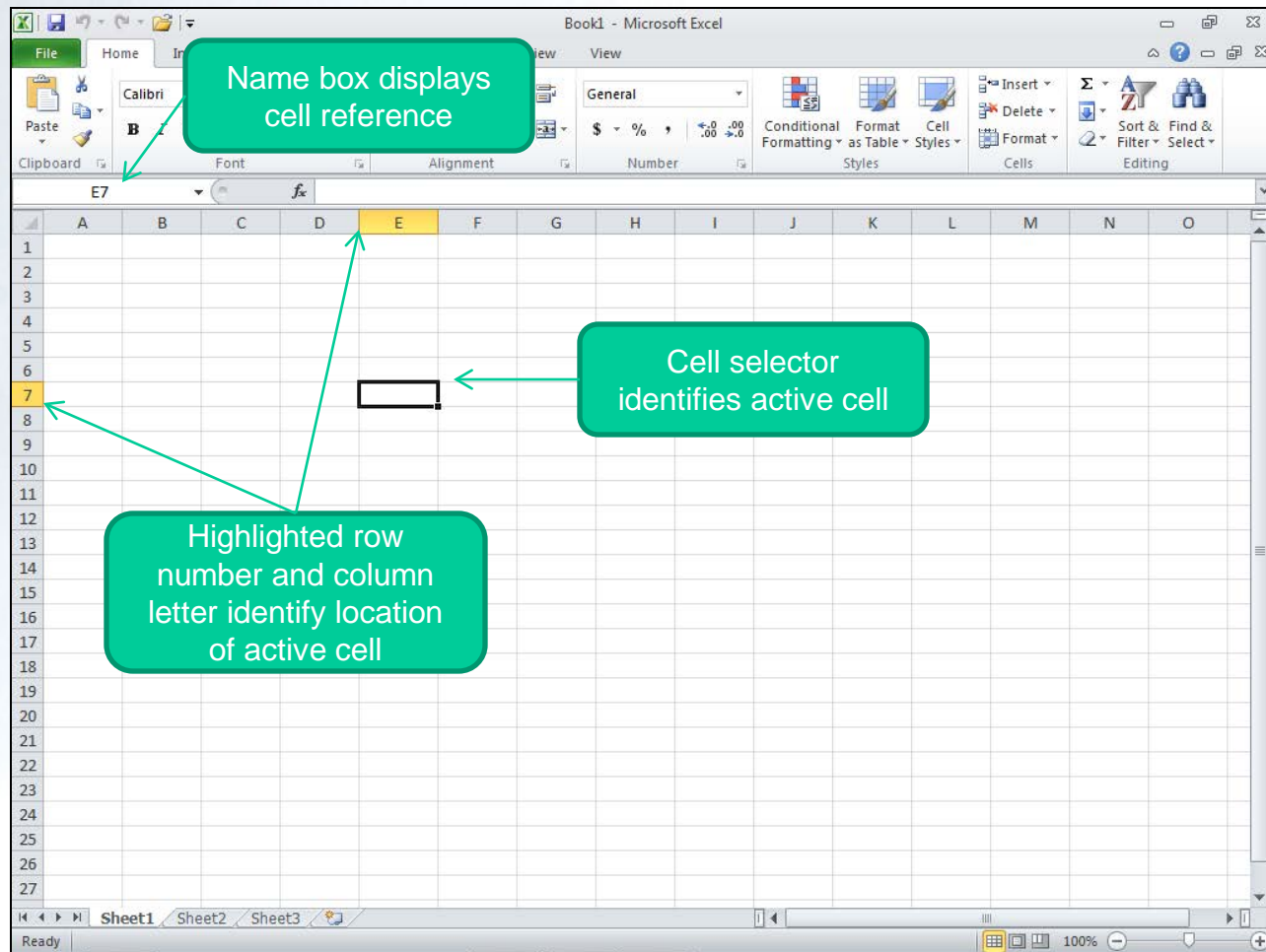
Tab scroll buttons

Active sheet

Shortcut Keys to Navigate a Worksheet

Keyboard	Action
Alt + Page Down	Moves right one full window.
Alt + Page Up	Moves left one full window.
Home	Moves to beginning of row.
Ctrl + Home	Moves to upper-left corner cell of worksheet.
Ctrl + End	Moves to last-used cell of worksheet.
End + →	Moves to last-used cell in row.
End + ↓	Moves to last-used cell in column.

Moving Around the Worksheet



Developing a Worksheet

Downtown Internet Café
First Quarter Forecast

Sales:

	January	February	March	Total
Beverage	\$ 13,600	\$ 14,600	\$ 15,600	\$ 43,800 <small>(sum of beverage sales)</small>
Food	xx,xxx	_____	_____	_____
Total Sales	\$ xx,xxx <small>(sum of monthly sales)</small>	\$ xx,xxx	\$ xx,xxx	\$ xxx,xxx <small>(sum of total sales)</small>

Expenses:

Cost of Goods	\$ (.25 * beverage sales + 50 * food sales)			\$ (sum of cost of goods)
Salary	_____	_____	_____	_____
Total Expenses	\$ xx,xxx <small>(sum of monthly expenses)</small>	\$ xx,xxx	\$ _____	\$ _____

Income

Net Income \$ $(\text{Total Sales} - \text{Total Expenses})$

Profit Margin \$ $(\text{Total Expenses} \div \text{Total Sales})$

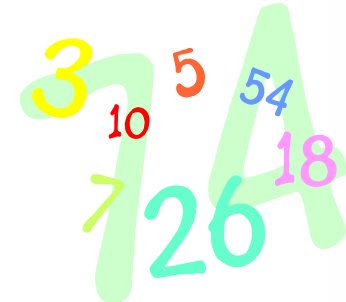
Step	Description
1. Plan	Specify the purpose of the worksheet and how it should be organized. This means clearly identifying the data that will be input, the calculations that are needed to achieve the results, and the output that is desired. As part of the planning step, it is helpful to sketch out a design of the worksheet to organize the worksheet's structure. The design should include the worksheet title and row and column headings that identify the input and output. Additionally, sample data can be used to help determine the formulas needed to produce the output.
2. Enter and edit	Create the structure of the worksheet using Excel by entering the worksheet labels, data, and formulas. As you enter information, you are likely to make errors that need to be corrected or edited, or you will need to revise the content of what you have entered to clarify it or to add or delete information.
3. Test	Test the worksheet for errors. Use several sets of real or sample data as the input, and verify the resulting output. The input data should include a full range of possible values for each data item to ensure the worksheet can function successfully under all possible conditions.
4. Format	Enhance the appearance of the worksheet to make it more readable or attractive. This step is usually performed when the worksheet is near completion. It includes many features such as boldface text, italic, and color.

Entering and Editing Data

- A blank Excel workbook file contains three blank worksheets.
- Each worksheet has predefined settings.

Concept 1: Data

- Data you enter in a cell
 - Text
 - Letters, numbers, spaces, & special characters
 - Numbers
 - Only the digits 0 to 9
 - Characters + - () , . / \$ % ? =
 - Formulas used for calculations



Adding Text Entries

The screenshot illustrates the process of adding a text entry to a cell in Microsoft Excel. The active cell is B3, which contains the text 'January'. The formula bar at the top of the window also displays 'January'. The mode indicator in the bottom-left corner shows the text entry mode. The ribbon at the top includes tabs for File, Home, Insert, Page Layout, and Formulas. The ribbon also includes various toolbars such as Clipboard, Font, Alignment, Number, Conditional Formatting, Format as Table, Cell Styles, Insert, Delete, Format, Sort & Filter, and Find & Select. The spreadsheet grid shows columns A through O and rows 1 through 27. The active cell B3 is highlighted in yellow. The formula bar is located at the top of the spreadsheet area. The mode indicator is located in the bottom-left corner of the spreadsheet area.

Completions entry

Formulas bar displays entry

Active cell displays entry and cursor

Mode indicator

Cancels entry

Clearing an Entry

Book1 - Microsoft Excel

File Home Insert Page Layout Formulas Data Review View

Clipboard Font Alignment Number Styles Cells Editing

B3 X ✓ f January

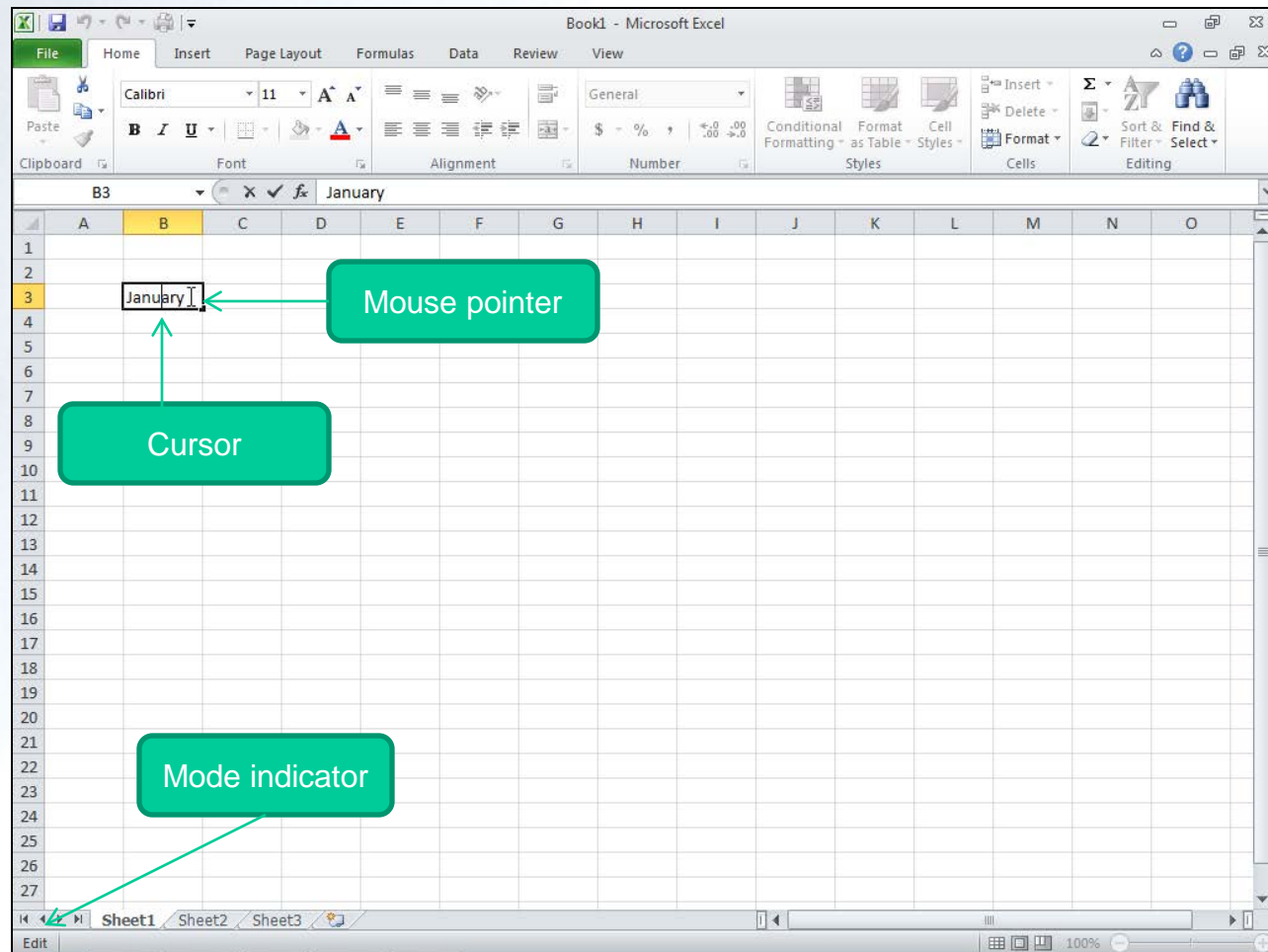
Cell contents of active cell displayed in formula bar

