Methodological guidelines

Using Microsoft Word 2010

Part 3

for individual work and laboratory work of disciplines «Informatics», «Informatics and information technologies»,
«Information systems and technologies»,
«Computers and computer technologies»
for students with learning in a foreign language

Kharkiv – 2015

Megel Y.E., Kovalenko S.M., Chaly I.V., Mikhnova O.D., Chala O.I.

Reviewers:

Mashtalir V. P.,	doctor of engineering sciences, Professor of Department of Informatics (Kharkiv National University of Radio Electronics)
Furman I. O.	doctor of engineering sciences, Head of the Department of Automation and Computer Integrated Technologies (Kharkiv Petro Vasylenko National Technical University of Agriculture)

Methodological guidelines are intended to assist students in studying Informatics in English, both in the classroom and individually.

Laboratory Work № 3

Inserting tables in MS Word document

Objective: obtain basic skills in inserting table in MS Word document using tree ways: inserting itself, drawing and using Excel spreadsheet (creating new table in Word and copy and paste existing worksheet) as well as formatting table.

Seven ways to create tables

Microsoft now provides five different methods for creating tables: the Graphic Grid, Insert Table, Draw Table, insert a new or existing Excel Spreadsheet table, and Quick Tables, plus an option for converting existing text into a table. To start, open a blank Word document from the Home/New page. Position your cursor in the document where you want the table inserted.

Graphic Grid/Select Table from Graph

Under the Insert tab, click the *Table* button. The Insert Table dialog box will open, showing a basic grid pattern as well as traditional menu options below it. Place your cursor on the first cell in the grid and slide it down and over until you highlight (for this example) four columns and five rows, then click once.

Notice that once the table is created, a new option called Table Tools appears on the Ribbon bar with two new tabs: Design and Layout. See the Layout and Design section below for details regarding these options.
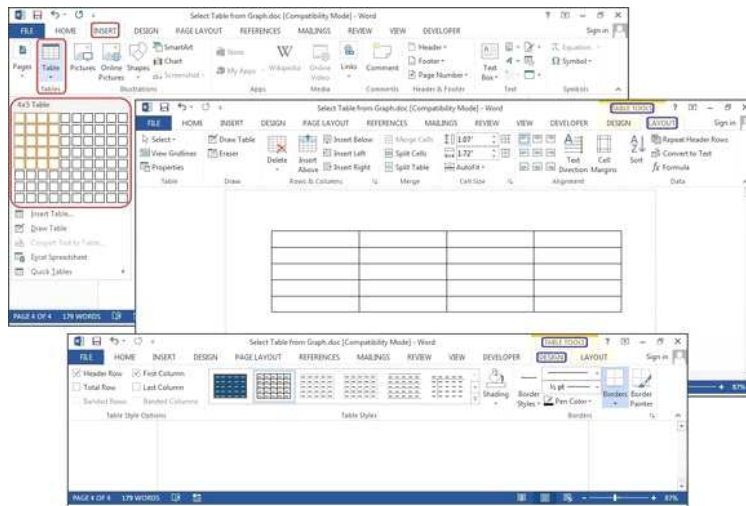
Create a new table using the graphical grid.

