

Creating Tables

Lesson Skill Matrix

Skill	Exam Objective	Objective Number
Creating a Table	Create a table by specifying rows and columns.	3.1.3
Formatting a Table	Apply table styles.	3.1.4
Managing Tables	Resize tables, rows, and columns.	3.2.4
	Sort table data.	3.2.1
	Merge and split cells.	3.2.3
	Configure cell margins and spacing.	3.2.2
	Add alternative text to objects for accessibility	5.2.8
	Convert text to tables.	3.1.1
	Convert tables to text.	3.1.2
	Configure a repeating row header.	3.2.6
Split tables.	3.2.5	

Creating a Table

A table, such as the one shown in Figure 6-1, is an arrangement of data made up of horizontal rows and vertical columns. Cells are the rectangles that are formed when rows and columns intersect. Tables are ideal for organizing information in an orderly manner. Calendars, invoices, and contact lists are all examples of how tables are used every day. Word provides several options for creating tables, including the dragging method, the Insert Table dialog box, table drawing tools, and the Quick Table method.

The image shows a calendar table for January 20XX. The table has 7 columns representing the days of the week (Sunday through Saturday) and 6 rows representing the days of the month (1 through 31). The table is annotated with several labels: 'Column' points to the top of the Monday column; 'Cell' points to the Thursday, 7th cell; 'End of Cell Marker' points to the small square at the bottom-right corner of the Thursday, 7th cell; 'End of Row Marker' points to the small square at the bottom-right corner of the Thursday, 7th row; and 'Row' points to the bottom edge of the Thursday, 7th row.

January 20XX						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
				1	2	
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

Figure 6-1

A table created in Word

Inserting a Table by Dragging

In this exercise, you learn how easily and quickly you can create a table from the Insert Table menu by dragging the mouse pointer to specify the number of rows and columns you need. Using this method, you can create a new, empty table with up to eight rows and ten columns.

Step by step Insert a Table by Dragging

GET READY. Before you begin these steps, **LAUNCH** Microsoft Word 2016 and **OPEN** a new blank Word document.

1. On the Insert tab, in the Tables group, click the **Table** button. The Insert Table menu appears.
2. Point to the cell in the fifth column, second row. The menu title should read *5x2 Table*, as shown in Figure 6-2. Click the mouse button to create the table. Once the table is inserted in the document, you are ready to begin entering text. Later in this lesson, you enter data into the table.

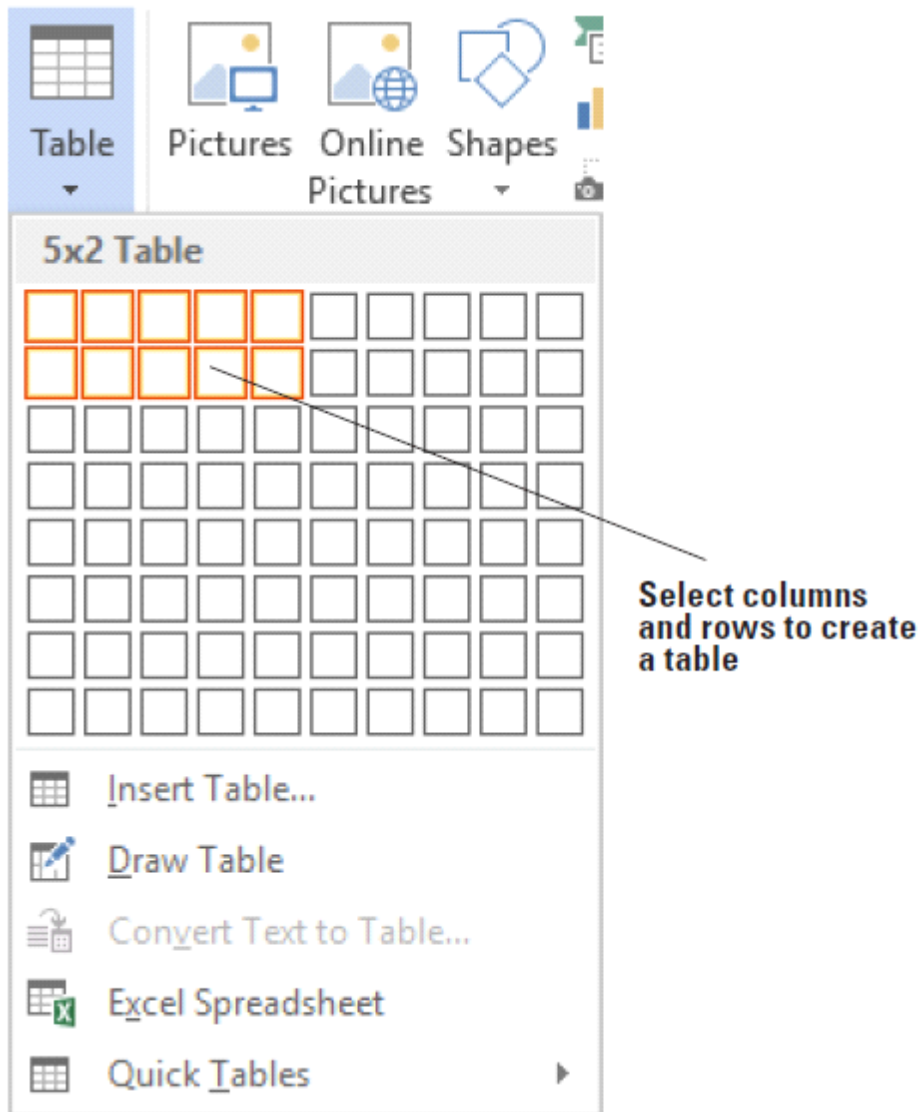


Figure 6-2
Insert Table menu

3. Click below the table and press **Enter** twice to insert blank lines. When you insert more than one table in a document, you should separate them with a blank line to avoid joining the tables.
4. **SAVE** the document as **Tables** in the lesson folder on your flash drive.

PAUSE. LEAVE the document open to use in the next exercise.

Using the Insert Table Dialog Box

The Insert Table dialog box enables you to create large tables by specifying up to 63 columns and thousands of rows. Note that in the Insert Table dialog box, you can click the spin box arrows or type in the number of columns and rows you need in a table. In this exercise, you use the Insert Table dialog box to create a table.

Step by step Use the Insert Table Dialog Box

GET READY. USE the document that is open from the previous exercise.

1. On the Insert tab, in the Tables group, click the **Table** button to open the Insert Table menu.
2. On the menu, just below the rows and columns, select **Insert Table**. The *Insert Table* dialog box appears.
3. In the Number of columns box, set the value to **9**.
4. In the Number of rows box, set the value to **3**. The AutoFit behavior is shown in the dialog box and is discussed later in the lesson.
5. Click **OK** to insert the table. You inserted a new table with 9 columns and 3 rows.
6. Click below the table and press **Enter** twice to insert blank lines.
7. **SAVE** the document as **Tables 2** in the lesson folder on your flash drive.

PAUSE. LEAVE the document open to use in the next exercise.

Drawing a Table

Word 2016 provides the option to draw complex tables using the Draw Table command, which enables you to draw a table as you would with a pencil and paper. The Draw Table command transforms the mouse pointer into a pencil tool, which you can use to draw the outline of the table, and then draw rows and columns exactly where you need them. In this exercise, you use the Draw Table command from the Table menu.

Step by step Draw a Table

GET READY. USE the document that is open from the previous exercise.