Using to complete entry leaves cell selector in current cell location

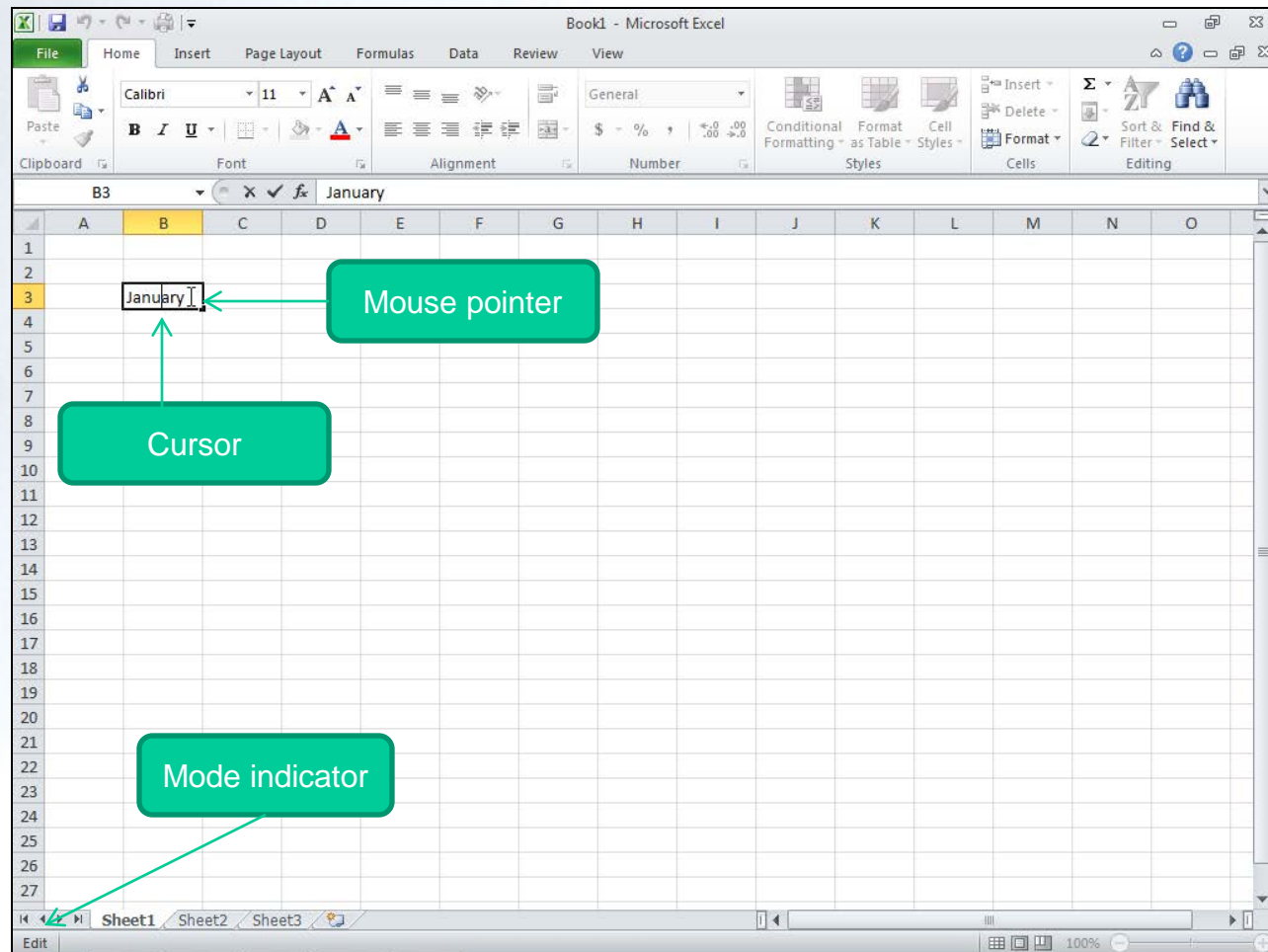
Sheet1 Sheet2 Sheet3

Edit 100%

Editing an Entry



Editing an Entry

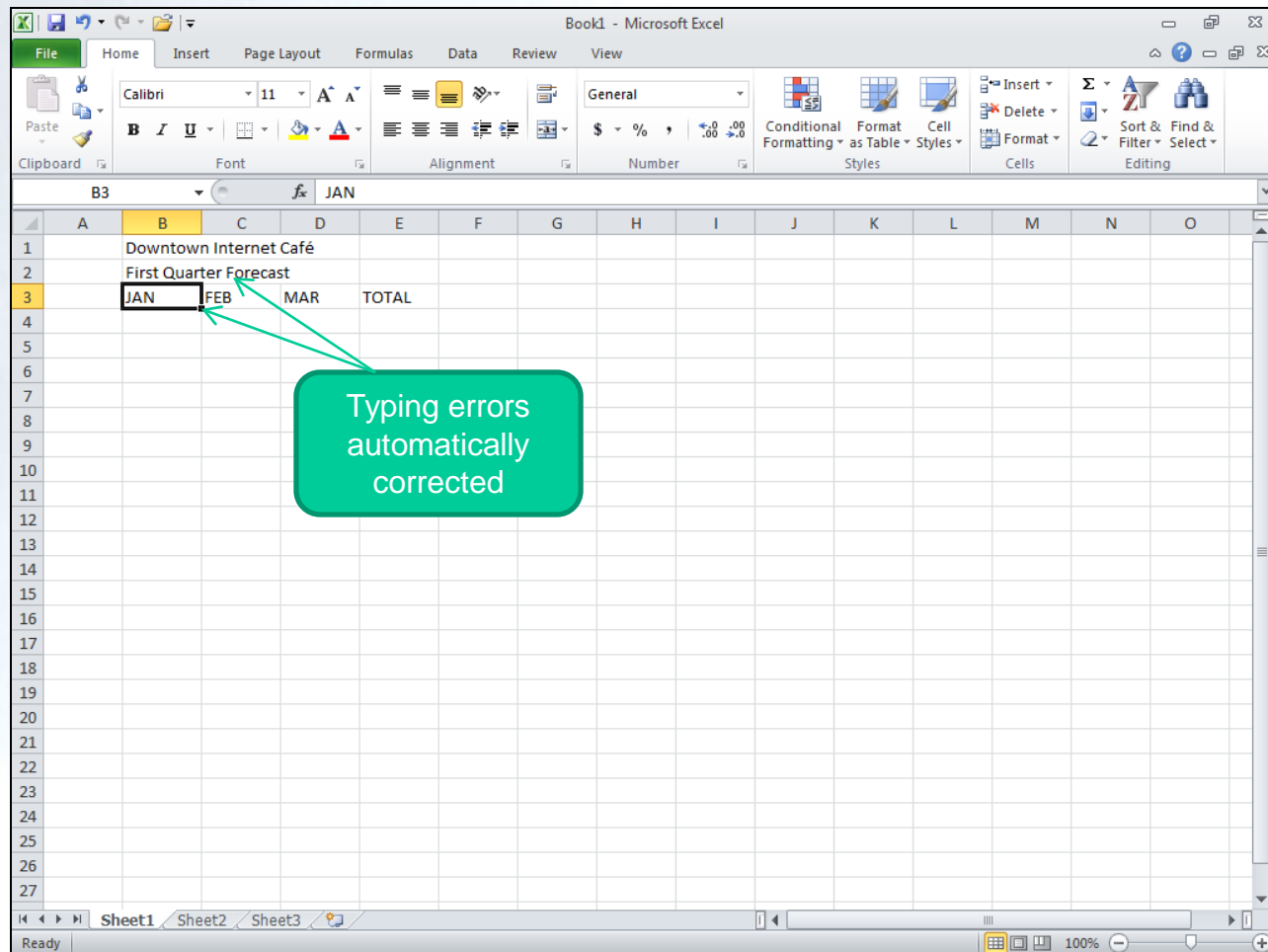


Concept 2: AutoCorrect

- Makes basic assumptions about the text you are typing
 - Automatically corrects the entry
 - Automatically corrects many common typing and spelling errors
 - Makes corrections by ...
 - Checking against a built-in list
 - Looking for certain types of errors



Using AutoCorrect



Adding Number Entries

The screenshot shows a Microsoft Excel spreadsheet with the following data:

Sales	JAN	FEB	MAR	TOTAL
Espresso	13300			
Coffee	5800			
Food/Bev	3600			
Merchand	1800			
Computer	600			
Total Sales				

Two callout boxes provide additional information:

- Long text entries are cut off because cell to the right contains an entry**: This box points to the 'Merchand' entry in cell B7, which is truncated because cell C7 contains a number.
- Number entries are right-aligned in cell spaces**: This box points to the numerical values in column B, which are right-aligned within their respective cells.

