Shelly Cashman: Microsoft Excel 2019
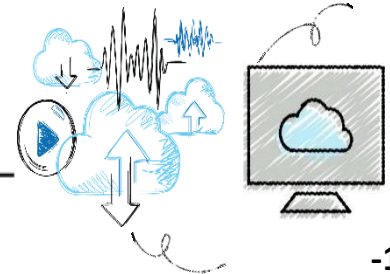
Module 1: Creating a Worksheet and a Chart

- Start an app

- Identify the components of the Microsoft Office ribbon

- Describe the Excel worksheet

- Enter text and numbers

- Use the Sum button to sum a range of cells

- Enter a simple function

- Copy the contents of a cell to a range of cells using the fill handle

- Apply cell styles

Objectives (2 of 2)

- Format cells in a worksheet

- Create a pie chart

- Change a worksheet name and sheet tab color

- Change document properties

- Preview and print a worksheet

- Use the AutoCalculate area to display statistics

- Correct errors on a worksheet

- Use Microsoft Office Help

Project: Real Estate Budget Worksheet

Project: Pie Chart Showing Monthly Expenses by Category

- **What is Excel?**
  - A powerful spreadsheet app that allows users to organize data, complete calculations, make decisions, graph data, develop professional-looking reports, publish organized data to the web, and access real-time data from websites
  - Four major parts:
    - Workbooks and worksheets
    - Charts
    - Tables
    - Web support

- **To Start Excel and Create a Blank Workbook**
  - If necessary, scroll to display the Excel 2019 app on the Start menu
  - Click the Excel 2019 app to run the Excel app and display the Excel start screen
  - Click the Blank workbook thumbnail on the Excel start screen to create a blank Excel workbook in the Excel window

Starting and Using Excel (3 of 3)
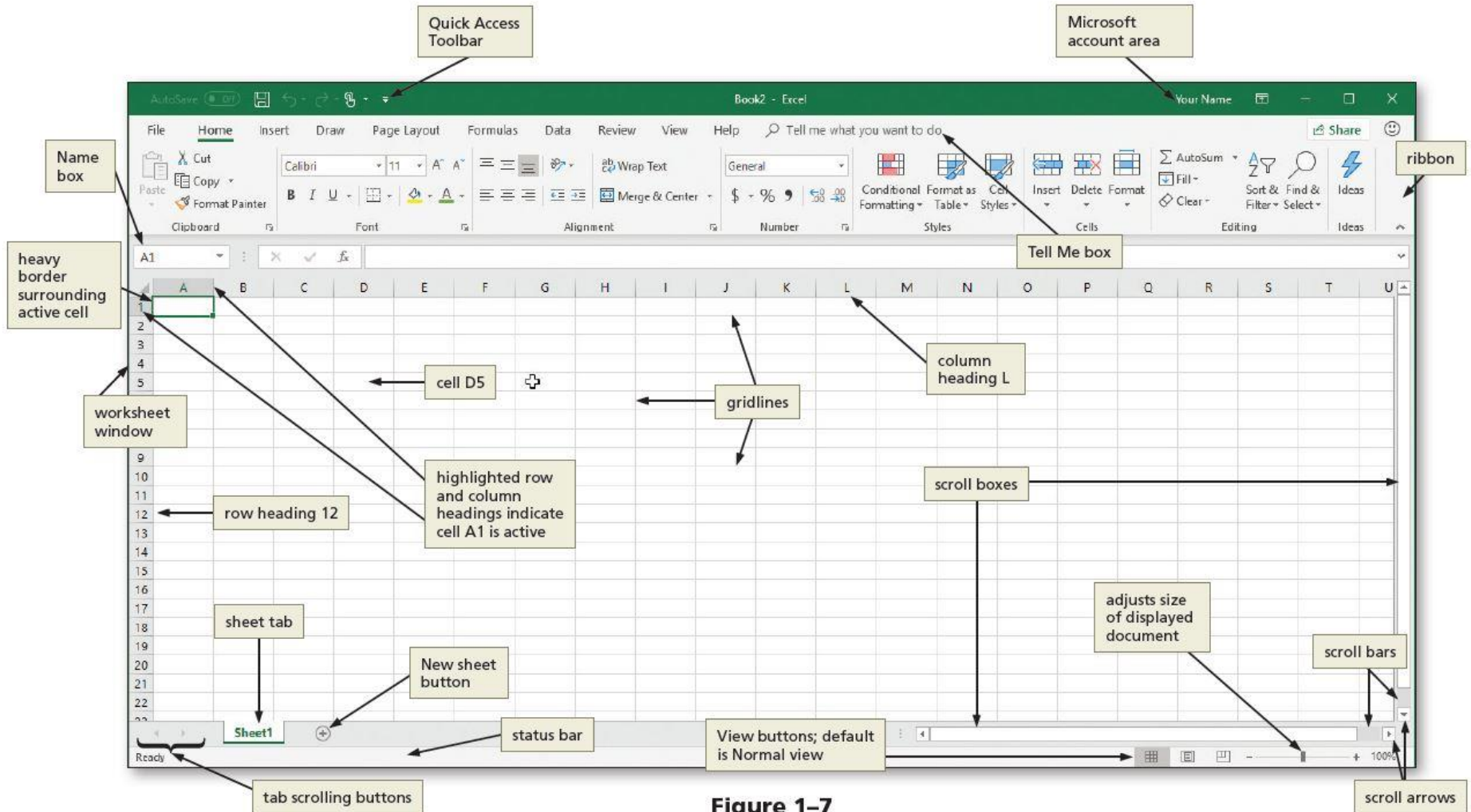
Figure 1–7