1. If your ruler is not displayed, on the View tab, in the Show group, select the **Ruler** checkbox.
2. Make sure your insertion point is at the bottom of the document; then use the scroll bar to scroll down, so the insertion point is at the top of the screen.
3. On the Insert tab, in the Tables group, click the **Table** button to open the Insert Table menu.
4. On the menu, just below the rows and columns, select **Draw Table**. The pointer becomes a pencil tool.
5. To begin drawing the table shown in Figure 6-3, click at the **blinking insertion point** and drag down and to the right until you draw a rectangle that is approximately **3** inches high and **6** inches wide. Notice that the Table Tools contextual Design and Layout tabs automatically appears with the Layout tab active.

Figure 6-3
Draw a table

6. Starting at about 1 inch down from the top border, click and drag the pencil from the left border to the right border to draw a horizontal line. Use your ruler as your guide.
7. Draw two more horizontal lines below the first one, about 0.5 inches apart.
8. Starting at about 1 inch from the left border, click and drag the pencil from the top of the table to the bottom of the table to create a column.
9. Move over about 1 inch to the right and draw a line from the top of the table to the bottom.

Take Note

If you draw a line in the wrong position, click the **Eraser** button in the **Draw** group of the **Table Tools - Layout** tab and begin again.

10. Draw three more vertical lines to the right of the others, about 1 inch apart, from the top to the bottom of the table, to create a total of six columns. Your table should look similar to Figure 6-3.
11. Click the **Draw Table** button in the **Draw** group of the **Table Tools - Layout** tab to turn the pencil tool off.
12. Click below the table and press **Enter** twice to create blank lines. If necessary, place your insertion point outside the last cell, and then press **Enter**.
13. **SAVE** the document as **Tables 3** in the lesson folder on your flash drive.

PAUSE. LEAVE the document open to use in the next exercise.



Troubleshooting

When drawing tables with the pencil tool, note that this tool will draw squares and rectangles as well as lines. If you are trying to draw a straight line and you move the pencil off your straight path, Word might think you are trying to draw a rectangle and insert one for you. If this happens, just click the **Undo** button on the **Quick Access Toolbar** and try again. It might take a bit of practice to master the difference between drawing straight lines and drawing rectangles.

Inserting a Quick Table

Quick Tables are built-in preformatted tables, such as calendars and tabular lists, which you can insert and use in your documents. Word 2016 provides a variety of Quick Tables that you can insert into your documents. You can edit the Quick Table calendar to reflect the current month and year. In this exercise, you insert a Quick Table calendar into a document.

Step by step Insert a Quick Table

GET READY. USE the document that is open from the previous exercise.

1. On the Insert tab, in the Tables group, click the **Table** button to open the Insert Table menu.
2. On the menu, just below the rows and columns, select **Quick Tables** from the menu. A gallery of built-in Quick Tables appears, as shown in Figure 6-4.

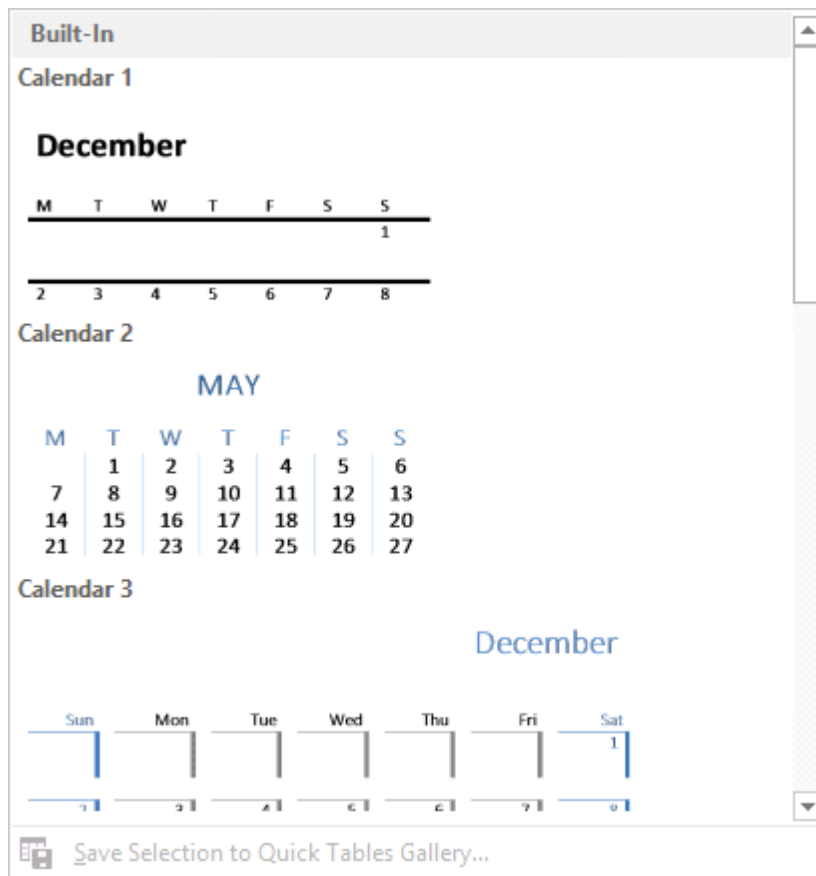


Figure 6-4
Built-In Quick Table gallery

3. Select **Calendar 2**. You can edit the data in the calendar to display the current month and year.
4. **SAVE** the document as **Tables 4** in the lesson folder on your flash drive, and then **CLOSE** the file.

PAUSE. LEAVE Word open to use in the next exercise.

Take Note

You can move a table to a new page or a new document by clicking the Move handle to select the table and then using the Cut and Paste commands. You can also use the Copy command to leave a copy of the table in the original location.

Software Orientation

Design Tab on the Table Tools Ribbon

After inserting a table, Word displays Table Tools in the Ribbon, as shown in Figure 6-5. It is important to become familiar with the commands available on the Design tab under Table Tools. Use this figure as a reference throughout this lesson as well as the rest of this book.

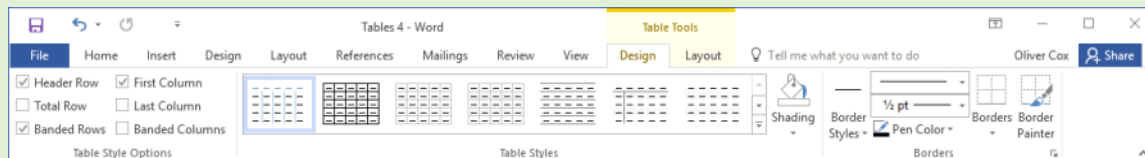


Figure 6-5

Design Tab on the Table Tools Ribbon

Formatting a Table

Once you have inserted a table into a document, you can apply a preformatted style using the Table Styles gallery. These styles add a professional appearance to the tables in your documents. In the Table Tools - Design tab, in the Borders group, you can manually format a table's borders. The Borders group enables you to draw and apply styles to the table.

Applying a Style to a Table

With Table Styles, it is easy to quickly change a table's formatting. You can apply styles to tables in much the same way you learned to apply styles to text in previous lessons, by positioning the insertion point in a table and selecting a style from the Table Styles gallery. You can preview the style before applying it and change the style as many times as needed. You can modify an existing Table Style or create a New Table Style and add it to the gallery, and then modify or delete it, as appropriate. In this exercise, you apply a Table Style to a table in your Word document.

Step by step Apply a Style to a Table

GET READY. OPEN **Clients** from the data files for this lesson

1. Position the insertion point anywhere in the table.
2. On the Table Tools - Design tab, in the Table Styles group, click the **More** button to view a gallery of Table Styles. There are three options available: Plain Tables, Grid Tables, and List Tables.
3. Scroll down to the third row under the Grid Tables and select the **Grid Table 3 – Accent 3** style, as shown in Figure 6-6.
4. **SAVE** the document as **Clients Table** in the lesson folder on your flash drive.