Modifying Column Width

The screenshot displays the Microsoft Excel interface with a spreadsheet titled "Book1 - Microsoft Excel". The ribbon is set to "Home", and the "Font" group is active. The spreadsheet data is as follows:

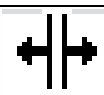
	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1		Downtown Internet Café												
2		First Quarter Forecast												
3	Sales	JAN	FEB	MAR	TOTAL									
4	Espresso	13300												
5	Coffee	5800												
6	Food/Beverage	3600												
7	Merchandise	1000												
8	Computer	600												
9	Total Sales													
10														
11														
12														
13														
14														
15														
16														
17														
18														
19														
20														
21														
22														
23														
24														
25														
26														
27														

Two callout boxes provide instructions:

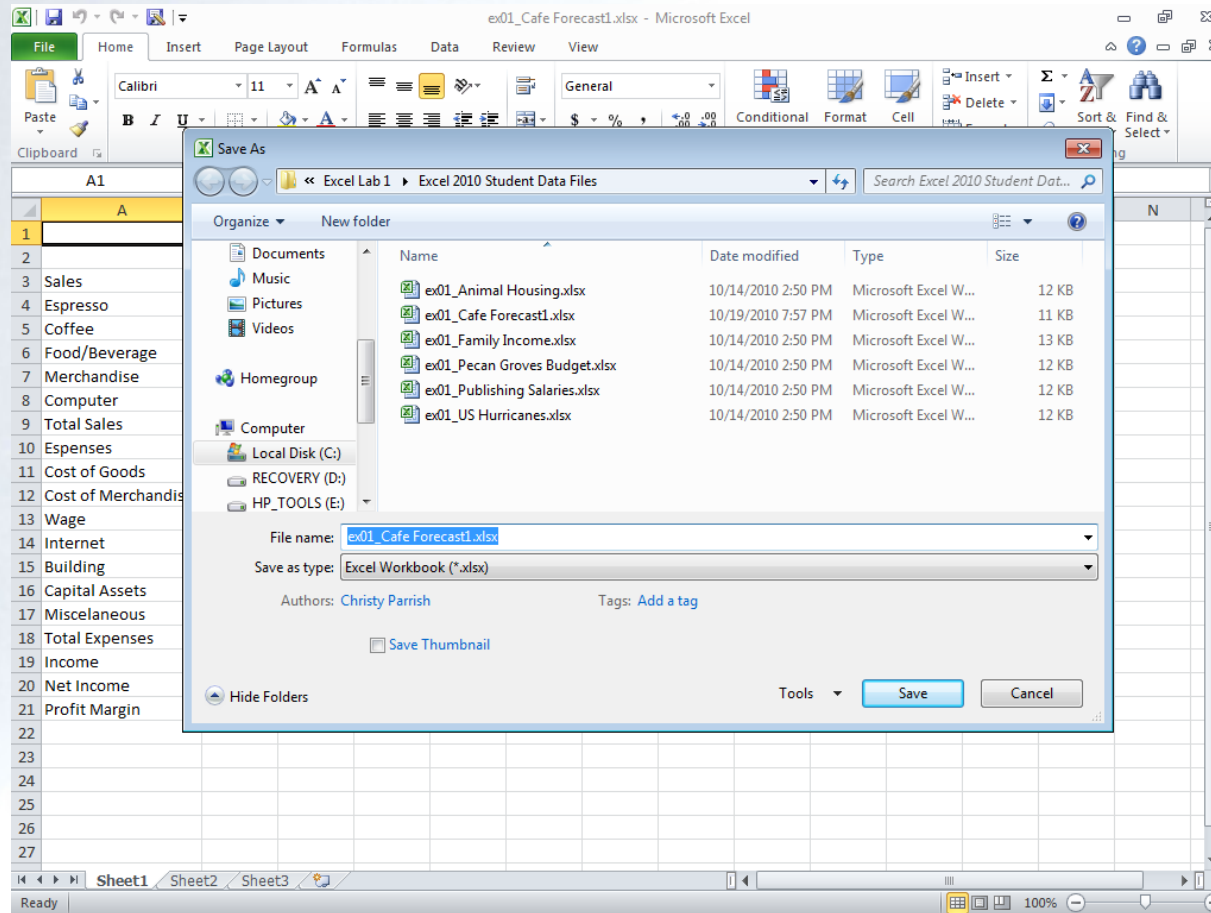
- A green callout box with a white border points to the right edge of column B, containing the text: "Mouse pointer indicates you can change the size of the column".
- A green callout box with a white border points to the width of column B, containing the text: "Column width increased to 24 and fully displays row headings".

Concept : Column Width

- Size of column controls the amount of information displayed in a cell
- If text larger than the column width is entered in a cell, data may not be fully displayed.
- Column width can be adjusted using the mouse, using the AutoFit feature, or set to an exact value.



Saving a Workbook File



Closing and Opening a Workbook File

The screenshot displays the Microsoft Excel interface. The title bar at the top reads "ex01_Cafe Forecast1 - Microsoft Excel". A green callout box with a white border and the text "Name of open workbook" is positioned over the title bar, with a green arrow pointing to it. The ribbon includes tabs for File, Home, Insert, Page Layout, Formulas, Data, Review, and View. The Home tab is active, showing options for Clipboard, Font, Alignment, and Number. The spreadsheet area contains the following data:

	A	B	C	D	E	F	G	L	M	N
1		Downtown Internet Café								
2		First Quarter Forecast								
3	Sales	JAN	FEB	MAR	TOTAL					
4	Espresso	13300	13600	14200						
5	Coffee	5800	6000	6200						
6	Food/Beverage	3600	3800	3800						
7	Merchandise	1000	1100	1100						
8	Computer	600	600	600						
9	Total Sales									
10	Expenses									
11	Cost of Goods									
12	Cost of Merchandise									
13	Wage	9000								
14	Internet	325								
15	Building	2100								
16	Capital Assets	1500								
17	Miscellaneous	1300								
18	Total Expenses									
19	Income									
20	Net Income									
21	Profit Margin									
22										
23										
24										
25										
26										
27										

Using Proofing Tools

- Spelling Checker
 - Locates spelling and typing errors
 - Suggests the correct spelling
- Thesaurus
 - Suggests better words to clarify meaning



Concept : Spelling Checker

- Proposes the correct spelling for:
 - Misspelled words
 - Duplicate words
 - Capitalization irregularities
- Compares words to the main dictionary
 - Custom dictionary, if one exists



Check Spelling

Starts spelling checker

Changes misspelled word to selected choice from Suggested list

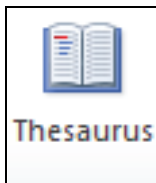
Located misspelled word

Suggested replacements

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1		Downtown Internet Café												
2		First Quarter Fore												
3	Sales	JAN	FEB											
4	Espresso	13300	136											
5	Coffee	5800	60											
6	Food/Beverage	3600	38											
7	Merchandise	1000	11											
8	Computer	600	5											
9	Total Sales													
10	Expenses													
11	Cost of Goods													
12	Cost of Merchandise													
13	Wage	9000												
14	Internet	325												
15	Building	2100												
16	Capital Assets	1500												
17	Miscellaneous	1300												
18	Total Expenses													
19	Income													
20	Net Inc													
21	Profit M													

Concept : Thesaurus

- A reference tool that provides:
 - Synonyms
 - Antonyms
 - Related words for a selected word or phrase
- Helps to liven up documents by adding interest and variety to the text



Using Thesaurus

Word to be replaced

Suggested synonyms for the word "wage"

Click the heading word to hide list

Sales	JAN	FEB	MAR	TOTAL
Espresso	13300	13600	14200	
Coffee	5800	6000	6200	
Food/Beverage	3600	3800	3800	
Merchandise	1000	1100	1100	
Computer	600	600	600	
Total Sales				
Expenses				
Cost of Goods				
Cost of Merchandise				
Wage	9000			
Internet	325			
Building	2100			
Capital Assets	1500			
Miscellaneous	1300			
Total Expenses				
Income				
Net Income				
Profit Margin				

Research

Search for: Wage

Thesaurus: English (U.S.)

Thesaurus: English (U.S.)

Salary (n.)

- Salary
- Pay
- Income
- Remuneration
- Gross
- Net
- Stipend
- Earnings (Dictionary Fo...
- Take-home pay (Dictio...

Conduct (v.)

- Conduct
- Pursue
- Fight
- Instigate
- Carry on (Dictionary F...
- Engage in (Dictionary F...

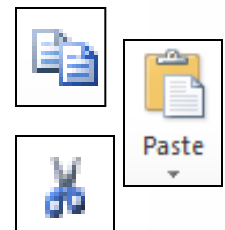
Can't find it?

Get services on Office Marketplace

Research options...

Copying and Pasting Cell Contents

- Copying and Pasting Data
- Selecting a Range
- Using the Fill Handle
- Inserting Copied Cell Content
- Cutting and Pasting Data



Copying Data

The screenshot shows the Microsoft Excel interface with a spreadsheet titled 'Downtown Internet Café'. The spreadsheet contains a table with columns for 'Sales', 'JAN', 'FEB', 'MAR', and 'TOTAL'. The 'Pay' cell (B13) is highlighted with a dashed border, and the status bar at the bottom displays '9000'. Three callout boxes provide instructions: 'Copies selection' points to the Copy button in the ribbon; 'Moving border identifies the copy area' points to the dashed border around cell B13; and 'Status bar displays instructions on how to complete command' points to the status bar.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1		Downtown Internet Café												
2		First Quarter Forecast												
3	Sales	JAN	FEB	MAR	TOTAL									
4	Espresso	13300	13600	14200										
5	Coffee	5800	6000	6200										
6	Food/Beverage	3600	3800	3800										
7	Merchandise	1000	1100	1100										
8	Computer	600	600	600										
9	Total Sales													
10	Expenses													
11	Cost of Goods													
12	Cost of Merchandise													
13	Pay	9000												
14	Internet	325												
15	Building	2100												
16	Capital Assets	1500												
17	Miscellaneous	1300												
18	Total Expenses													
19	Income													
20	Net Income													
21	Profit Margin													
22														
23														
24														
25														
26														
27														

Pasting Data

The screenshot shows the Microsoft Excel interface with a spreadsheet titled 'Downtown Internet Café First Quarter Forecast'. The spreadsheet contains the following data:

Sales	JAN	FEB	MAR	TOTAL
Espresso	13300	13600	14200	
Coffee	5800	6000	6200	
Food/Beverage	3600	3800	3800	
Merchandise	1000	1100	1100	
Computer	600	600	600	
Total Sales				
Expenses				
Cost of Goods				
Cost of Merchandise				
Pay	9000	9000		
Internet	325			
Building	2100			
Capital Assets	1500			
Miscellaneous	1300			
Total Expenses				
Income				
Net Income				
Profit Margin				

Callouts in the image:


- Pastes contents of system Clipboard:** Points to the Paste button in the ribbon.
- Paste Options button:** Points to the (Ctrl) button that appears after pasting.
- Contents from B13 copied into C13:** Points to the value '9000' in cell C13, which was copied from cell B13.

Concept 6 : Range

- A selection of two or more cells on a worksheet
- Cells can be
 - Adjacent: A rectangular block of adjoining cells
 - Nonadjacent: A range consisting of two or more selected cells or ranges that are not adjoining

	A	B	C	D	E	F	G	H
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								

Selecting a Range

To Select	Mouse
A range	Click first cell of range and drag to the last cell.
A large range	Click first cell of range, hold down [Shift] , and click last cell of range.
All cells on worksheet	Click the  All button located at the intersection of the row and column headings.
Nonadjacent cells or ranges	Select first cell or range, hold down [Ctrl] while selecting the other cell or range.
Entire row or column	Click the row number or column letter heading.
Adjacent rows or columns	Drag across the row number or column letter headings.
Nonadjacent rows or columns	Select first row or column, hold down [Ctrl] , and select the other rows or columns.