- **Excel Window**
  - Worksheet
  - Scroll Bars
  - Status Bars
  - Ribbon
  - Mini Toolbar (right click / shortcut menu)
  - Quick Access Toolbar (customizable)
  - KeyTips (ALT key)
  - Formula Bar (expandable)
  - Tell Me Box (Search)
  - Microsoft Account Area

- **To Display a Different Tab on the Ribbon**
  - Click Insert on the ribbon to display the Insert tab
  - Click the View tab, click Page Layout tab, then click Insert tab
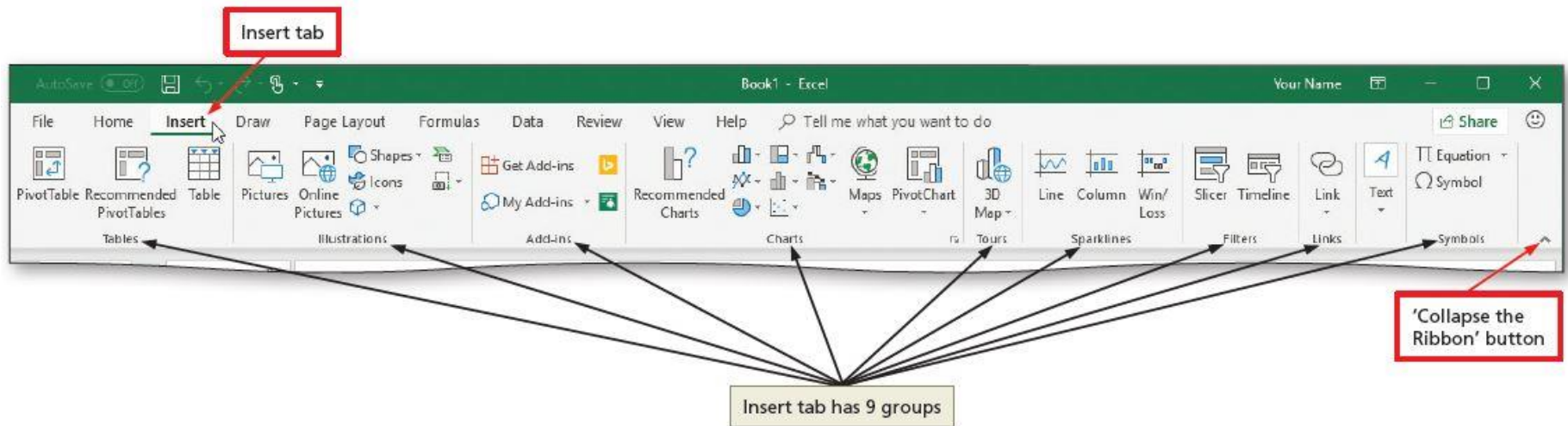
Selecting a Cell

- **Make the cell active**
  - Use the mouse
  - Use the arrow keys
  - Cell is active when a heavy border surrounds the cell

- **To Enter the Worksheet Titles**
  - Run Excel and create a blank workbook in the Excel window
  - Click the A1 to make the cell A1 the active cell
  - Type desired text ("Frangold Real Estate Budget")
  - Click the ENTER button to complete the entry and enter the worksheet title
  - Click cell A2 to select it ("Monthly Estimates")
  - Click the ENTER button to complete the entry and enter the worksheet subtitle

- **To Enter Column Titles**
  - Click cell A3 and enter a column title ("Income")
  - Press the RIGHT ARROW key to enter a column title and make the cell to the right the active cell
  - Repeat the previous steps until all column titles are entered. Click the Enter box after entering the last column title (January, February, March, May, June, July, August, September, October, November, December, Total)
  - Click cell A8 and enter the expenses column titles (Expenses, January, February, March, May, June, July, August, September, October, November, December, Total)