PAUSE. LEAVE the document open to use in the next exercise.

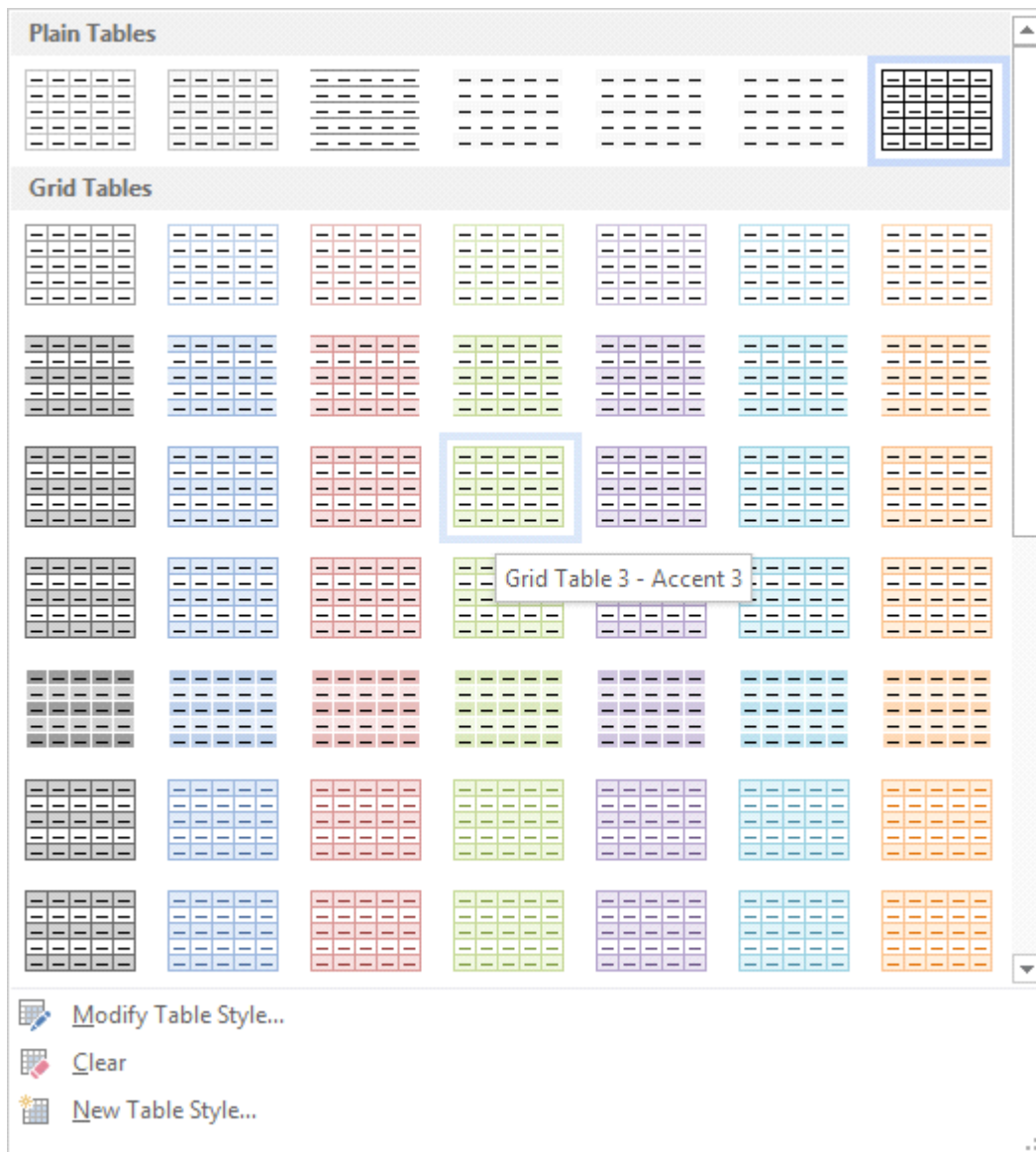


Figure 6-6
Table Styles gallery

Changes to Table Styles

Modifying styles in a table is similar to what you have already learned when modifying styles for text. You can apply changes to a table style in an existing document or as a new document based on a template. You can apply the changes to the whole table or specifically to one of the Table Styles options such as in the banded rows or columns. You can apply formatting changes to the table properties, borders/shading, banding, font, paragraphs, tabs, and text effects. In this exercise, you learn to modify the font in a table style.

Step by step **Modify the Table Styles**

GET READY. USE the document that is open from the previous exercise.

1. Make sure that the insertion point is still in the table. If you click outside the table, the Design and Layout tabs will not be available.
2. On the Table Tools - Design tab, in the Table Styles group, click the [More button](#).

3. Click **Modify Table Style** to open the *Modify Style* dialog box (see Figure 6-7). Notice that in the Name box, Grid Table 3 – Accent 3 is applied from a previous exercise.
4. In the Apply formatting to box, click the **drop-down arrow** and select **First column**. For this exercise, you apply changes only to the first column.
5. Click the **Format** button in the *Modify Styles* dialog box and select **Font** to open the *Font* dialog box. The Format button displays the menu of available options. Each menu opens its own dialog box.