Selecting a Range



Using the Fill Handle

- Fill handle is a black box in the lower-right corner of the selection

The screenshot shows an Excel spreadsheet with the following data:

	Q1	FEB	MAR	TOTAL
13 Wage	9000	9000	9000	
14 Internet	325	325	325	
15 Building	2100	2100	2100	
16 Capital Assets	1500	1500	1500	
17 Miscellaneous	1300	1300	1300	
18 Total Expenses				
19 Income				
20 Net Income				
21 Profit Margin				

Callouts in the image:

- A green box highlights the selection of cells B15:D17, which contain the values 2100, 1500, and 1300. A black box (the fill handle) is shown in the lower-right corner of this selection.
- A callout points to the fill handle, stating: "Fill handle used to copy source".
- A callout points to the AutoFill Options button (a small square with a plus sign) located at the bottom-right corner of the selection, stating: "AutoFill Options button".

Inserting Copied Cells

The screenshot shows the Microsoft Excel interface with a spreadsheet titled "ex01_Cafe Forecast1". The spreadsheet contains a table with the following data:

	JAN	FEB	MAR	TOTAL
Sales				
Espresso	13300	13600	14200	
Coffee	5800	6000	6200	
Food/Beverage	3600	3800	3800	
Merchandise	1000	1100	1100	
Computer	600	600	600	
Total Sales				
Expenses				
Cost of Goods				
Cost of Merchandise				
Wage	9000	9000	9000	
Internet	325	325	325	
Building	2100	2100	2100	
Capital Assets	1500	1500	1500	
Miscellaneous	1300	1300	1300	
Total Expenses				
Income				
Net Income				
Profit Margin				

In the image, a green dashed box highlights the row containing Sales, Espresso, Coffee, Food/Beverage, Merchandise, and Computer. A green arrow points from a callout box labeled "Copied data" to this row. Below it, a new row (row 10) has been inserted, containing the same data as the copied row. A green arrow points from a callout box labeled "Inserted row with copied data" to this new row.

Cutting and Pasting Data

The screenshot shows the Microsoft Excel interface with a spreadsheet titled "ex01_Cafe Forecast1 - Microsoft Excel". The ribbon includes File, Home, Insert, Page Layout, Formulas, Data, Review, and View. The spreadsheet data is as follows:

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1		Downtown Internet Café												
2		First Quarter Forecast												
3	Sales	JAN	FEB	MAR	TOTAL									
4	Espresso	13300	13600	14200										
5	Coffee	5800	6000	6200										
6	Food/Beverage	3600	3800	3800										
7	Merchandise	1000	1100	1100										
8	Computer	600	600	600										
9	Total Sales													
10		JAN	FEB	MAR	TOTAL									
11	Expenses													
12	Cost of Goods													
13	Cost of Merchandise													
14	Wage	9000	9000	9000										
15	Internet	325	325	325										
16	Building	2100	2100	2100										
17	Capital Assets	1500	1500	1500										
18	Miscellaneous	1300	1300	1300										
19	Total Expenses													
20														
21	Income													
22	Net Income													
23	Profit Margin													
24														
25														
26														
27														

A green callout box with the text "Selected cells cut and then pasted to a new location" points to the selected range of cells A21:C23.

Working with Formulas

- Entering Formulas
- Copying Formulas with Relative References
- Summarizing Data
- Using Pointing to Enter a Formula
- Recalculating the Worksheet

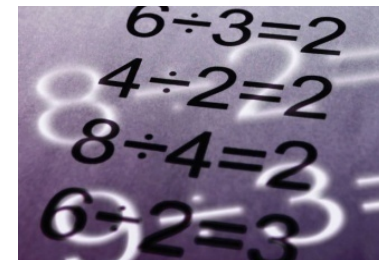
=SUM(A2+B2)

=SUM(2+2)



Concept 7: Formula

- An equation that performs a calculation on data in a worksheet
 - Always begins with an equal sign (=)
 - Formulas use arithmetic operators (+, -, /, *, %, ^)
 - Calculated result is a variable value
- Follows the order of precedence, except where overridden by parentheses



Entering Formulas

A screenshot of the Microsoft Excel interface. The 'Formulas' ribbon is active, and the 'fx' button is highlighted. A dropdown list of function names is displayed, filtered by the letter 'b'. The list includes functions like BAHTTEXT, BESSELI, BESSELJ, BESSEK, BESSELY, BETA.DIST, BETA.INV, BIN2DEC, BIN2HEX, BIN2OCT, BINOM.DIST, and BINOM.INV. A green callout box points to this list.

Drop-down list of function names that begin with the letter "b"

A screenshot of the Microsoft Excel interface showing a spreadsheet. The formula bar at the top displays the formula `=B4+C4+D4`. The spreadsheet data is as follows:

	A	B	C	D	E	F
1	Downtown Internet Café					
2	First Quarter Forecast					
3	Sales	JAN	FEB	MAR	TOTAL	
4	Espresso	13300	13600	14200	41100	
5	Coffee	5800	6000	6200		
6	Food/Beverage	3600	3800	3800		
7	Merchandise	1000	1100	1100		
8	Computer	600	600	600		
9	Total Sales					
10		JAN	FEB	MAR	TOTAL	
11	Expenses					
12	Capital Assets	1500	1500	1500		
13	Miscellaneous	1300	1300	1300		
14	Total Expenses					
15	Income					
16	Net Income					
17	Profit Margin					

The formula bar shows `=B4+C4+D4`. The result of the formula, 41100, is displayed in cell E4. A green callout box points to the result in the cell.

Result of formula displayed in cell

Formula displayed in formula bar

Result of formula displayed in cell

Copying Formulas with Relative References

Formula cell references are color coded

Each referenced cell is surrounded by a colored box

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1		Downtown Internet Café												
2		First Quarter Forecast												
3	Sales	JAN	FEB	MAR	TOTAL									
4	Espresso	13300	13600	14200	=b4+c4+d4									
5	Coffee	5800	6000	6200										
6	Food/Beverage	3600	3800	3800										
7	Merchandise	1000	1100	1100										
8	Computer	600	600	600										
9	Total Sales													
10		JAN	FEB	MAR	TOTAL									
11	Expenses													
12	Cost of Goods													
13	Cost of Merchandise													
14	Pay													
15	Internet													
16	Building													
17	Capital Assets													
18	Miscellaneous	1300	1300	1300										
19	Total Expenses													
20														
21	Income													
22	Net Income													
23														
24	Profit Margin													
25														
26														
27														

Concept 8:

Relative Reference

- A cell or range reference in a formula whose location is interpreted in relation to the position of the cell that contains the formula
- When a formula is copied, referenced cells automatically adjust to reflect the new location

	A	B
1	=A4	
2		=B5
3		
4	10	
5		20
6		

Concept 9: Function

- Function is a prewritten formula
- Performs certain types of calculations automatically
- Function name identifies the type of calculation to be performed
- Argument is the data the function uses to perform the calculation

= Function name (argument 1, argument 2, ...)

=NOW()

Summarizing Data (part 1)

Category	Function	Calculates
Financial	PMT	Calculates the payment for a loan based on constant payments and a constant interest rate.
	PV	Returns the present value of an investment—the total amount that a series of future payments is worth now.
	FV	Returns the future value of an investment—the total amount that a series of payments will be worth.
Date & Time	TODAY	Returns the serial number that represents today's date.
	DATE	Returns the serial number of a particular date.
	NOW	Returns the serial number of the current date and time.
Math & Trig	SUM	Adds all the numbers in a range of cells.
	ABS	Returns the absolute value of a number (a number without its sign).
Statistical	AVERAGE	Returns the average (arithmetic mean) of its arguments.
	MAX	Returns the largest value in a set of values; ignores logical values and text.
	MIN	Returns the smallest value in a set of values; ignores logical values and text.
	COUNT	Counts the number of cells in a range that contain numbers.
	COUNTA	Counts the number of cells in a range that are not empty.
	COLUMNS	Returns the number of columns in an array or reference.
Lookup & Reference	HLOOKUP	Looks for a value in the top row of a table and returns the value in the same column from a row you specify.
	VLOOKUP	Looks for a value in the leftmost column of a table and returns the value in the same row from a column you specify.
Database	DSUM	Adds the numbers in the field (column) or records in the database that match the conditions you specify.
	DAVERAGE	Averages the values in a column in a list or database that match conditions you specify.

Summarizing Data cont.

Category	Function	Calculates
Text	PROPER	Converts text to proper case in which the first letter of each word is capitalized.
	UPPER	Converts text to uppercase.
	LOWER	Converts text to lowercase.
	SUBSTITUTE	Replaces existing text with new text in a text string.
Logical	IF	Returns one value if a condition you specify evaluates to TRUE and another value if it evaluates to FALSE.
	AND	Returns TRUE if all its arguments are TRUE; returns FALSE if any arguments are FALSE.
	OR	Returns TRUE if any arguments are TRUE; returns FALSE if all arguments are FALSE.
	NOT	Changes FALSE to TRUE or TRUE to FALSE.
	IFERROR	Returns value-if-error if expression is an error and the value of the expression itself otherwise.
Information	ISLOGICAL	Returns TRUE if value is a logical value, either TRUE or FALSE.
	ISREF	Returns TRUE if value is a reference.
Engineering	BIN2DEC	Converts a binary number to decimal.
	CONVERT	Converts a number from one measurement system to another.
Cube	CUBESETCOUNT	Returns the number of items in a set.

Using Functions

Function name

Range argument

SUM command

Moving border identifies proposed range to sum

Sales	JAN	FEB	MAR	TOTAL
Espresso	13300	13600	14200	41100
Coffee	5800	6000	6200	18000
Food/Beverage	3600	3800	3800	11200
Merchandise	1000	1100	1100	3200
Computer	600	600	600	1800
Total Sales	=SUM(B4:B8)			TOTAL

Using Pointing to Enter a Formula

Cell reference of selected cell is entered in formula

Mode indicator

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1		Downtown Internet Café												
2		First Quarter Forecast												
3	Sales	JAN	FEB	MAR	TOTAL	MIN	MAX	AVG						
4	Espresso	13300	13600	14200	41100	13300	14200	13700						
5	Coffee	5800	6000	6200	18000	5800	6200	6000						
6	Food/Beverage	3600	3800	3800	11200	3600	3800	3733.333						
7	Merchandise	1000	1100	1100	3200	1000	1100	1066.667						
8	Computer	600	600	600	1800	600	600	600						
9	Total Sales	24300	25100	25900	75300									
10		JAN	FEB	MAR	TOTAL									
11	Expenses													
12	Cost of Goods	=B4												
13	Cost of Merchandise													
14	Pay	9000	9000	9000										
15	Internet	325	325	325										
16	Building	2100	2100	2100										
17	Capital Assets	1500	1500	1500										
18	Miscellaneous	1300	1300	1300										
19	Total Expenses													
20														
21	Income													
22	Net Income													
23														
24	Profit Margin													
25														
26														
27														

Entering a Formula

Cell reference of selected cell is entered in formula

Moving border surrounds selected cell

Preselected range

Mode indicator

	JAN	FEB	MAR	TOTAL	MIN	MAX	AVG
Espresso	13300	13600	14200	41100	13300	14200	13700
Coffee	5800	6000	6200				
Food/Beverage	3600	3800	3800				
Merchandise	1000	1100	1100				
Computer	600	600	600				
Total Sales	24300	25100	25900				
Expenses							
Cost of Goods	=B4						
Cost of Merchandise							
Pay	9000	9000	9000				
Internet	325	325	325				
Building	2100	2100	2100				
Capital Assets	1500	1500	1500				
Miscellaneous	1300	1300	1300				
Total Expenses							
Income							
Net Income							
Profit Margin							

Concept 10: Recalculation

- When a number in a referenced cell in a formula changes, Excel automatically recalculates all formulas that are dependent upon the changed value.
- One of the most powerful features of electronic worksheets.