- **To Enter Row Titles**
  - Click cell A4 and enter a row title ("Commission")
  - Press the DOWN ARROW key to enter a row title and make the cell below the current cell the active cell
  - Repeat the previous steps for cell A5 & A6 until all row titles are entered ("Interest", "Total")
  - Click cell A9 ~ A19 and repeat the above steps to enter row titles for expenses (Rent, Utilities, Advertising, Website, Printing, Office Supplies, Gas, Miscellaneous, Total, " ", Net)

Entering Numbers

- In Excel, you can enter numbers into cells

- If a cell entry contains any other keyboard character, Excel interprets it as text and treats it accordingly

- **To Enter Numbers**

  - Click cell B4 to select it

  - Type desired number and then press the RIGHT ARROW key to enter the data in the selected cell and make the cell to the right the active cell

  - Continue until all numbers are entered (See Slide 1 for all the data)

- **To Sum a Column of Numbers**
  - Click the first empty cell (B6) below the column of numbers to sum
  - Click the AutoSum button on the HOME tab to display a formula in the formula bar and in the active cell
  - Click the Enter box in the formula bar to enter a sum in the active cell
  - Repeat above steps to enter the SUM function in other locations (Income: cells C6 ~ M6; Expenses: cells B17 ~ M17)

- **To Copy a Cell to Adjacent Cells in a Row**
  - With the cell containing the contents to fill across the row active, point to the fill handle (lower-right corner of the cell) to activate it
  - Drag the fill handle to select the destination area to display a shaded border around the source area and the destination area
  - Release the mouse button to copy the SUM function from the active cell to the destination area and calculate the sums
  - Repeat the above steps to copy the SUM function to other ranges

	Expenses	January	February					July	August	Septe...					
9	Rent	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500		
10	Utilities	325	325	325	325	325	325	325	325	325	325	325	325		
11	Advertisir	400	400	400	400	400	400	400	400	400	400	400	400		
12	Website	0	0	0	0	0	0	500	0	0	0	0	0		
13	Printing	200	200	200	200	200	200	200	200	200	200	200	200		
14	Office Sup	200	0	0	200	0	0	200	0	0	200	0	0		
15	Gas	100	100	100	100	100	100	100	100	100	100	100	100		
16	Miscellan	250	250	250	250	250	250	250	250	250	250	250	250		
17	Total	2975	2775	2775	2975	2775	2775	3475	2775	2775	2975	2775	2775		
18															
19	Net														
20															

SUM function in range C17:M17

- **To Calculate Multiple Totals at the Same Time**
  - Highlight a range at the end of rows or columns of numbers to total (N4 ~ N6)
  - Click the AutoSum button on the HOME tab to calculate and display the sums of the corresponding rows
  - Repeat the above steps to calculate and display the sums of the corresponding rows (N9 ~ N17)

Using the Fill Handle to Copy a Cell to Adjacent Cells (3 of 3)

- **Calculating the average, maximum and minimum**
  - The AutoSum list lets you calculate Average, Maximum, Minimum and other values

- **To Enter a Formula Using the Keyboard**
  - Select the cell that will contain the formula (B19)
  - Type the formula in the cell to display it in the formula bar and in the current cell and to display colored borders around the cells referenced in the formula (=b6-b17)
  - Click the cell to the right (C19) to complete the formula and to display the result in the worksheet.

- **To Copy a Cell to Adjacent Cells in a Row Using the Fill Handle**
  - Select the cell
  - Drag the fill handle to select the destination area to display a shaded border around the source area and the destination area
  - Release the mouse button to copy the function from the active cell to the destination area and calculate the results
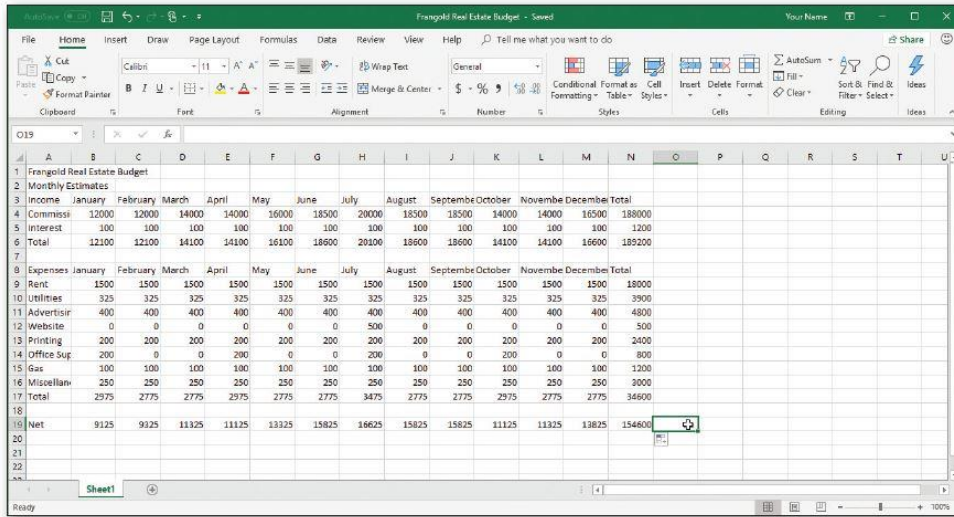
Saving the Project