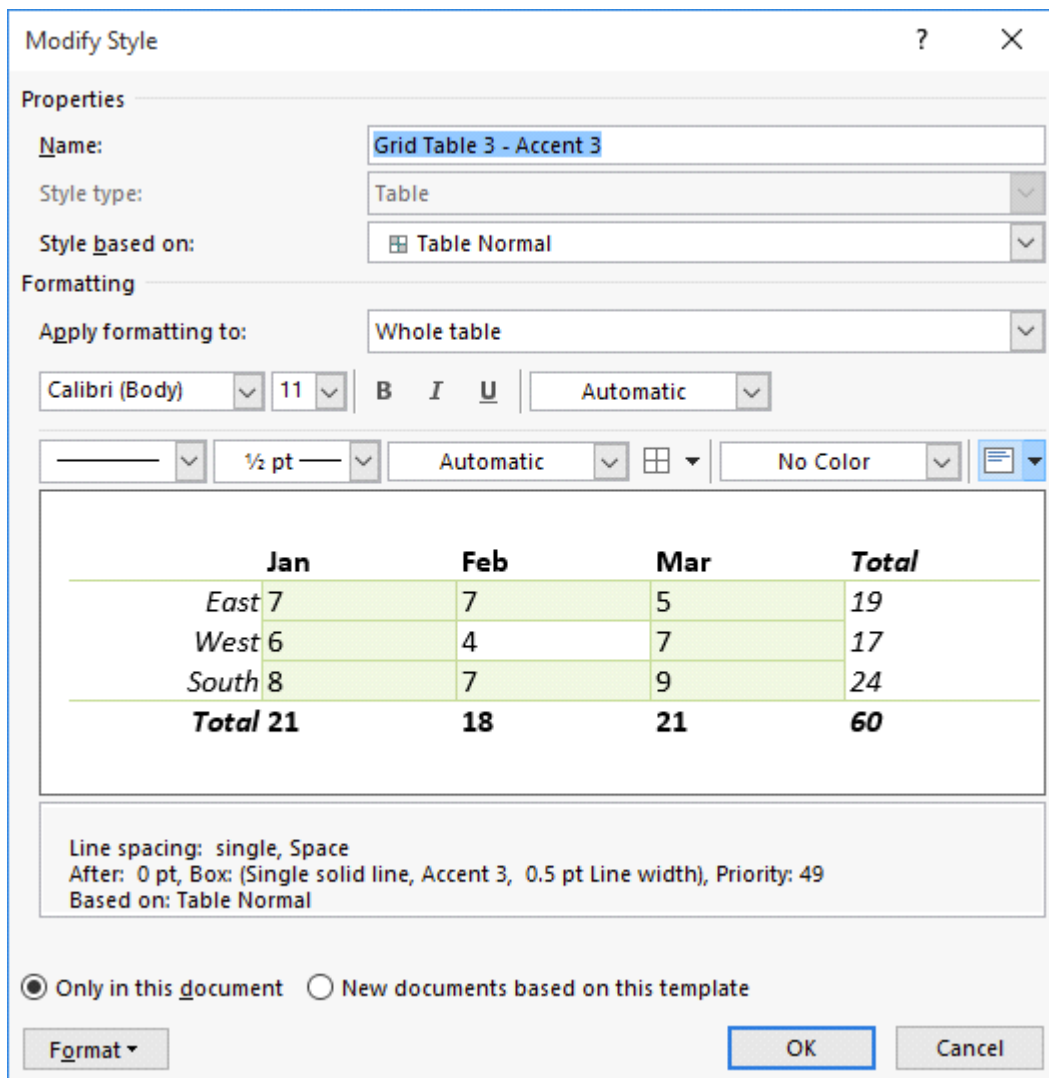


Figure 6-7
Modify Style dialog box

6. With the Font dialog box open, type **Garamond** in the font box. Notice that when you type the first three characters, Word displays available fonts. Select **Garamond**.
7. In the Font style group, select **Bold Italic**, **12 pt** for Size, and **Olive Green, Accent 3, Darker 50%** for Font color.
8. Click **OK** to close the *Font* dialog box. Changing the attributes affects only the first column. Click **OK** to close the *Modify Style* dialog box. Nothing happens to the table.

9. In the Table Style Options group, select the First Column checkbox. The style changes you made appear in the table.
10. **SAVE** the document as **Clients Table 2** in the lesson folder on your flash drive.

PAUSE. LEAVE the document open to use in the next exercise.

Software Orientation

Layout Tab on the Table Tools Ribbon

When working with tables, Word displays a contextual Table Tools Ribbon that is only visible when a table is in use. The Table Tools Ribbon has two tabs: the Design tab and the Layout tab. The Layout tab, as shown in Figure 6-8, includes commands for changing the entire format of a table as well as commands for changing the appearance of individual table components, such as cells, columns, rows, and formulas. Use this figure as a reference throughout this lesson as well as the rest of this book.

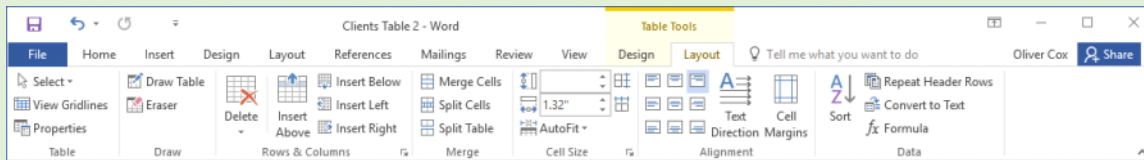


Figure 6-8

Layout Tab on the Table Tools Ribbon

Managing Tables

As with any document that you edit, some adjustments are always necessary when you work with tables. After you create a table, you can resize and move its columns; insert columns and rows; change the alignment or direction of its text; set a header row to repeat on several pages; organize data by sorting the text, number, or date; convert text and tables; merge and split cells; add formulas in a table; and work with the table's properties.

Using AutoFit

The AutoFit command enables you to adjust column widths to fit the size of the table's contents, the size of the window, or a fixed column width. You can AutoFit a column using the mouse or the Ribbon. You can use commands in the Cell Size group on the Table Tools - Layout tab and then select the AutoFit command. In this exercise, you practice using AutoFit in a Word table.

Step by step Use AutoFit

GET READY. USE the document that is open from the previous exercise.

1. On the Table Tools - Layout tab, in the Table group, click the [View Gridlines](#) button to hide the gridlines, if necessary.
2. Click the [View Gridlines](#) button again to display gridlines and enable more precise editing.
3. On the Table Tools - Layout tab, in the Cell Size group, click the [AutoFit](#) button to open the drop-down menu. On the drop-down menu, click [AutoFit Contents](#). Each column width changes to fit the data in the column.
4. **SAVE** the document as **Clients Table 3** in the lesson folder on your flash drive.

PAUSE. LEAVE the document open to use in the next exercise.

Resizing a Row or Column

Word offers a number of tools for resizing rows or columns. You can resize a column or row using the mouse or using the commands on the Ribbon. You can use commands in the Cell Size group on the Table Tools - Layout tab to adjust height and width or use the ruler to adjust the column width. In addition, the Table Properties dialog box enables you to set the measurements at a precise height for rows or an ideal width for columns, cells, and tables. In this exercise, you practice using these techniques to resize rows and columns in a Word table.

Step by step Resize Rows and Columns

GET READY. USE the document that is open from the previous exercise.

1. Click in the first column and position the mouse pointer over the horizontal ruler on the first column marker (see Figure 6-9). The pointer changes to a double-

headed arrow along with the ScreenTip *Move Table Column*.

2. Click and drag the column marker to the right, just until the contents in the first column fit in a single line. On the Table Tools - Layout tab, in the Cell Size group, the width automatically adjusts to 2.19". Just as columns can be adjusted manually, so can rows—you use the vertical ruler to adjust the row markers.
3. Position the insertion point in the phone number column of the table. On the Table Tools - Layout tab, in the Table group, click the **Select** button, and choose **Select Column** from the drop-down menu.
4. On the Table Tools - Layout tab, in the Cell Size group, click the **up arrow** in the Width box until it reads **1.1"** and the column width changes. The phone numbers now fit on a single line.

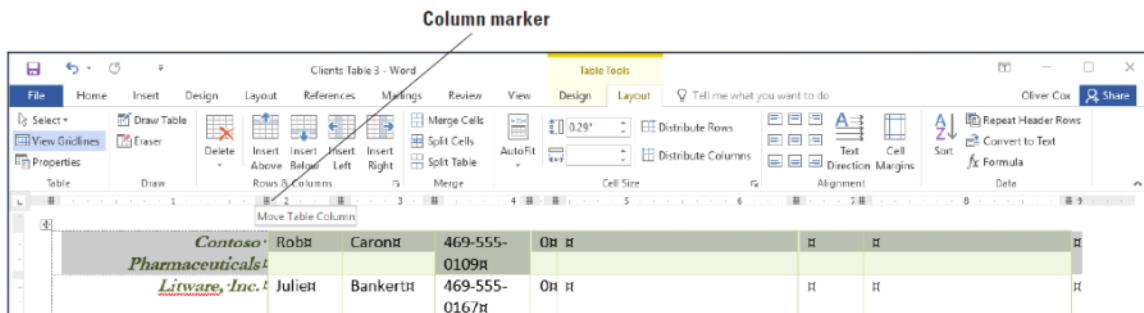


Figure 6-9
Horizontal Ruler on the first column marker

5. Place the insertion point anywhere in the first row. In the Table group, click the **Select** button again, and then click **Select Row** from the drop-down menu. The first row is selected.
6. On the Table Tools - Layout tab, in the Cell Size group, click the dialog box launcher. The *Table Properties* dialog box appears.
7. Click the **Row** tab in the dialog box.
8. Select the **Specify height** checkbox. In the Height box, click the **up arrow** until the box reads **0.5"**.
9. Click the **Next Row** button and notice that the changes are applied only to the first row. By clicking the **Next Row** button, the selection moves down one row.
10. Click **OK**. In the Cell Size group, notice that the height for row 2 is at 0.14" and row 1 is at 0.5". You can also adjust the height of a row individually or by selection.
11. Click in any cell to remove the selection.
12. **SAVE** the document as **Clients Table 4** in the lesson folder on your flash drive.