	A	B	C	D	E	F	G	H	I	J	K
1		Downtown Internet Cafe									
2		First Quarter Forecast									
3	Sales	JAN	FEB	MAR	TOTAL	MIN	MAX	AVG			
4	Espresso	13300	13600	14200	41100	13300	14200	13700			
5	Coffee	5800	6000	6200	18000	5800	6200	6000			
6	Food/Beverage	3600	3800	3800	11200	3600	3800	3733.333			
7	Merchandise	1000	1100	1100	3200	1000	1100	1066.667			
8	Computer	400	600	600	1600	400	600	533.3333			
9	Total Sales	24100	25100	25900	75100						
10		JAN	FEB	MAR	TOTAL						
11	Expenses										
12	Cost of Goods	7225	7480	7650	22395						
13	Cost of Merchandise	700	770	770	2240						
14	Wage	9000	9000	9000	27000						
15	Internet	325	325	325	975						
16	Building	2100	2100	2100	6300						
17	Capital Assets	1500	1500	1500	4500						
18	Miscellaneous	1300	1300	1300	3900						
19	Total Expenses	22150	22475	22685	67310						
20											
21	Income										
22	Net Income	1950	2625	3215	7790						
23											
24	Profit Margin	0.080913	0.104582	0.124131	0.103728						
25											

All dependent formulas have been automatically recalculated

Inserting Rows and Columns

Cafe Forecast1 - Microsoft Excel

File Home Insert Page Layout Formulas Data Review View

Clipboard Font Alignment Number

B20 \sum =SUM(B12:B19)

	A	B	C	D	E	F	G	H
1		Downtown Internet Café						
2		First Quarter Forecast						
3	Sales	JAN	FEB	MAR	TOTAL	MIN	MAX	AVG
4	Espresso	13300	13600	14200	41100	13300	14200	13700
5	Coffee	5800	6000	6200	18000	5800	6200	6000
6	Food/Beverage	3600	3800	3800	11200	3600	3800	3733.333
7	Merchandise	1000	1100	1100	3200	1000	1100	1066.667
8	Computer	400	600	600	1600	400	600	533.3333
9	Total Sales	24100	25100	25900	75100			
10		JAN	FEB	MAR	TOTAL			
11	Expenses							
12	Cost of Goods	7225	7480	7690	22395			
13	Cost of Merchandise	700	770	770	2240			
14	Wage	9000	9000	9000	27000			
15	Internet	325	325	325	975			
16	Building	2100	2100	2100	6300			
17	Advertising	600	600	600	1800			
18	Capital Assets	1500	1500	1500	4500			
19	Miscellaneous	1300	1300	1300	3900			
20	Total Expenses	22750	23075	23285	69110			
21								
22	Income							
23	Net Income	1350	2025	2615	5990			
24								
25	Profit Margin	0.056017	0.080677	0.100965	0.07976			
26								
27								

Sheet1 Sheet2 Sheet3

Ready

New row inserted

Formulas recalculated

Cafe Forecast1 - Microsoft Excel

File Home Insert Page Layout Formulas Data Review View

Clipboard Font Alignment Number

F20 \sum

	A	B	C	D	E	F	G	H
1		Downtown Internet Café						
2		First Quarter Forecast						
3	Sales	JAN	FEB	MAR	TOTAL	AVG		
4	Espresso	13300	13600	14200	41100	13700		
5	Coffee	5800	6000	6200	18000	6000		
6	Food/Beverage	3600	3800	3800	11200	733.333		
7	Merchandise	1000	1100	1100	3200	1066.667		
8	Computer	400	600	600	1600	533.3333		
9	Total Sales	24100	25100	25900	75100			
10		JAN	FEB	MAR	TOTAL			
11	Expenses							
12	Cost of Goods	7225	7480	7690	22395			
13	Cost of Merchandise	700	770	770	2240			
14	Wage	9000	9000	9000	27000			
15	Internet	325	325	325	975			
16	Building	2100	2100	2100	6300			
17	Advertising	600	600	600	1800			
18	Capital Assets	1500	1500	1500	4500			
19	Miscellaneous	1300	1300	1300	3900			
20	Total Expenses	22750	23075	23285	69110			
21								
22	Income							
23	Net Income	1350	2025	2615	5990			
24								
25	Profit Margin	0.056017	0.080677	0.100965	0.07976			
26								
27								

Sheet1 Sheet2 Sheet3

Ready

Deleting Rows and Columns

Cafe Forecast1 - Microsoft Excel

File Home Insert Page Layout Formulas Data Review View

Calibri 11

B I U

Clipboard Font Alignment Number

B20 =SUM(B12:B19)

	A	B	C	D	E	F	G	H
1		Downtown Internet Café						
2		First Quarter Forecast						
3	Sales	JAN	FEB	MAR	TOTAL	MIN	MAX	AVG
4	Espresso	13300	13600	14200	41100	13300	14200	13700
5	Coffee	5800	6000	6200	18000	5800	6200	6000
6	Food/Beverage	3600	3800	3800	11200	3600	3800	3733.333
7	Merchandise	1000	1100	1100	3200	1000	1100	1066.667
8	Computer	400	600	600	1600	400	600	533.3333
9	Total Sales	24100	25100	25900	75100			
10		JAN	FEB	MAR	TOTAL			
11	Expenses							
12	Cost of Goods	7225	7480	7690	22395			
13	Cost of Merchandise	700	770	770	2240			
14	Wage	9000	9000	9000	27000			
15	Internet	325	325	325	975			
16	Building	2100	2100	2100	6300			
17	Advertising	600	600	600	1800			
18	Capital Assets	1500	1500	1500	4500			
19	Miscellaneous	1300	1300	1300	3900			
20	Total Expenses	22750	23075	23285	69110			
21								
22	Income							
23	Net Income	1350	2025	2615	5990			
24								
25	Profit Margin	0.056017	0.080677	0.100965	0.07976			
26								
27								

Sheet1 Sheet2 Sheet3

Ready

MIN and MAX columns deleted

Cafe Forecast1 - Microsoft Excel

File Home Insert Page Layout Formulas Data Review View

Calibri 11

B I U

Clipboard Font Alignment Number

F20

	A	B	C	D	E	F	G	H
1		Downtown Internet Café						
2		First Quarter Forecast						
3	Sales	JAN	FEB	MAR	TOTAL	AVG		
4	Espresso	13300	13600	14200	41100	13700		
5	Coffee	5800	6000	6200	18000	6000		
6	Food/Beverage	3600	3800	3800	11200	3733.333		
7	Merchandise	1000	1100	1100	3200	1066.667		
8	Computer	400	600	600	1600	533.3333		
9	Total Sales	24100	25100	25900	75100			
10		JAN	FEB	MAR	TOTAL			
11	Expenses							
12	Cost of Goods	7225	7480	7690	22395			
13	Cost of Merchandise	700	770	770	2240			
14	Wage	9000	9000	9000	27000			
15	Internet	325	325	325	975			
16	Building	2100	2100	2100	6300			
17	Advertising	600	600	600	1800			
18	Capital Assets	1500	1500	1500	4500			
19	Miscellaneous	1300	1300	1300	3900			
20	Total Expenses	22750	23075	23285	69110			
21								
22	Income							
23	Net Income	1350	2025	2615	5990			
24								
25	Profit Margin	0.056017	0.080677	0.100965	0.07976			
26								
27								

Sheet1 Sheet2 Sheet3

Ready

Formulas recalculated

Formatting Cells and Cell Content

- Changing Cell Alignment
- Changing Row Height
- Indenting Cell Content
- Merging Cells
- Changing Fonts and Font Sizes
- Applying Text Effects
- Clearing Formats
- Using Format Painter
- Formatting Numbers
- Adding Font Color
- Adding Fill Color
- Adding and Removing Cell Borders

Concept : Alignment

- Settings allow you to change placement and orientation of the entry in a cell.

– Horizontal

Text	Text	Text
------	------	------

– Vertical

Text	Text	Text
------	------	------

– Angle of text

Text	Text	Text	Text
------	------	------	------

Concept : Row Height

- The size or height of a row measured in points.
- Default height is 12.75 points.
- Can be changed manually or set to a specific value.



Indenting Cell Content

The screenshot shows an Excel spreadsheet titled 'Cafe Forecast1'. The data is organized into two tables. The first table, 'Sales', has columns for JAN, FEB, MAR, TOTAL, and AVG. The second table, 'Expenses', has columns for JAN, FEB, MAR, and TOTAL. The 'Miscellaneous' cell in the Sales table and the 'Advertising' and 'Capital Assets' cells in the Expenses table are highlighted in blue. Two callout boxes provide instructions: one points to the 'Miscellaneous' cell, stating 'Increase margin space between border and text', and another points to the 'Advertising' and 'Capital Assets' cells, stating 'Entries in nonadjacent selection are indented'.