- **To Save a Workbook**
  - Click File on the ribbon to open Backstage view
  - Click Save As, then Click This PC to display the default save location
  - Click the More options link to display the Save As dialog box
  - Type desired file name in the File name text box
  - Click Save button

Formatting the Worksheet (1 of 11)

(a) Unformatted Worksheet
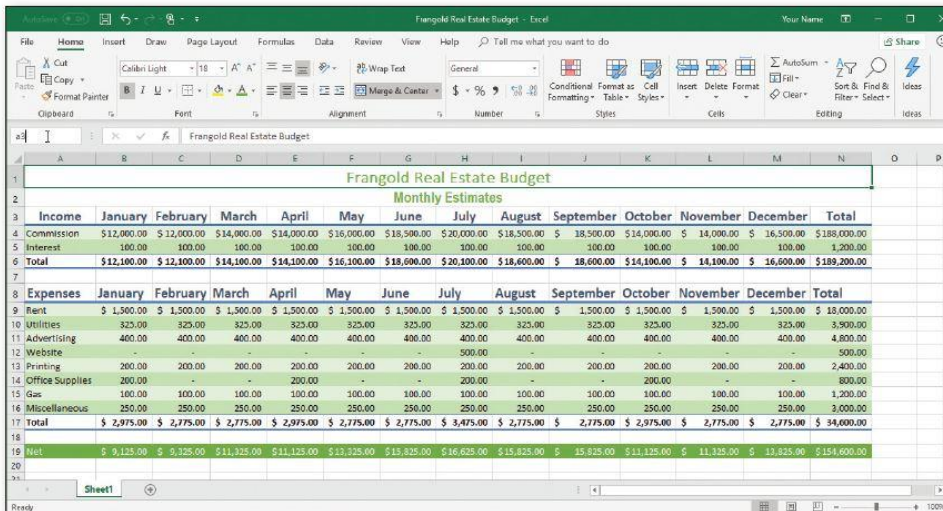

(b) Formatted Worksheet

You format a worksheet to enhance the appearance of information by changing its font, size, color, or alignment.

A formatted sheet is not only easier to read but also more professional.

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- **To Change a Cell Style**
  - Click the desired cell (A1) and then click the Cell Styles button (HOME tab | Style group) to display the Cell Styles gallery
  - Point to the Title cell style in the Titles and Headings area of the Cell Styles gallery to see a live preview of the cell style in the active cell
  - Click the Title cell style to apply the cell style to the active cell

- **To Change the Font**
  - Click the desired cell (A2) for which you want to change the font
  - Click the Font arrow (HOME tab | Font group) to display the font gallery
  - Point to desired font (Arial Narrow) in the Font gallery to see a live preview of the selected font in the active cell
  - Click the desired font to change the font of the selected cell

- **To Apply Bold Style to a Cell**
  - Click a cell (A1) to bold and then click the Bold button on the HOME tab to change the font style of the active cell to bold
  - Repeat above to bold cell A2

- **To Increase the Font Size of a Cell Entry**
  - With the desired cell (A2) selected, click the Font Size arrow (HOME tab | Font group) to display the Font Size gallery
  - Point to the desired font size (16) in the Font Size gallery to see a live preview of the active cell with the selected font size
  - Click the desired font size in the Font Size gallery to change the font size in the active cell

- **To Change the Font Color of a Cell Entry**
  - Select the cell (A1) for which you want to change the font color and then click the Font Color arrow on the HOME tab
  - Point to the desired color in the Theme Colors area of the Font Color gallery to see a live preview of the font color
  - Click the desired theme {Green, Accent 6 (col 10, row 1)} to change the font color of the in the active cell
  - Click cell A2 and repeat the above