PAUSE. LEAVE the document open to use in the next exercise.

Creating a Header Row

Column headings are usually placed in the header row. A header row is the first row of the table that contains information that helps identify the contents of a particular column. It is usually formatted differently and should be repeated at the beginning of each new page for tables that extend beyond one page. When you specify a header row

in the Table Style Options group, the row is distinguished from the entire table. In this exercise, you practice repeating header rows for lengthy tables.

Step by step Create a Header Row

GET READY. USE the document that is open from the previous exercise.

1. Position the insertion point anywhere inside the table. On the Table Tools - Layout tab, in the Table group, click the **Select** button, and then click **Select Table**.
2. On the Home tab, change the font size for the entire table to 14 pt. By changing the font size in the table, the data extends to the next page.
3. Place the insertion point on the first row of the table.
4. On the Table Tools - Layout tab, in the Rows & Columns group, click **Insert Above**. A new blank row is inserted.
5. On the Table Tools - Design tab, in the Table Style Options group, select the **Header Row** checkbox to apply a distinctive format to the header row.
6. Type headings in the cells of the table's first row, as shown in Figure 6-10.

<i>Company Name</i>		Contact Person	Telephone Number	Number of Current Open Positions	Position Title	Date Posted	Notes
<i>Contoso Pharmaceuticals</i>	Rob	Caron	469-555-0109	0			
<i>Litware, Inc.</i>	Julie	Bankert	469-555-0167	0			

Figure 6-10
Header row

7. On the Table group of the Table Tools - Layout tab, click the **Select** button and **Select Row**.
8. On the Table Tools - Layout tab, in the Data group, click the **Repeat Header Rows** button. Scroll down and view the headings on the second page.
9. Click anywhere in the table to deselect.
10. Position the insertion point anywhere inside the table. On the Table Tools - Layout tab, in the Table group, click the **Select** button, and then click **Select Table**.
11. On the Home tab, change the font size to 12 pt. As long as the content extends to a new page, the headings will appear, regardless of the font size.
12. **SAVE** the document as **Clients Table 5** in the lesson folder on your flash drive.

PAUSE. LEAVE the document open to use in the next exercise.

Take Note

Repeating rows are only visible in Print Layout view, Backstage view, or on a printed document.

Sorting a Table's Contents

To sort data means to arrange it alphabetically, numerically, or chronologically. Sorting

displays data in order so that users can locate it more quickly. You can sort text, numbers, or dates in ascending or descending order. Ascending order sorts text from beginning to end, such as from A to Z, 1 to 10, or January to December. Descending order sorts text from the end to the beginning, such as from Z to A, 10 to 1, or December to January. In this exercise, you practice sorting data in a Word table using the Sort dialog box, which you access through the Sort command on the Table Tools - Layout tab in the Data group.

Take Note

You can sort by up to three columns of data in the Sort dialog box. Before beginning the sort process, you must select the column (or columns) to be sorted.

Step by step Sort a Table's Contents

GET READY. USE the document that is open from the previous exercise.

1. Place the insertion point anywhere in the first column. On the Table Tools - Layout tab, in the Table group, click the **Select** button and **Select Column**.
2. On the Table Tools - Layout tab, in the Data group, click the **Sort** button. The *Sort* dialog box appears, as shown in Figure 6-11. Because you selected the *Company Name* column, the Company Name data is listed in the Sort by text box, with Ascending order selected by default. The column contains text; therefore, the type was listed as Text. The other options under type are Number and Date.

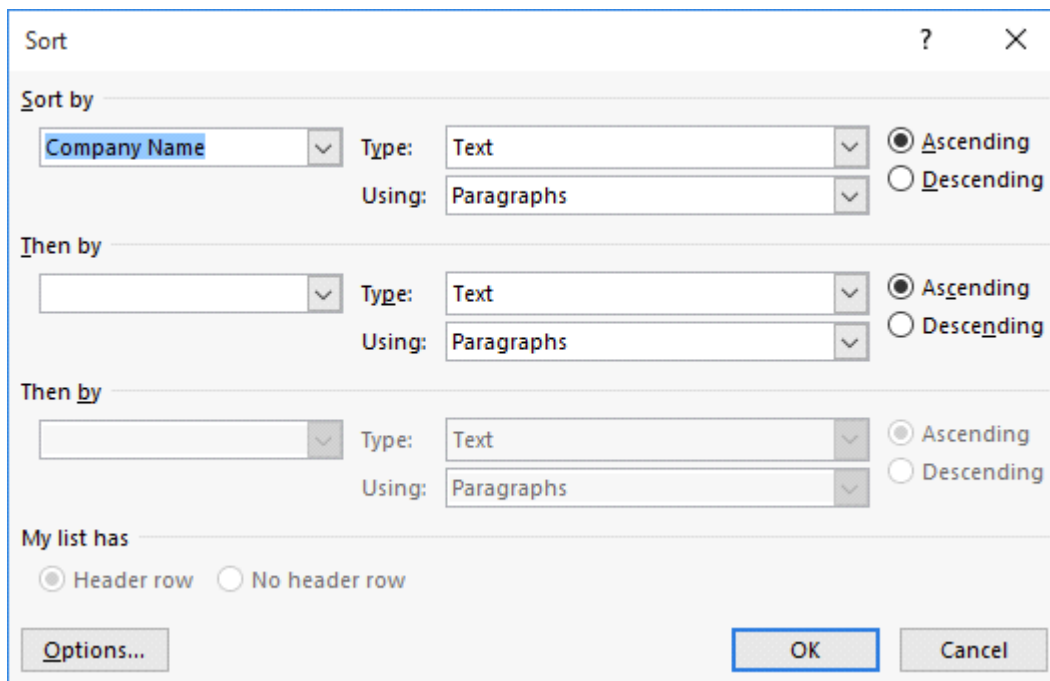


Figure 6-11
Sort dialog box

3. Click **OK**. Note that the table now appears sorted in ascending order by company name.
4. **SAVE** the document as **Clients Table 6** in the lesson folder on your flash drive.

PAUSE. LEAVE the document open to use in the next exercise.

Merging and Splitting Table Cells

The ability to merge and split table cells provides flexibility in customizing tables. To merge cells means to combine two or more cells into one. Merging cells is useful for headings that extend over several columns. To split cells means to divide one cell into two or more cells. You might split cells when you need to place more than one type of data in one cell. The Split Cells dialog box enables you to split a cell into columns or rows. In this lesson, you practice using commands in the Merge group on the Table Tools - Layout tab to merge and split cells.

Step by step Merge and Split Table Cells

GET READY. USE the document that is open from the previous exercise.

1. Position the insertion point on the header row located on page 1. Select the cell that contains the *Contact Person* heading and the empty cell to the left of it.
2. On the Table Tools - Layout tab, in the Merge group, click the **Merge Cells** button. The selected cells merge into one cell.
3. In the Position Title column, on the Lucerne Publishing row, select the cell that contains the text *Director Marketing VP Public Relations*.
4. On the Table Tools - Layout tab, in the Merge group, click the **Split Cells** button to open the *Split Cells* dialog box, as shown in Figure 6-12.