Sales	JAN	FEB	MAR	TOTAL	AVG
Espresso	13300	13600	14200	41100	13700
Coffee	5800	6000	6200	18000	6000
Food/Beverage	3600	3800	3800	11200	3733.333
Merchandise	1000	1100	1100	3200	1066.667
Computer	400	600	600	1600	533.3333
Total Sales	24100	25100	25900	75100	

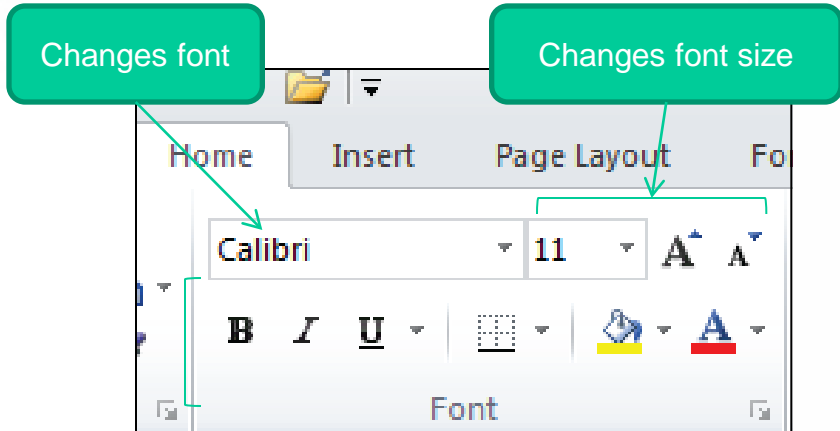
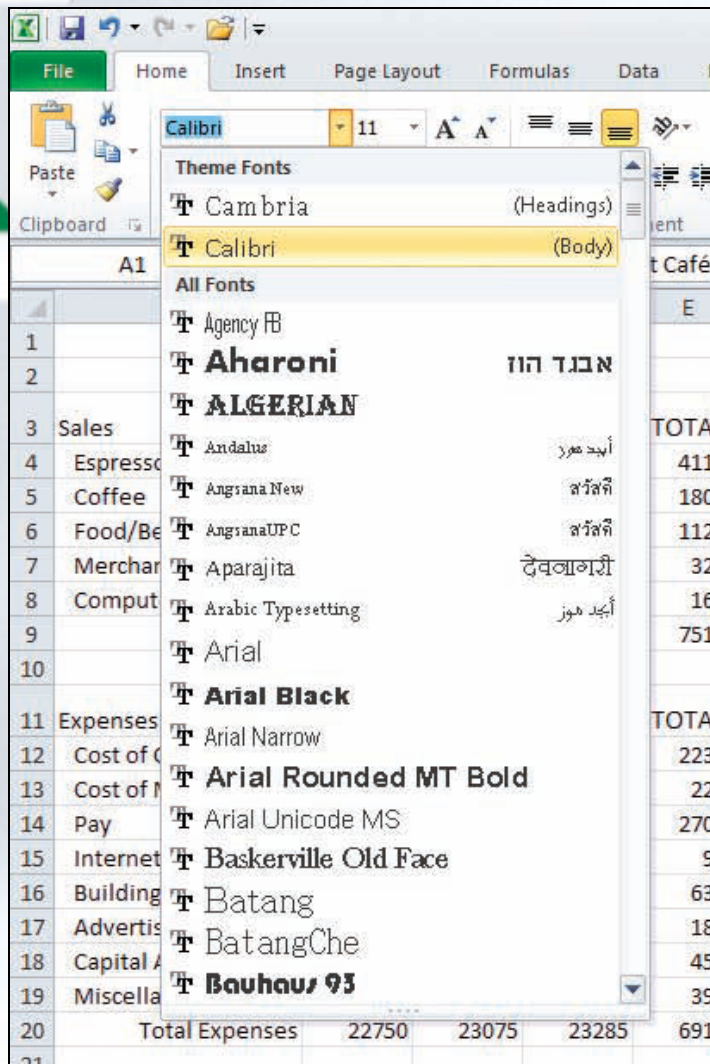
Expenses	JAN	FEB	MAR	TOTAL
Cost of Goods	7225	7480	7690	22395
Cost of Merchandise	700	770	770	2240
Pay	9000	9000	9000	27000
Internet	325	325	325	975
Building	2100	2100	2100	6300
Advertising	600	600	600	1800
Capital Assets	1500	1500	1500	4500
Miscellaneous	1300	1300	1300	3900
Total Expenses	22750	23075	23285	69110

Merging Cells

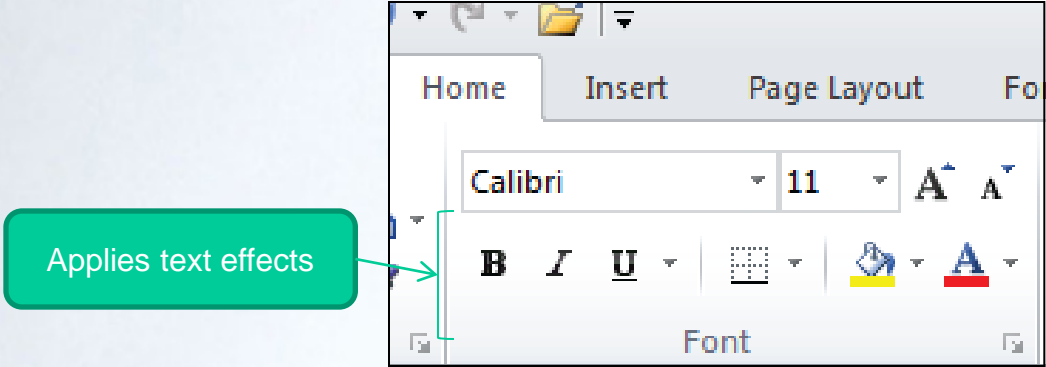
The screenshot shows the Excel ribbon with the 'Merge & Center' button highlighted. A callout box points to this button with the text 'Merges cells and centers content'. Another callout box points to the formula bar, which contains 'Downtown Internet Café', with the text 'Cell reference of merged cell'. A third callout box points to the text 'Downtown Internet Café' in cell A1 of the spreadsheet, with the text 'Cell entry centered in merged cell'.

Merge Menu	Action
Merge & Center	Merges cells and centers entry
Merge Across	Merges cells horizontally
Merge Cells	Merges cells horizontally and vertically
Unmerge Cells	Splits cells that have been merged back into individual cells

Fonts Effects



Text Effects



Format	Example	Use
Bold	Bold	Adds emphasis.
Italic	<i>Italic</i>	Adds emphasis.
Underline	<u>Underline</u>	Adds emphasis.
Strikethrough	Strikethrough	Indicates words to be deleted.
Superscript	"To be or not to be." ¹	Used in footnotes and formulas.
Subscript	H ₂ O	Used in formulas.
Color	Color Color Color	Adds interest.

Clearing Formats

Removes all formatting in a selected cell or range

The screenshot shows the Microsoft Excel interface with the 'Home' ribbon selected. The 'Clear All Formats' button, represented by a blue eraser icon, is highlighted with a green callout box. The spreadsheet data is as follows:

Downtown Internet Café First Quarter Forecast					
Sales	JAN	FEB	MAR	TOTAL	AVG
Espresso	13300	13600	14200	41100	13700
Coffee	5800	6000	6200	18000	6000
Food/Beverage	3600	3800	3800	11200	3733.333
Merchandise	1000	1100	1100	3200	1066.667
Computer	400	600	600	1600	533.3333
Total Sales	24100	25100	25900	75100	
Expenses	JAN	FEB	MAR	TOTAL	
Cost of Goods	7225	7480	7690	22395	
Cost of Merchandise	700	770	770	2240	
Pay	9000	9000	9000	27000	
Internet	325	325	325	975	
Building	2100	2100	2100	6300	
Advertising	600	600	600	1800	
Capital Assets	1500	1500	1500	4500	
Miscellaneous	1300	1300	1300	3900	
Total Expenses	22750	23075	23285	69110	
Income					
Net Income	1350	2025	2615	5990	
Profit Margin	0.056017	0.080677	0.100965	0.07976	

Using Format Painter

Format Painter copies format of selected cell

Downtown Internet Café First Quarter Forecast					
Sales	JAN	FEB	MAR	TOTAL	AVG
Espresso	13300	13600	14200	41100	13700
Coffee	5800	6000	6200	18000	6000
Food/Beverage	3600	3800	3800	11200	3733.333
Merchandise	1000	1100	1100	3200	1066.667
Computer	400	600	600	1600	533.3333
Total Sales	24100	25100	25900	75100	
Expenses	JAN	FEB	MAR	TOTAL	
Cost of Goods	7225	7480	7690	22395	
Cost of Merchandise	700	770	770	2240	
Pay	9000	9000	9000	27000	
Internet	325	325	325	975	
Building	2100	2100	2100	6300	
Advertising	600	600	600	1800	
Capital Assets	1500	1500	1500	4500	
Miscellaneous	1300	1300	1300	3900	
Total Expenses	22750	23075	23285	69110	
Income					
Net Income	1350	2025	2615	5990	
Profit Margin	0.056017	0.080677	0.100965	0.07976	

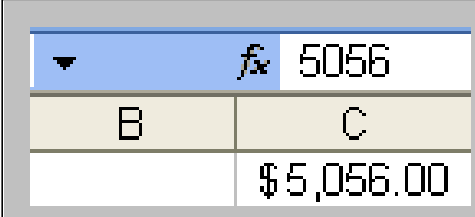
Bold, underline, and center-alignment formats copied from B3 using Format Painter

Bold effect copied from A9 using Format Painter

Concept :

Number Formats

- Number formats change the appearance of numbers
- Does not change the way the number is stored or used in calculations
- Default number format is General
- Other formats include:
 - Accounting, Currency, Date, Time, Percentage, Fraction, Scientific, Custom



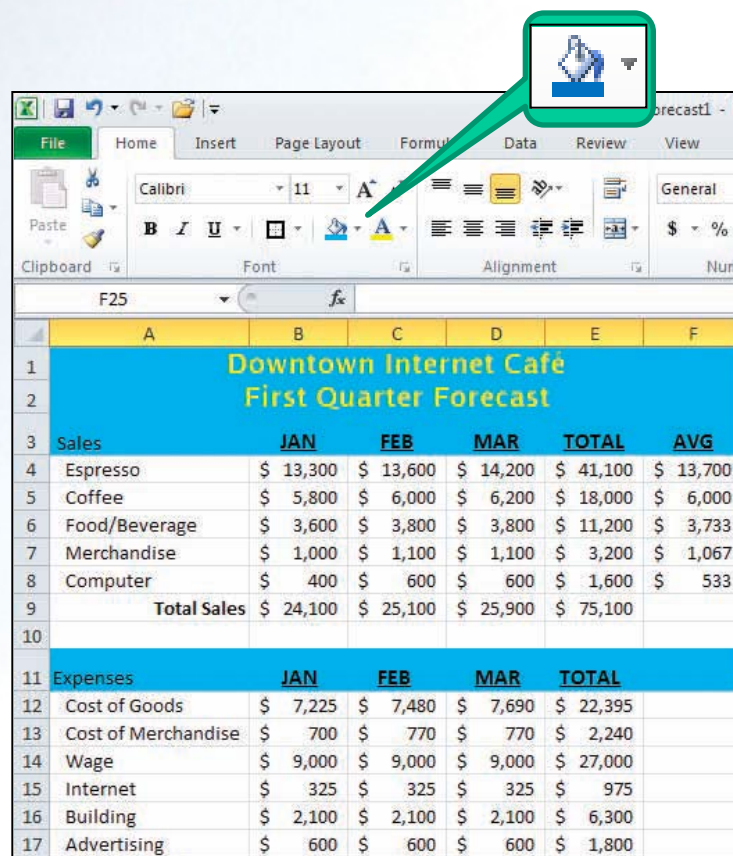
fx	
B	C
	\$ 5,056.00

Adding Font Color

The screenshot shows the Microsoft Excel interface with the 'Home' tab selected. The 'Font' group in the ribbon is active, and the font color icon (represented by the letter 'A' with a colored underline) is highlighted by a green callout box. A color palette is open, showing 'Theme Colors' and 'Standard Colors' options. The spreadsheet data is visible in the background, including a sales and expenses table.