- **To Center Cell Entries across Columns by Merging Cells**
  - Drag to select the range of cells you want to merge and center (A1:N1)
  - Click the "Merge & Center" button (HOME tab | Alignment group) to merge the selected range and center the contents of the leftmost cell across the selected columns
  - Repeat the above steps to merge and center (A2:N2)
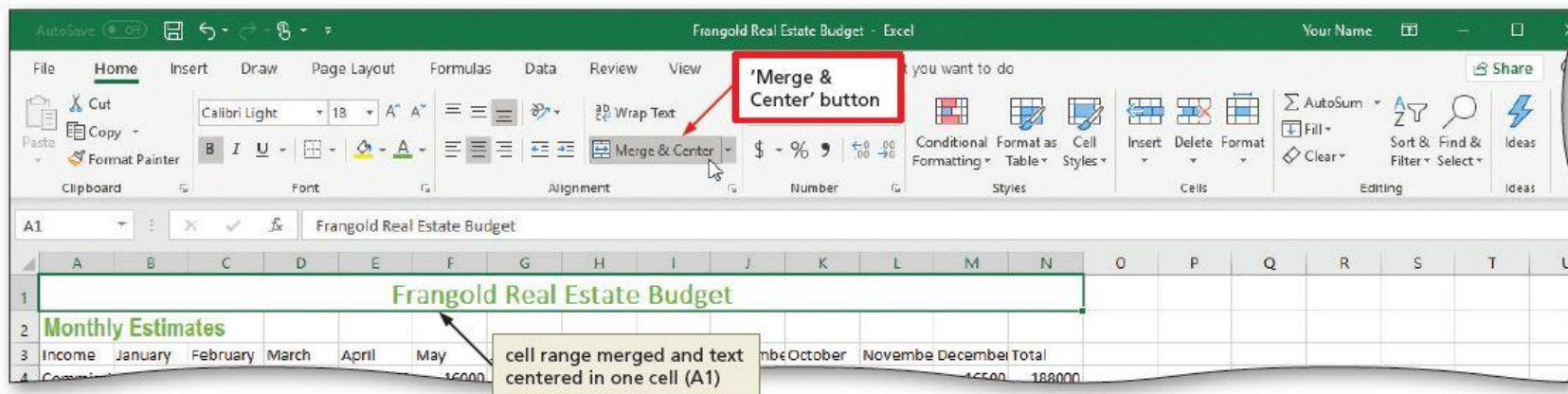
- **To Format Rows Using Cell Styles**
  - Click a cell and drag to select the desired range (A3:N3)
  - Click the Cell Styles button (HOME tab | Styles group) to display the Cell Styles gallery
  - Click a Heading cell style to apply the cell style (Heading 1) to the selected range
  - Then click the Center button (HOME tab | Alignment group) to center the column headings in the selected range
  - Repeat the above steps to format (A8:N8)
  - Format A6:N6 and A17:N17 with Total cell style format
  - Format A19:N19 with the Accent6 cell style format
  - Format A4:N4, A9:N9, A11:N11, A13:N13, A15:N15 with 20%-Accent 6 cell style format
  - Format A5:N5, A10:N10, A12:N12, A14:N14, A16:N16 with 40%-Accent6 cell style format

- **To Format Numbers in the Worksheet**

  - Select the range of cells (B4:N4) containing numbers to format
  - Click the desired format (Accounting) (HOME tab | Number group) to apply the format to the cells in the selected range
  - Select the range B5:N5 And click the Comma Style button (HOME tab | Number group) to apply comma style format

- **To Format Numbers in the Worksheet (Continued)**
  - Select the range of cells (B6:N6)
  - Click the "Accounting Number Format" button to apply the accounting number format
  - Format B9:N9, B17:N17, and B19:N19 with the accounting number format
  - Format B10:N16 with the Comma Style format
  - Click A1 to deselect ranges

- **To Adjust the Column Width**
  - Point to the boundary on the right side of the column heading (A) of which you want to change the size to change the mouse pointer to a split double arrow
  - Double-click on the boundary to adjust the width of the column to the width of the largest item in the column
  - Repeat the above steps for columns B through N

- **To Use the Name box to Select a Cell**
  - Click the Name box in the formula bar and then type the cell reference of the cell you wish to select (A3)
  - Press the ENTER key to change the active cell in the Name box

- **Excel provides 17 chart types for you to choose**
  - A pie chart shows the contribution of each piece of data to the whole of data