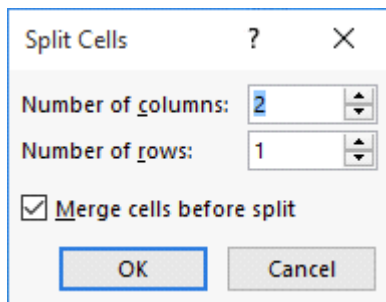


Figure 6-12
Split Cells dialog box

5. Click **OK** to accept the settings as they are. A new column is inserted within the cell.
6. Select the text *VP Public Relations* and drag and drop text to the new column.
7. In the *Company Name* column, select the *Woodgrove Bank* cell.
8. Click the **Split Cells** button. The default setting for the Number of columns is 2 and the default Number of rows is 1. The Merge cells before split check box is grayed out.
9. Change the Number of columns setting to 1 and the Number of rows setting to 2 to split the cell into a single column containing two rows and click **OK**. See Figure 6-13.

Split cell

<i>Company Name</i>	<i>Contact Person</i>		<i>Telephone Number</i>	<i>Number of Current Open Positions</i>	<i>Position Title</i>	<i>Date Posted</i>	<i>Notes</i>
<i>Trey Research</i>	Mike	Tian	469-555-0182	0			
<i>Wide World Importers</i>	Scott	Culp	469-555-0141	0			
<i>Wingtip Toys</i>	Mary	Baker	972-555-0167	1	VP-Direct-Marketing	June 1	50% Travel required
<i>Woodgrove Bank</i>	Mike	Nash	972-555-0189	0			

Figure 6-13
Cell split into two rows

10. Place the insertion point in front of *Woodgrove Bank*. Press and hold the mouse button to select the two rows within the column. Right-click, and then select **Merge Cells**. The cell is now a single row.
11. Click the **Undo** button.
12. **SAVE** the document as **Clients Table 7** in the lesson folder on your flash drive.

PAUSE. LEAVE the document open to use in the next exercise.

Changing Cell Margins

Word 2016 provides an option to change the cell margins and the spacing between cells—you can set the margins for an individual cell or for selected cells. When you make changes in the cell, the appearance of the cell in the table also changes. In this lesson, you practice changing the cell margins and adding spacing between the cells.

Step by step **Change Cell Margins**

GET READY. USE the document that is open from the previous exercise.

1. Position the insertion point in the *Telephone Number* column. In the Table Tools - Layout tab, in the Table group, click the **Select** button, and click **Select Column**.
2. In the Alignment group, click the **Cell Margins** button. The *Table Options* dialog box appears.
3. Change the top and bottom margins to **0.03"** by clicking the **up arrow** to change the dimensions.
4. Click **OK**. The phone numbers no longer fit on one line.
5. With the *Telephone Number* column still selected, click the **Cell Margins** button.
6. Change the left and right margins to **0.03"** by clicking the **down arrow**.
7. Click **OK**. Changing the left and right margins automatically adjusts the phone numbers, and now they fit on one line.
8. With the *Telephone Number* column still selected, click the **Cell Margins** button.
9. Select the **Allow spacing between cells** checkbox and increase the cell spacing to **0.09"**. You have changed the default cell spacing.
10. Click **OK**. Notice the difference in the spacing between the cells. By default, the **Automatically resize to fit contents** option is turned on.
11. **SAVE** the document as **Clients Table 8** in the lesson folder on your flash drive.

PAUSE. LEAVE the document open to use in the next exercise.

Adding Alternative Text to a Table

Alternative text is a useful interpretation tool for tables, diagrams, images, and other objects. Alternative text is also used by web browsers—when you hover over the object, text appears describing the object. The alternative text is also an accessibility tool. Browsers and other applications can read the text to users with disabilities. In this exercise, you learn to add alternative text to a table.

Step by step Add Alternative Text to a Table

GET READY. USE the document that is open from the previous exercise.

1. Place the insertion point anywhere in the table on page one. On the Tables Tools - Layout tab, in the Table group, click **Select**, and then click **Select Table**.
2. Click the **Properties** button in the Tables group. The Table Properties sheet appears.
3. Click the **Alt Text** tab and, in the Title box, type **Listing by Company**. In the Description box, type **Contact listing of individuals by company. The listing includes phone numbers, current positions that are open and titles for the contact person.** Click **OK**.
4. **SAVE** the document as **Clients Table 9** in the lesson folder on your flash drive, and then **CLOSE** the file.

PAUSE. LEAVE the document open to use in the next exercise.

Splitting a Table

In some situations, you might want to split an existing table into two or more separate tables. For example, you might want to divide the information in a table based on specific values, such as company divisions or street addresses. Using the Split Table feature, you can take one company personnel table and split it into separate tables for the Sales division, the Research and Development division, and so forth. In this exercise, you practice splitting a table based on its data.

Step by step Merge and Split Table Cells

GET READY. OPEN the **Client Table 6** document in your lesson folder.

1. Position the insertion point anywhere in the Number of Current Open Positions column. On the Table Tools - Layout tab, in the Table group, click the **Select** button and **Select Column**.
2. On the Table Tools - Layout tab, in the Data group, click the **Sort** button. The **Sort** dialog box appears.
3. In the Sort by area, select the Descending option and click **OK**. The table is sorted according to the values in the Number of Current Open Positions column.
4. Scroll down to the first row with a value of 0 in the Number of Current Open Positions column: Adventure Works, and position the insertion point there.
5. On the Table Tools-Layout tab, in the Merge group, click the **Split Table** button.

The table splits in two, with the rows containing open positions in the top part, and those with no open positions in the bottom part.

6. **SAVE** the document as **Clients Table 10** in the lesson folder on your flash drive, and then **CLOSE** the file.

PAUSE. LEAVE Word open for the next exercise.

Converting Text to Table or Table to Text

Text separated by a paragraph mark, tab, comma, or other character can be converted from text to a table. You can also convert a table to text. To convert text to a table, first select the text, click the *Insert* tab, click the *Table* button, and select *Convert Text to Table*. The Convert Text to Table dialog box appears, and Word determines the number of rows and columns needed based on how the text is separated. After text is converted to a table, the Convert to Text button will be available in the Table Tools - Layout tab. In this exercise, you practice using this technique to convert Word text into a table.

Step by step Convert Text to Table

GET READY. OPEN the **Part Numbers** document in your lesson folder.

1. Select the whole document.
2. On the *Insert* tab, in the *Tables* group, click the **Table** button. The *Table* menu appears.
3. Click **Convert Text to Table**. The *Convert Text to Table* dialog box opens. Word recognizes the number of columns and rows and places the number 10 in the *Number of rows* box—notice that it is shaded gray, making it unavailable to change (see Figure 6-14). Keep the default settings.

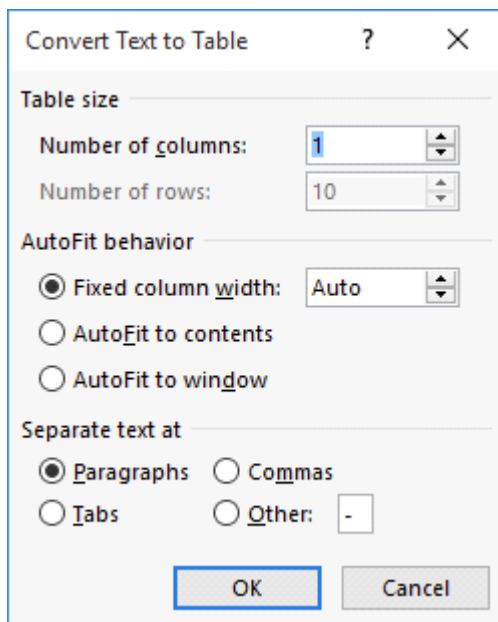



Figure 6-14
Convert Text to Table dialog box

4. Click **OK**. The selected text was separated by paragraph marks, and by selecting the default of **one column**, Word converts the text to a table as shown in Figure 6-15.