	A	B	C	D	E
1	Downtown				
2	First Quarter				
3	Sales	JAN			TOTAL
4	Espresso	\$ 13,300			41,100
5	Coffee	\$ 5,800			18,000
6	Food/Beverage	\$ 3,600	\$ 3,800	\$ 3,800	\$ 11,200
7	Merchandise	\$ 1,000	\$ 1,100	\$ 1,100	\$ 3,200
8	Computer	\$ 400	\$ 600	\$ 600	\$ 1,600
9	Total Sales	\$ 24,100	\$ 25,100	\$ 25,900	\$ 75,100
10					
11	Expenses	JAN	FEB	MAR	TOTAL
12	Cost of Goods	\$ 7,225	\$ 7,480	\$ 7,690	\$ 22,395
13	Cost of Merchandise	\$ 700	\$ 770	\$ 770	\$ 2,240
14	Pay	\$ 9,000	\$ 9,000	\$ 9,000	\$ 27,000
15	Internet	\$ 325	\$ 325	\$ 325	\$ 975
16	Building	\$ 2,100	\$ 2,100	\$ 2,100	\$ 6,300
17	Advertising	\$ 600	\$ 600	\$ 600	\$ 1,800

Adding Fill Color



The screenshot shows the Microsoft Excel interface with the Home tab selected. A callout box highlights the Fill Color icon (a paint bucket) in the Font group of the ribbon. Below the ribbon, a spreadsheet is displayed with a blue fill color applied to the title and header rows. The spreadsheet data is as follows:

	A	B	C	D	E	F
1	Downtown Internet Café					
2	First Quarter Forecast					
3	Sales	JAN	FEB	MAR	TOTAL	AVG
4	Espresso	\$ 13,300	\$ 13,600	\$ 14,200	\$ 41,100	\$ 13,700
5	Coffee	\$ 5,800	\$ 6,000	\$ 6,200	\$ 18,000	\$ 6,000
6	Food/Beverage	\$ 3,600	\$ 3,800	\$ 3,800	\$ 11,200	\$ 3,733
7	Merchandise	\$ 1,000	\$ 1,100	\$ 1,100	\$ 3,200	\$ 1,067
8	Computer	\$ 400	\$ 600	\$ 600	\$ 1,600	\$ 533
9	Total Sales	\$ 24,100	\$ 25,100	\$ 25,900	\$ 75,100	
10						
11	Expenses	JAN	FEB	MAR	TOTAL	
12	Cost of Goods	\$ 7,225	\$ 7,480	\$ 7,690	\$ 22,395	
13	Cost of Merchandise	\$ 700	\$ 770	\$ 770	\$ 2,240	
14	Wage	\$ 9,000	\$ 9,000	\$ 9,000	\$ 27,000	
15	Internet	\$ 325	\$ 325	\$ 325	\$ 975	
16	Building	\$ 2,100	\$ 2,100	\$ 2,100	\$ 6,300	
17	Advertising	\$ 600	\$ 600	\$ 600	\$ 1,800	

Adding and Removing Cell Borders

The screenshot shows the Microsoft Excel interface with a spreadsheet titled "Cafe Forecast1 - Microsoft Excel". The spreadsheet displays a financial forecast for "Downtown Internet Café" for the first quarter. The data is organized into sections for Sales, Expenses, and Income. A thick black border is applied to the entire data table. Two green callout boxes provide instructions:

- The first callout, "Opens Borders drop-down menu", points to the Borders icon in the Font group of the Home ribbon.
- The second callout, "Thick box border style applied to selection", points to the thick border around the data table.

Downtown Internet Café First Quarter Forecast					
Sales	JAN	FEB	MAR	TOTAL	AVG
Espresso	\$ 13,300	\$ 13,600	\$ 14,200	\$ 41,100	\$ 13,700
Coffee	\$ 5,800	\$ 6,000	\$ 6,200	\$ 18,000	\$ 6,000
Food/Beverage	\$ 3,600	\$ 3,800	\$ 3,800	\$ 11,200	\$ 3,733
Merchandise	\$ 1,000	\$ 1,100	\$ 1,100	\$ 3,200	\$ 1,067
Computer	\$ 400	\$ 600	\$ 600	\$ 1,600	\$ 533
Total Sales	\$ 24,100	\$ 25,100	\$ 25,900	\$ 75,100	
Expenses					
	JAN	FEB	MAR	TOTAL	
Cost of Goods	\$ 7,225	\$ 7,480	\$ 7,690	\$ 22,395	
Cost of Merchandise	\$ 700	\$ 770	\$ 770	\$ 2,240	
Wage	\$ 9,000	\$ 9,000	\$ 9,000	\$ 27,000	
Internet	\$ 325	\$ 325	\$ 325	\$ 975	
Building	\$ 2,100	\$ 2,100	\$ 2,100	\$ 6,300	
Advertising	\$ 600	\$ 600	\$ 600	\$ 1,800	
Capital Assets	\$ 1,500	\$ 1,500	\$ 1,500	\$ 4,500	
Miscellaneous	\$ 1,300	\$ 1,300	\$ 1,300	\$ 3,900	
Total Expenses	\$ 22,750	\$ 23,075	\$ 23,285	\$ 69,110	
Income					
Net Income	\$ 1,350	\$ 2,025	\$ 2,615	\$ 5,990	
Profit Margin	5.60%	8.07%	10.10%	7.98%	

Hide and Unhide Rows and Columns

Columns B-D hidden to emphasize totals

Sales	TOTAL	AVG
Espresso	\$ 41,100	\$ 13,700
Coffee	\$ 18,000	\$ 6,000
Food/Beverage	\$ 11,200	\$ 3,733
Merchandise	\$ 3,200	\$ 1,067

Rows 4-8 and 11-18 hidden to emphasize totals

Cafe Forecast1 - Microsoft Excel

	JAN	FEB	MAR	TOTAL	AVG
Downtown Internet Café First Quarter Forecast					
Sales					
Total Sales	\$ 24,100	\$ 25,100	\$ 25,900	\$ 75,100	
Expenses					
Total Expenses	\$ 22,750	\$ 23,075	\$ 23,285	\$ 69,110	
Income					
Net Income	\$ 1,350	\$ 2,025	\$ 2,615	\$ 5,990	
Profit Margin	5.60%	8.07%	10.10%	7.98%	

Creating a Simple Chart

The screenshot shows the Microsoft Excel interface with a worksheet titled "Cafe Forecast1". The worksheet contains a sales forecast for a downtown internet café for the first quarter. A column chart is displayed, showing sales for three months: January (JAN), February (FEB), and March (MAR). The chart uses data from the Sales section of the worksheet.

Chart Tools tab

Data outlined in color to show selection for chart

Column chart using data from Sales section of worksheet

Downtown Internet Café First Quarter Forecast					
Sales	JAN	FEB	MAR	TOTAL	AVG
Espresso	\$ 13,300	\$ 13,600	\$ 14,200	\$ 41,100	\$ 13,700
Coffee	\$ 5,800	\$ 6,000	\$ 6,200	\$ 18,000	\$ 6,000
Food/Beverage	\$ 3,600	\$ 3,800	\$ 3,800	\$ 11,200	\$ 3,733
Merchandise	\$ 1,000	\$ 1,000	\$ 1,000	\$ 3,000	\$ 1,000
Computer	\$ 400	\$ 400	\$ 400	\$ 1,200	\$ 400
Total Sales	\$ 24,100	\$ 25,000	\$ 25,000	\$ 74,100	\$ 24,700

Expenses		
	JAN	FEB
Cost of Goods	\$ 7,225	\$ 7,400
Cost of Merchandise	\$ 700	\$ 700
Wage	\$ 9,000	\$ 9,000
Internet	\$ 325	\$ 325
Building	\$ 2,100	\$ 2,100
Advertising	\$ 600	\$ 600
Capital Assets	\$ 1,500	\$ 1,500
Miscellaneous	\$ 1,300	\$ 1,300
Total Expenses	\$ 22,750	\$ 23,000

Income				
	JAN	FEB	MAR	AVG
Net Income	\$ 1,350	\$ 2,025	\$ 2,615	\$ 5,990
Profit Margin	5.60%	8.07%	10.10%	7.98%

Formatting Values as a Date

The screenshot shows the Microsoft Excel interface with a spreadsheet titled "Cafe Forecast1". The spreadsheet contains financial data for a cafe, including expenses and income. A bar chart displays sales for three months (JAN, FEB, MAR) across five categories: Espresso, Coffee, Food/Beverage, Merchandise, and Computer. The date "5/24/2012" is entered in cell A41, and the date "May 24, 2012" is displayed in the same cell. Three callouts explain the formatting process: "Launches Number dialog box" points to the Number tab in the ribbon, "Date as entered" points to the date in the formula bar, and "Date displayed in chosen format" points to the date in the cell.