- **To Add a Pie Chart**
  - Select the range (A9:A16, N9:N16) to identify the category names and data for the pie chart
  - Click the "Insert Pie or Doughnut Chart" button (INSERT tab | Charts group) to show the Insert Pie or Doughnut Chart gallery
  - Click Pie in the 2-D category to insert the chart
  - Click the chart title to select it then drag and select all the text
  - Type a chart title (Monthly Expenses) to change the title
  - Deselect the chart title

- **To Apply a Style to a Chart**
  - Click the Chart Styles button (to the right of the chart) to display the Chart Styles gallery
  - Click a style (Style 6) in the Chart Styles gallery to change the chart style to the desired style
  - Click Chart Styles button to close the Chart Styles gallery

- **To Move a Chart to a New Sheet**
  - Click the Move Chart button (CHART TOOLS DESIGN tab | Location group)
  - Click New sheet to select it (Move Chart dialog box) and then type a title (Monthly Expense Chart) for the worksheet that will contain the chart
  - Click the OK button to move the chart to a new chart sheet with a new sheet tab name
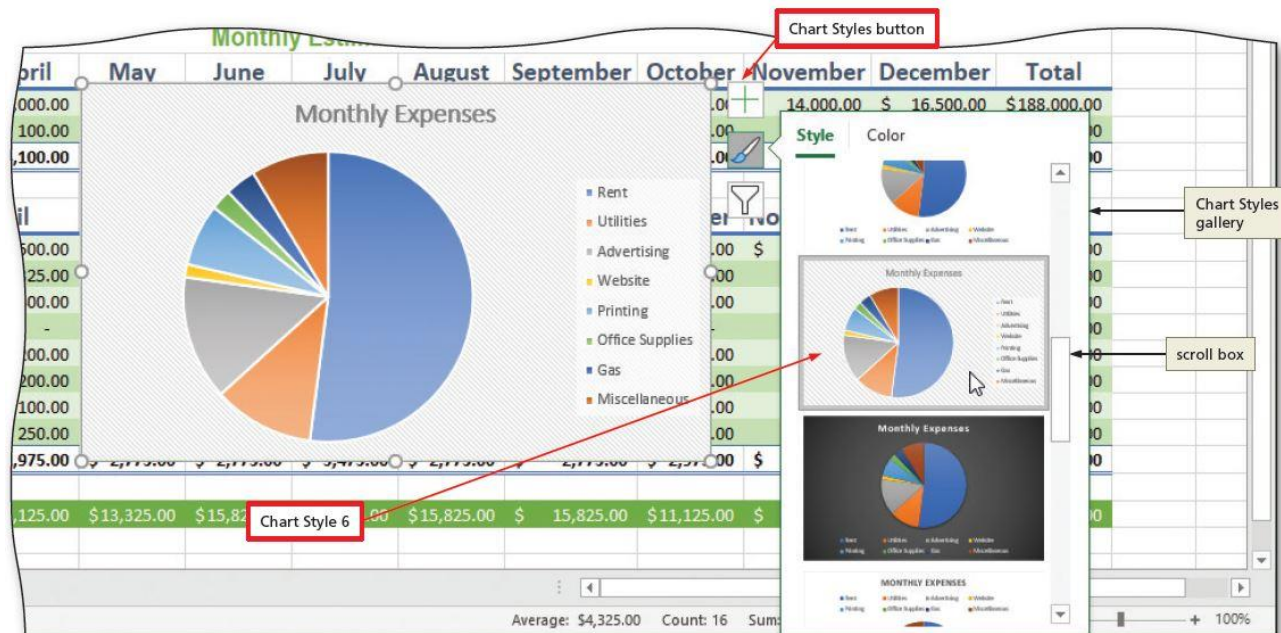
Changing the Sheet Tab Names and Colors (2 of 2)

- **To Change the Sheet Tab Name and Color**
  - Double-click the sheet tab (Sheet1) you wish to change in the lower-left corner of the window
  - Type a new name (≤ 31 characters) as the worksheet tab name (Monthly Finances)
  - Right-click the sheet tab in the lower-left corner of the window to display a shortcut menu
  - Point to Tab Color in the Tab Color gallery
  - Click the desired color in the Theme Colors area to change the color of the tab { Green, Accent 6 (col 10, row 1) }

Document Properties

- **To Change Document Properties**
  - Click File on the ribbon to open the Backstage view and then click the Info tab in the Backstage view to display the Info gallery
  - Click to the right of the property category to display a text box
  - If necessary, click the Properties button to display the Properties menu