Insert Table

Click *Insert > Tables > Insert Table* from the dropdown menu. In the Insert Table dialog box, enter the number of columns and rows you want in this table (four columns and five rows). In the AutoFit Behavior panel, select *Auto*, or click the down arrow to choose a specific size. You can also choose AutoFit to Contents (produces narrow columns that expand as you add data) or AutoFit to Window (expands the table to fit the document size). Check the *Remember Dimensions for New Tables* box if you want the sizes you're entering now to become your defaults for future tables.
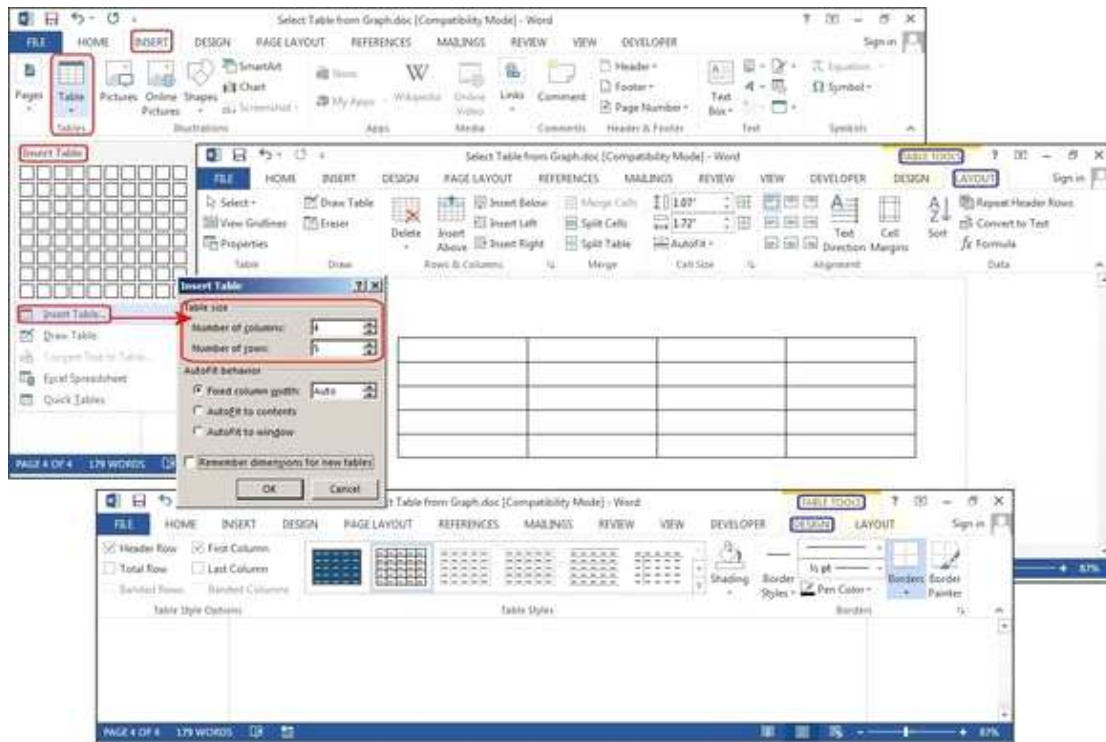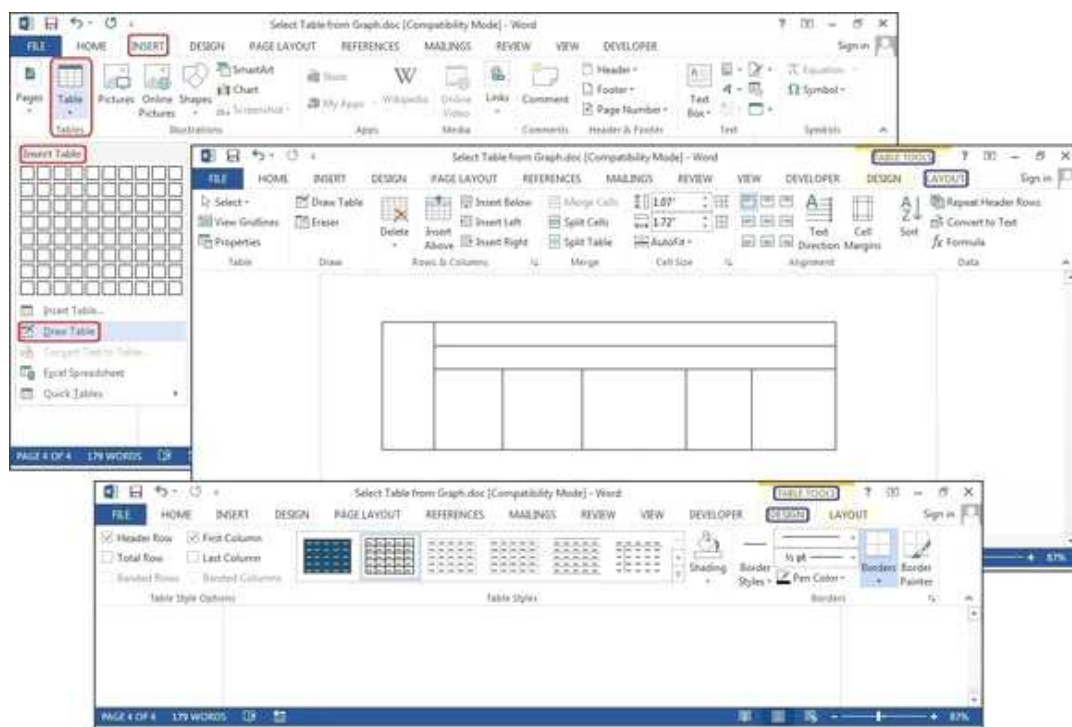

Create a new table using Insert Table.