	A	B	C	D	E
15	Building	\$ 2,100	\$ 2,100	\$ 2,100	\$ 6,300
16	Advertising	\$ 600	\$ 600	\$ 600	\$ 1,800
17	Capital Assets	\$ 1,500	\$ 1,500	\$ 1,500	\$ 4,500
18	Miscellaneous	\$ 1,300	\$ 1,300	\$ 1,300	\$ 3,900
19	Total Expenses	\$ 22,750	\$ 23,075	\$ 23,285	\$ 69,110
20	Income				
21	Net Income	\$ 1,350	\$ 2,025	\$ 2,615	\$ 5,990
22	Profit Margin	5.60%	8.07%	10.10%	7.98%

Bar Chart Data (Approximate Values):

Category	JAN	FEB	MAR
Espresso	\$13,000	\$14,000	\$14,500
Coffee	\$6,000	\$6,000	\$6,000
Food/Beverage	\$4,000	\$4,000	\$4,000
Merchandise	\$1,000	\$1,000	\$1,000
Computer	\$500	\$500	\$500

Launches Number dialog box

Date as entered

Date displayed in chosen format

Documenting a Workbook

The screenshot displays the 'Information about Cafe Forecast1' dialog box in Microsoft Excel. The dialog is titled 'Information about Cafe Forecast1' and shows the file path 'C:\Users\Documents\Excel\Lab1\Cafe Forecast1.xlsx'. It is divided into several sections:

- Permissions:** Anyone can open, copy, and change any part of this workbook.
- Prepare for Sharing:** Before sharing this file, be aware of the following:
 - Document properties, printer preferences and author's name
 - Content that people with disabilities are unable to read
- Versions:** A list of recent autosaves:
 - Today, 5:33 PM (autosave)
 - Today, 5:19 PM (autosave)
 - Today, 5:08 PM (autosave)
 - Today, 4:22 PM (autosave)
 - Today, 3:59 PM (autosave)
- Properties:** A section on the right side of the dialog, highlighted by a green callout box labeled 'Document properties'. It contains the following information:
 - Size: 15.9KB
 - Title: Downtown Internet Cafe
 - Tags: Sales Projections
 - Categories: Add a category
 - Related Dates:**
 - Last Modified: Today, 5:45 PM
 - Created: 6/25/2010 10:25 AM
 - Last Printed: Never
 - Related People:**
 - Author: Student Name
 - Add an author
 - Last Modified By
 - Related Documents:**
 - Open File Location
 - Show All Properties

Previewing and Printing the Worksheet

Print preview

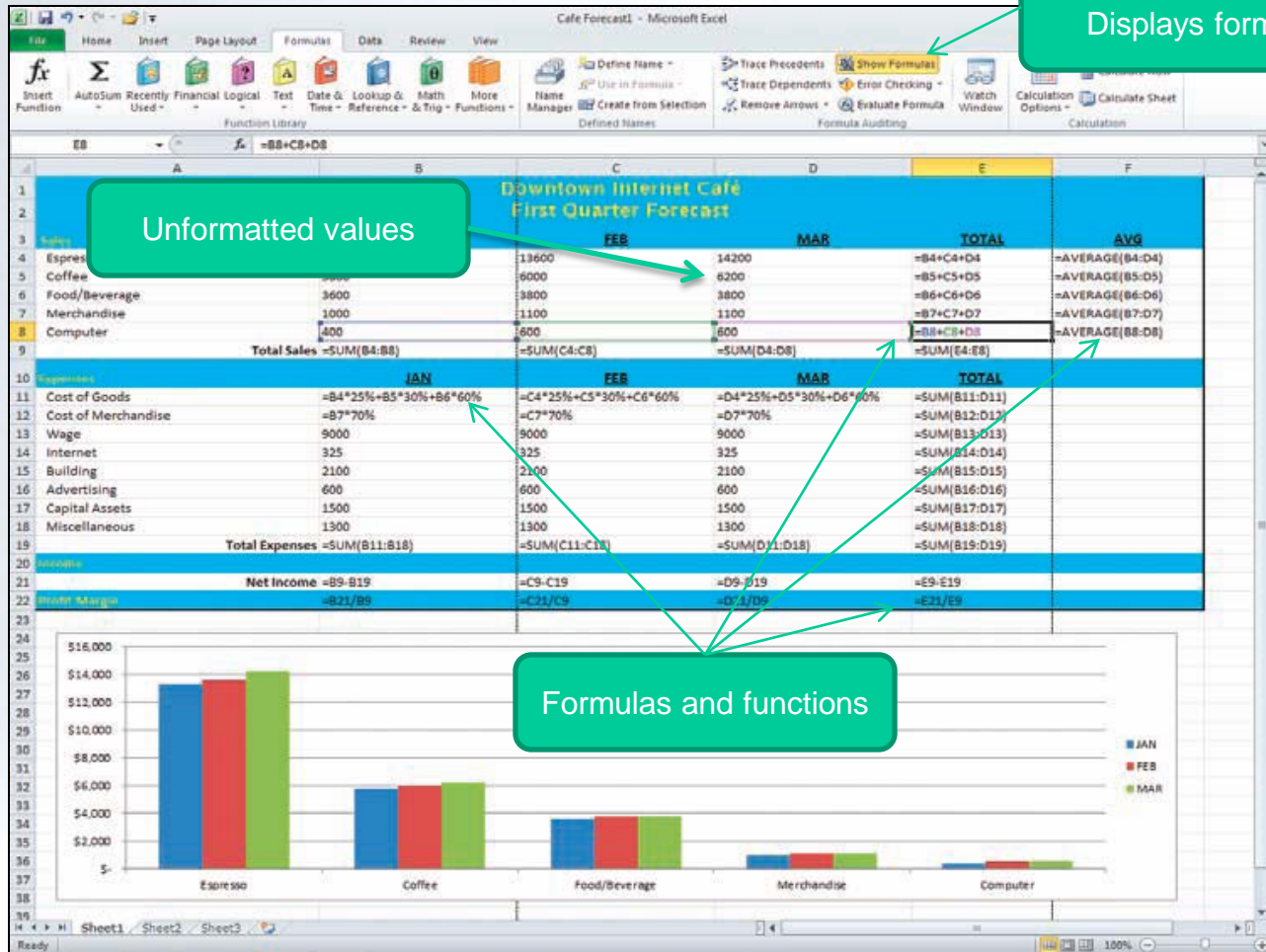
Sales	JAN	FEB	MAR	TOTAL	AVG
Espresso	\$ 13,300	\$ 13,600	\$ 14,200	\$ 41,100	\$ 13,700
Coffee	\$ 5,800	\$ 6,000	\$ 6,200	\$ 18,000	\$ 6,000
Food/Beverage	\$ 3,600	\$ 3,800	\$ 3,800	\$ 11,200	\$ 3,733
Merchandise	\$ 1,000	\$ 1,100	\$ 1,100	\$ 3,200	\$ 1,067
Computer	\$ 400	\$ 600	\$ 600	\$ 1,600	\$ 533
Total Sales	\$ 24,100	\$ 25,100	\$ 25,900	\$ 75,100	

Expenses	JAN	FEB	MAR	TOTAL
Cost of Goods	\$ 7,225	\$ 7,480	\$ 7,690	\$ 22,395
Cost of Merchandise	\$ 700	\$ 770	\$ 770	\$ 2,240
Wage	\$ 9,000	\$ 9,000	\$ 9,000	\$ 27,000
Internet	\$ 325	\$ 325	\$ 325	\$ 975
Building	\$ 2,100	\$ 2,100	\$ 2,100	\$ 6,300
Advertising	\$ 600	\$ 600	\$ 600	\$ 1,800
Capital Assets	\$ 1,500	\$ 1,500	\$ 1,500	\$ 4,500
Miscellaneous	\$ 1,300	\$ 1,300	\$ 1,300	\$ 3,900
Total Expenses	\$ 22,750	\$ 23,075	\$ 23,285	\$ 69,110

Income	JAN	FEB	MAR	AVG
Net Income	\$ 1,350	\$ 2,025	\$ 2,615	\$ 990
Profit Margin	5.60%	8.07%	10.10%	7.88%

Option	Action
Print Active Sheets	Prints the active worksheet (default).
Print Entire Workbook	Prints all worksheets in the workbook.
Print Selection	Prints selected range only.
Pages	Prints pages you specify by typing page numbers in the text box.

Displaying and Printing Formulas



Displays formulas

Unformatted values

Formulas and functions

Changing Page Orientation and Scaling



The screenshot shows the Microsoft Excel interface with the Print dialog box open. The 'Settings' section is expanded, showing 'Landscape Orientation' selected. Below it, 'Fit Sheet on One Page' is also selected, with the subtext 'Think the printout so that it fits on one page'. The worksheet 'Cafe Forecast1' is displayed in landscape orientation. It contains a table titled 'Economic Forecast' and a bar chart. Two callout boxes with arrows point to the 'Landscape Orientation' setting and the 'Fit Sheet on One Page' setting.

Page orientation changed to landscape

Worksheet sized to fit on one page

	2010	2011	2012	2013	2014	2015
Revenue	1100	1200	1300	1400	1500	1600
Cost of Sales	500	550	600	650	700	750
Expenses	100	110	120	130	140	150
Profit	500	540	580	620	660	700
Total	1100	1200	1300	1400	1500	1600

Exiting Excel 2007

 A screenshot of the 'Exit' dialog box in Excel 2007. It features a red 'X' icon in a square on the left and the word 'Exit' in a standard font to its right.	If you try to close without saving your work, Excel displays a warning
 A screenshot of the 'Save' dialog box in Excel 2007. It features a small icon of a document with a checkmark inside a square.	Excel saves the file with location of the cell selector



Key Terms

- active cell
- active sheet
- adjacent range
- alignment
- antonym
- argument
- AutoCorrect
- AutoFit
- cell
- cell reference
- cell selector
- chart
- column
- column letter
- column width
- constant

Key Terms cont.



- copy area
- custom dictionary
- data
- fill handle
- formula
- formula bar
- function
- heading
- main dictionary
- merged cell
- Name box
- nonadjacent range
- number
- number formats
- operand
- operator

Key Terms cont.



- order of precedence
- paste area
- range
- range reference
- recalculation
- relative reference
- row
- row number
- sans serif
- scaling
- serial value
- serif
- sheet



Key Terms cont.

- sheet tab
- spelling checker
- spreadsheet
- synonym
- syntax
- tab scroll buttons
- text
- theme
- thesaurus
- variable
- workbook
- workbook window
- worksheet



FAQs

1. What is a workbook? A worksheet? A spreadsheet?
2. Why is there a heavy border around a cell?
3. How many columns and rows are in a worksheet?
4. I'm not sure how to use the Name box. How is it used?
5. Help! I want to clear an entry from a cell. How can I do this?



FAQs cont.

6. What is AutoCorrect?
7. Is it necessary to type a comma when entering numbers?
8. The columns on my worksheet are too small. How can I widen them?
9. What is the file extension for Excel workbooks?
10. I want to preview a file before I open it. Can I do this in Excel?
11. When I copy a cell, a moving border appears around the cell. What does this mean?



FAQs cont.

12. What is a range?
13. How do I use the fill handle?
14. What is the difference between copy and move?
15. What is a formula?
16. What is a function? Give examples.
18. I'm not sure I understand a relative reference. What is it?
19. I read that I can enter a formula using pointing. How does this work?



FAQs cont.

18. Help! I changed some cell values in my worksheet. Are my calculations still correct?
21. I can't center the worksheet title across a selection of cells. What can I do?
22. I formatted my worksheet and I don't like the way it looks. Is there anyway to reverse this?
23. How do I enter the date?
24. How can I print a range of cells in Excel?

Discussion Questions



1. Describe the formula bar and discuss how it is used.
2. Discuss the different ways to enter text and numbers in Excel cells.
3. Discuss ways to clear an entry in a cell?
4. How does Copy and Paste work?

Discussion Questions



5. What is the difference between Copy and Move?
6. Explain how to select nonadjacent cells in Excel?
7. What order does Excel use when performing calculations?
8. What are the operator symbols for calculations in Excel?

Discussion Questions



9. Describe the proofing tools available in Excel.
10. Discuss how you can add words to the AutoCorrect list.
11. Your worksheet needs to be enhanced. What can you do to make it more attractive?
12. Discuss the three alignment features available in Excel.