Printing a Worksheet

- **To Preview and Print a Worksheet in Landscape Orientation**
  - In Backstage view, click the Print tab to display the Print screen
  - Verify that the printer listed on the Printer Status button will print a hard copy of the workbook. If necessary, click the Printer Status button to display a list of available printer options and then click the desired printer to change the currently selected printer
  - Click the Portrait Orientation button in the Settings area and then select Landscape Orientation to change the orientation of the page to landscape.
  - Click the No Scaling button and then select "Fit Sheet on One Page" to print the entire worksheet on one page
  - Click the Print button in the Print gallery to print the worksheet in landscape orientation on the currently selected printer
  - When the printer stops, retrieve the hard copy

Viewing Automatic Calculations

- **To Use the AutoCalculate Area to Determine a Maximum**
  - Select the range of which you wish to determine a maximum (B19:M19), and then right-click the status bar to display the Customize Status Bar shortcut menu
  - Click Maximum on the shortcut menu to display the Maximum value in the range in the AutoCalculate area of the status bar
  - Right-click the status bar and click Maximum on the shortcut menu to deselect it.

- **Correcting Errors after Entering Data into a Cell**
  - If the entry is short, select the cell, retype the entry correctly
  - If the entry is long, use the EDIT mode to perform in-cell editing
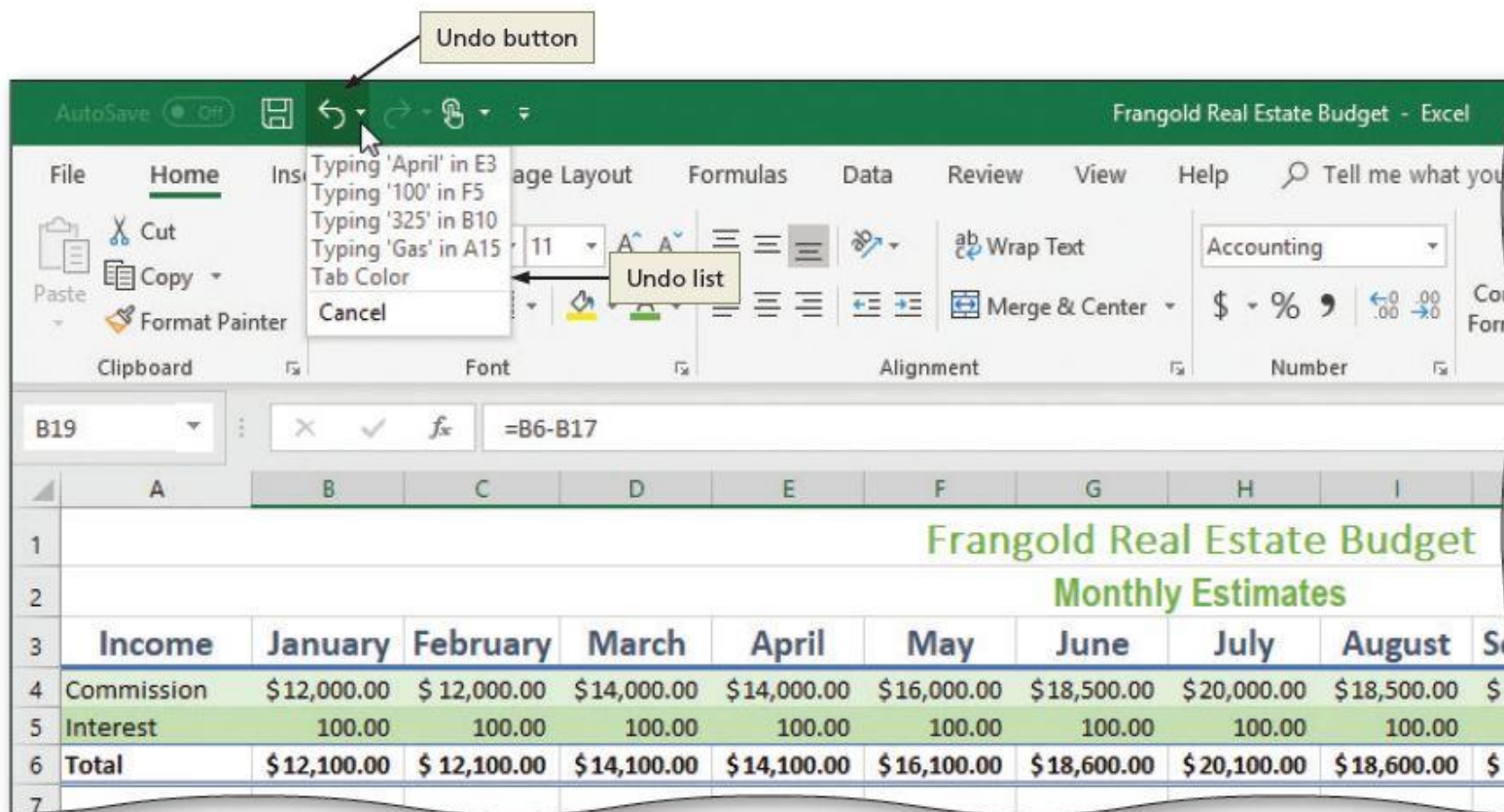 - Double-click the cell containing the error to enter EDIT mode