Part-No.
BC846B
NSSW100DT
R7RES0805
R12RES0805
R11RES1206
PCB·9x18
5065-2
DF11-26DP-2DSA
PCB·12x12

Figure 6-15
Document converted from text to a table

5. In the Table group, select the entire table. Then in the Cell Size group, click the **AutoFit** button and select **AutoFit Contents**.
6. On the Table Tools - Layout tab, click the **Properties** button in the Table group, and then select the **Table** tab. Center the table. Click **OK**.
7. **SAVE** the document as **Part Numbers Table** in the lesson folder on your flash drive.

PAUSE. LEAVE the document open to use in the next exercise.

Step by step **Convert Table to Text**

GET READY. USE the document that is open from the previous exercise.

1. Position the insertion point anywhere in the table and click the Table Tools - Layout tab.
2. In the Table group, click the **Select** button, and then click **Select Table** to select the entire table.
3. In the Data group, click **Convert to Text**. The *Convert Table to Text* dialog box opens. The default setting in the *Convert Table to Text* dialog box is Paragraph marks. A table can be converted to text and separated by paragraph marks, tabs, commas, or other characters.
4. Click **OK**. The document is converted to text separated by paragraph marks.
5. **SAVE** the document as **Part Numbers Text** in the lesson folder on your flash drive, and then **CLOSE** the file.

PAUSE. LEAVE Word open to use in the next exercise.

Using Formulas in a Table

As you learned previously, you can create tables in Word that contain data and numbers. Word 2016 also provides options to use formulas to calculate a total, compute an average, determine the highest/lowest number, and count values. These are simple

functions that are used in Microsoft Excel, which you can also use in Word. Just as in Excel, formulas begin with an equal symbol followed by the function that you want to perform, such as SUM, AVERAGE, MAX, MIN, and COUNT. You can also use the math operators to perform addition, subtraction, division, and multiplication using cell range references. A cell range is identified by two or more cells within the table. The same rules that you learned in your math class also apply here when using formulas in your table. If you want to perform a certain action first, set the order of operation.

You can also create formulas in a table using cell address location. For example, columns are identified by letters beginning with A and rows are identified with numbers beginning with 1. See the sample table with column and row headings in Table 6-1. To begin a formula, you first place your insertion point in the cell location where you want the formula to appear. In Table 6-1, the first formula begins in a blank cell, E1, and the formula is written using the cell address locations where the values appear, as in =B1+C1+D1. You can use the SUM function to obtain the same result; it is displayed as =SUM(LEFT). These two different approaches for adding the values in the cell range yield the same result. See Table 6-2 for descriptions of types of formulas and functions.

	A	B	C	D	E
1	Dresses	123	87	456	
2	Pants	456	659	456	
3	Skirts	987	456	78	

Table 6-1
Sample of table columns and rows

You can apply a number format to a selected cell. The available format options consists of a pound symbol (#), zero decimal places, a comma, a currency system (\$), two-decimal places, percentage symbol (%), and parentheses (). Selecting any one of these changes the format of the number for that cell.

Sometimes it is necessary to edit a value and update the field with the new total, average, or another function that you applied. To update a field, select the field, right-click, and then select *Update Field*.

Table 6-2 describes the basic functions available in Word tables. Word 2016 provides many more functions—not all functions are listed. In the exercise, you learn to apply a simple function to calculate values, apply a number format, and display the field codes.

File Type	Description
=SUM(ABOVE)	Adds the values in the range above cell.
=SUM(LEFT)	Adds the values in the range to the left of the cell.
=A1+A2+A3+A4	Adds values by cell address location.
=SUM(A1:A4)	Adds the values by using the range arguments. The cell address to

	the left of the colon is the beginning of the range, and the cell address to the right of the colon is the last cell in the range.
=AVERAGE(ABOVE)	Averages values in the range above the cell.
=AVERAGE(LEFT)	Averages values in the range to the left of the cell.
=MAX(ABOVE)	Displays the highest value in the range above the cell.
=MAX(LEFT)	Displays the highest value in the range to the left of the cell.
=MIN(ABOVE)	Displays the lowest value in the range above the cell.
=MIN(LEFT)	Displays the lowest value in the range to the left of the cell.
=COUNT(ABOVE)	Counts values above the cell.
=COUNT(LEFT)	Counts values to the left of the cell.

Table 6-2
Formula Functions

Step by step Use Formulas in a Table

GET READY. OPEN the **Sales** document in your lesson folder.

1. Place the insertion point on the last column (Dec).
2. On the Table Tools - Layout tab, in the Rows & Columns group, click **Insert Right**. A new column appears.
3. Type **Total** in the last column, first row.
4. Position the insertion point in the last column, second row. You will calculate the total using the *Formula* dialog box.
5. On the Table Tools - Layout tab, in the Data group, click the **Formula** button. The *Formula* dialog box appears (see Figure 6-16). If you are familiar with Excel, then you will notice the similarities in the Formula dialog box. Refer to Table 6-2 for the formula functions.

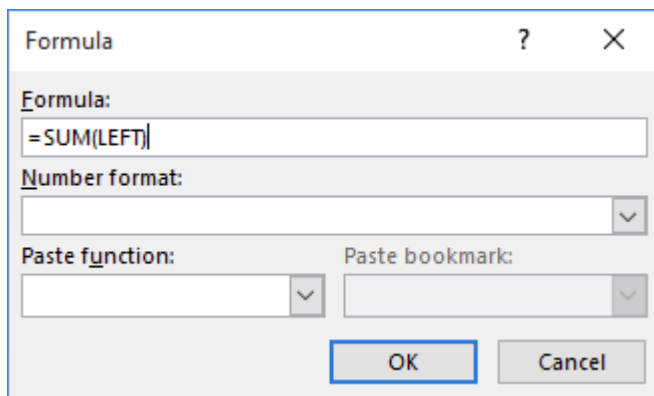


Figure 6-16
Formula dialog box

6. By default, the =SUM(LEFT) formula appears. This function totals the values listed in the second row. Word automatically detects values in a table when you use the

Formula dialog box.

7. Click **OK** to accept the default and close the *Formula* dialog box. The total appears. However, the total value includes the year (2009) as a number, not as a row heading. To prevent the formula from including 2009 in the total, you must reference the range of cells you want to add.
8. Select the **Total value** you just calculated and press **Delete**.
9. Click the **Formula** button again, and this time, replace the default formula with `=SUM(B2:M2)`. In a cell coordinate, the letter refers to the column and the number to the row, so B2 is the cell in the second row, second column.
10. Click **OK**. Notice that the Total value now does not include the 2009.
11. Repeat the process to calculate the total for the 2010 monthly values. The formula you use should be `=SUM(B3:M3)`.
12. **SAVE** the document as **Sales 2** in the lesson folder on your flash drive.

PAUSE. LEAVE the document open to use in the next exercise.

Step by step Apply a Number Format

GET READY. USE the document that is open from the previous exercise.

1. Place the insertion point in the Total value for 2009. By default, the cell value is shaded in gray. This value appears with no formatting. To change the formatting, open the **Formula** dialog box again by clicking on the **Formula** button.
2. Click the **drop-down arrow** in the Number format section and select the third option, `#,##0.00;($#,##0.00)` as shown in Figure 6-17.