- **Undoing the Last Cell Entry**
  - The Undo button on the Quick Access Toolbar allows you undo up to 100 previous actions

- **Clearing a Cell or Range of Cells (select the cell or range first)**
  - To Clear Cell Entries Using the Fill Handle
    - Drag the fill handle back into the selected cell or range
  - To Clear Cell Entries Using the Shortcut Menu
    - Click Clear Contents on the shortcut menu
  - To Clear Cell Entries Using the Delete Key
  - To Clear Cell Entries and Formatting Using the Clear Button
    - Click the Clear button (Home tab | Editing group)
  - To Clear Formatting Using the Cell Styles Button
    - Click Cell Style button (Home tab | Style group) -> Normal

- **Clearing the Entire Worksheet**
  - To Clear the Entire Worksheet
    - Click the Select All button on the worksheet (above row 1 identifier and to the left of the column A heading)
    - Click the Clear button and then click Clear All (Home tab | Editing group)

- **To Obtain Help Using the Search Text Box**
  - Click Help on the ribbon to display the Help tab
  - Click the Help button to display the Help pane
  - Type a word in the Search help box (functions)
  - Press Enter to display the search results
  - Click the Close button
  - Click Home on the ribbon to display the Home tab

- **To Obtain Help Using the Tell Me Box**
  - Type desired text in the Tell Me box and watch the search results appear (header and footer)
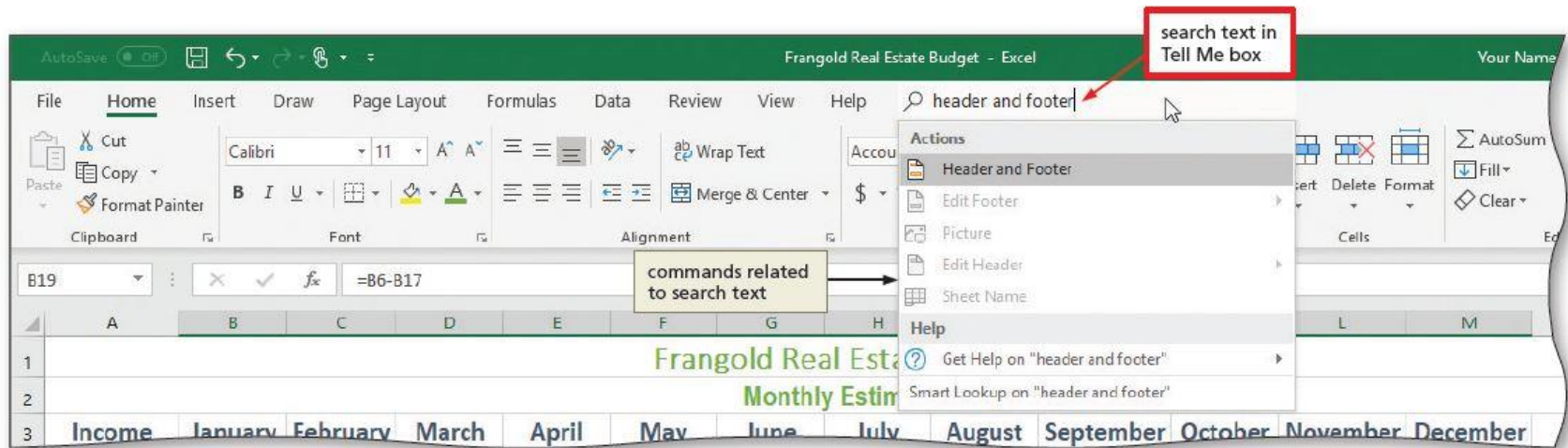
- **To Save a Workbook with a Different File Name**
  - Click File on the ribbon to open Backstage view
  - Click Save As in Backstage view to display the Save As screen
  - Type the desired file name in the File name text box to replace the existing file name
  - Click the Save button

- **To Sign Out of a Microsoft Account**
  - Click File on the ribbon to open Backstage view
  - Click Account to display the Account screen
  - Click the Sign out link
  - Click Yes
  - Click the Back button in the upper-left corner of Backstage view to return to the document
  - Click Close to close the workbook and exit Microsoft Excel. If prompted, click Yes