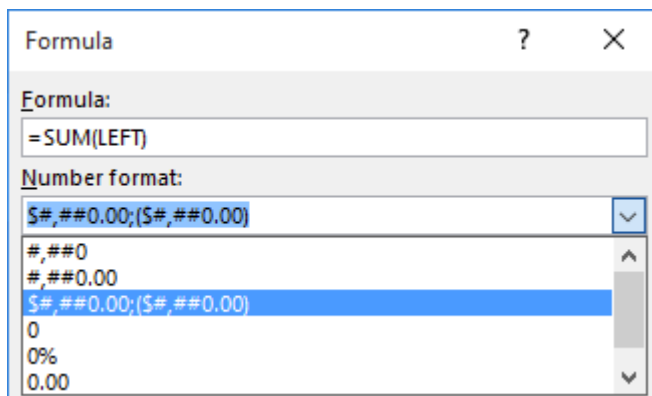


Figure 6-17

Number format options

3. Click **OK**. This option inserts a currency symbol and two decimal places.
4. Repeat the process to format the total for the 2010 monthly values.
5. **SAVE** the document as **Sales 3** in the lesson folder on your flash drive.

CLOSE Word.

Knowledge Assessment

Multiple Choice

Select the best response for the following statements.

1. Using the Sort feature in a table sorts selected content in which of the following orders?
 - a. Ascending
 - b. Descending
 - c. Alphabetical order
 - d. All of the above
2. Combining two or more cells into one cell uses a Word feature called:
 - a. Split Cells
 - b. Merge Cells
 - c. Merge All Cells
 - d. Merge Selected Cells
3. Built-in preformatted tables that can be inserted and used in your documents are called:
 - a. Table Style Options
 - b. Tables
 - c. Quick Tables
 - d. Insert Tables
4. Sorted data can consist of which of the following?
 - a. text
 - b. numbers
 - c. dates
 - d. All of the above
5. The first row of a table that is formatted differently than the rest of the table and contains information to identify the data in the column is called a:
 - a. total row
 - b. banded column
 - c. header column
 - d. header row

True/False

Circle T if the statement is true or F if the statement is false.

- T F** 1. When you know how many rows and columns you need in a table, the quickest way to create the table is by dragging over the grid in the Table menu.
- T F** 2. When Word converts text to tables, it uses paragraph marks, tabs, and commas to determine how to organize the data within the table.
- T F** 3. Sorting can only sort one column of data at a time.
- T F** 4. You can sort single-level lists, such as bulleted or numbered lists in a table.

T F 5. The Repeat Header Rows button is used for tables that extend to multiple pages.

Projects

Project 6-1: Creating and Formatting a Table

Ms. Archer, the executive recruiter, asks you to start working on a placements table that will list the candidates that have been placed, the companies that hired them, and the date of hire.

GET READY. LAUNCH Word if it is not already running.

1. **OPEN** **Placements** from the data files for this lesson.
2. **SAVE** the document as **6-1 Placements Table** in the lesson folder on your flash drive.
3. Place the insertion point in the last column. On the Table Tools - Layout tab, in the Table group, click the **Select** button and **Select Column**.
4. In the Cell Size group, click the **up arrow** in the Width box until it reads **1.3"**.
5. Select the first column in the table.
6. On the Layout tab, in the Cell Size group, click the **down arrow** in the Width box until it reads **.9"**.
7. Select the **Company** column and change the width to **1.5"**.
8. On the Table Tools - Design tab, in the Table Style Options group, select the **Header Row** and **Banded Rows** check boxes.
9. Place your insertion point within the table, and in the Table Styles group, select the **Grid Table 4 – Accent 4 style**.
10. Select the last column in the table.
11. On the Table Tools - Layout tab, in the Data group, click the **Sort** button to open the *Sort* dialog box.
12. Under the *My list has* section, make sure the **Header row** option is selected. Click **OK**. This sorts the column by date.
13. With the table selected, on the Table Tools - Layout tab, in the Table group, click the **Properties** button.
14. In the *Table Properties* sheet, on the Table tab, click **Center** in the Alignment area.
15. Click the **Alt Text tab** and in the Title box, type **Employee Placements**. In the Description box, type **Employees date of employment**. Click **OK**.
16. Select the header row.
17. On the Table Tools - Layout tab, in the Alignment group, click **Align Center**.
18. **SAVE** the document in the lesson folder on your flash drive, and then **CLOSE** the file.

LEAVE Word open for the next project.

Project 6-2: Creating and Managing a Table

In this project, you will create and manage a table showing the quarterly sales for Coho Vineyard.

GET READY. LAUNCH Word if it is not already running.

1. Create a new blank document.
2. **SAVE** the document as **6-2 Quarterly Sales** in the lesson folder on your flash drive.
3. On the Insert tab, in the Tables group, click the **Table** button. Drag to create a table that has 5 columns and 6 rows.
4. Enter the following data in the table as shown below.

Take Note

Press **Shift+Enter** to insert a line break after typing **Vineyard**.

Coho Vineyard 20XX				
	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
Mark Hanson	19,098	25,890	39,088	28,789
Terry Adams	21,890	19,567	32,811	31,562
Max Benson	39,400	35,021	19,789	21,349
Cathan Cook	34,319	27,437	28,936	19,034

5. Select the first row. On the Table Tools - Layout tab, in the Merge group, click the **Merge Cells** button.
6. With the row still selected, center the title by clicking the **Align Center** button in the Alignment group.
7. On the Table Tools - Design tab, in the Table Style Options group, select the **Last Column** checkbox. The Header Row, First Column, and Banded Rows checkboxes should be selected already.
8. In the Table Styles gallery, click the **More** button to display the gallery. In the List Table group, select **List Table 1 Light - Accent 6**.
9. On the Home tab, turn on Show/Hide, if necessary.
10. Insert a column after *Fourth Quarter* by placing the insertion point above the end of row markers, and then clicking the **plus** symbol.
11. Merge the first row in the last column with the title by selecting the first row, right-clicking, and then selecting **Merge Cells**.
12. Type **Total** in the second row of the last column. In the Alignment group, select **Align Center**.
13. Position the insertion point in the blank cell below *Total*. In the Data group, select **Formula**. The Formula box displays =SUM(LEFT); this totals the values to the left.
14. In the Number format drop-down list, select the third option **[\$,##0.00;(\$,##0.00)**.
15. Click **OK**. The total value for Mark Hanson's four quarters appears.
16. Position the insertion point in the next blank cell down and in the Data group, select **Formula**. Edit the formula by double-clicking on the text **ABOVE** and typing **LEFT**. Make sure you type the function inside the parentheses.
17. Apply the same number format that you selected earlier. Click **OK**.
18. Position the insertion point in the next blank cell down and in the Data group, and

select **Formula**.

19. In the Formula box, delete **SUM(ABOVE)**—do not delete the equal sign.
20. In the Paste function drop-down list, select **SUM**. Place the insertion point inside the parentheses and type **LEFT**.
21. Apply the same number format that you selected earlier.
22. Click **OK**.
23. Position the insertion point in the last blank cell and in the Data group, select **Formula**.
24. Edit the formula by double-clicking on the text **ABOVE** and typing **LEFT**.
25. Apply the same number format that you selected earlier.
26. Click **OK**.
27. **SAVE** the document with the same filename in the lesson folder on your flash drive.
28. On the Table Tools - Layout tab, click the **Select** button in the Table group, and then choose **Select Table** from the drop-down menu.
29. In the Data group, select **Convert to Text**, and then select **Tabs**. Click **OK**.
30. **SAVE** the document as **6-2 Quarterly Sales 2** in the lesson folder on your flash drive, and then **CLOSE** the file.

STOP. CLOSE Word.