Draw Table

Click *Insert> Tables > Draw Table*. The cursor turns into a pencil, which you drag down and across to draw a box. Don't worry about the exact dimensions; you can modify it any time.

Once the box is created, position the cursor inside the box and draw lines over and down for the columns and rows (one at a time). Don't worry about crooked lines, either—Word straightens them as you draw.

To add or remove columns and/or rows later, click anywhere inside the table, then select the Design tab under Table Tools. Click the *Draw Table* button to add or continue drawing lines with your pencil cursor, or click the *Eraser* button to remove lines with the eraser cursor. To remove a line, just touch the line with the eraser cursor, and the line disappears.
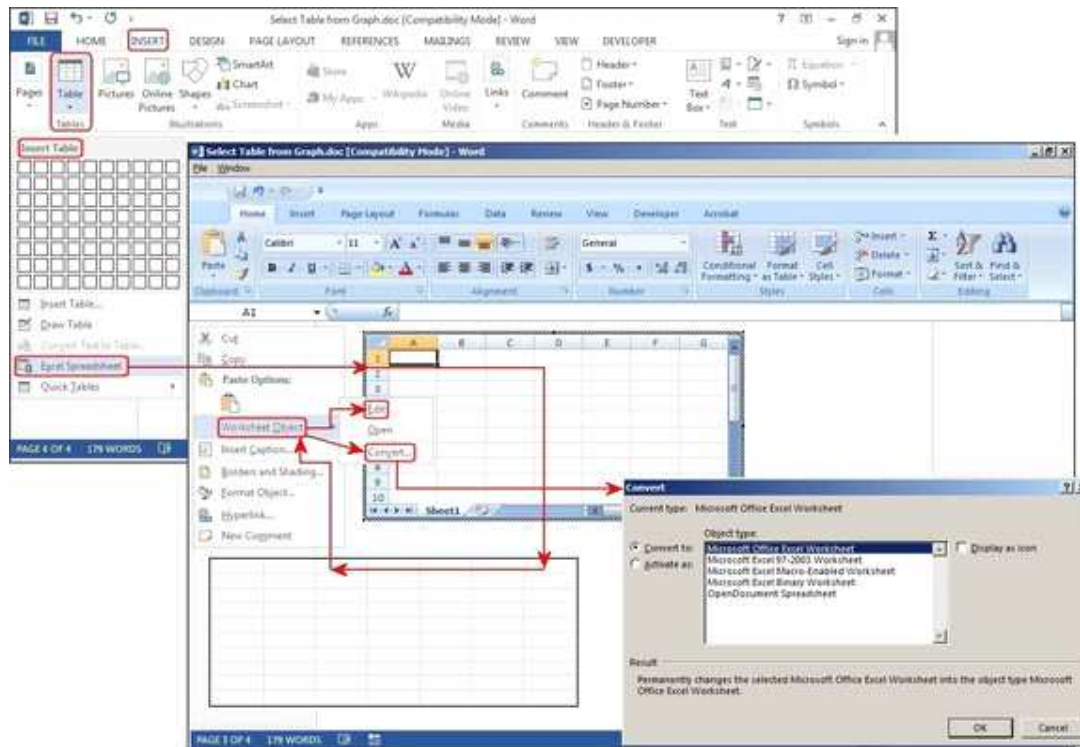

Create a new table using Draw Table.

Excel Spreadsheet (create In Word)

Click *Insert > Tables > Excel Spreadsheet*. An Excel spreadsheet inserts at your cursor location. You can continue using Excel and its menus and commands, but after you enter your data it converts to a non-editable graphic.

If you want to add, delete, or modify the spreadsheet, right-click anywhere inside the worksheet graphic, select *Worksheet Object* from the dropdown menu, then click *Edit*. The original spreadsheet reappears for editing. Notice the top menu has changed to an Excel menu for edits.

Also from the Worksheet Object dropdown menu, you can click *Open* to open the spreadsheet in Excel, so you can manipulate it in that program. Or click *Convert* to view a Windows dialog box that lists file-

conversion options.

Create a new table using Excel Spreadsheet.

Excel Spreadsheet (copy and paste existing worksheet)

In the old days, Excel spreadsheets had to be imported into Word. Now you can just copy and paste. Open Excel, highlight the spreadsheet, and copy it. Then open Word, position your cursor at the desired location, and select *Paste > Keep Source Formatting*.

The other options on the Paste dialog menu are Merge Formatting, which changes the text format to match the file into which you pasted the spreadsheet, and Keep Text Only, which pastes the text without the Excel grid, meaning you will likely have to realign your columns with tabs.
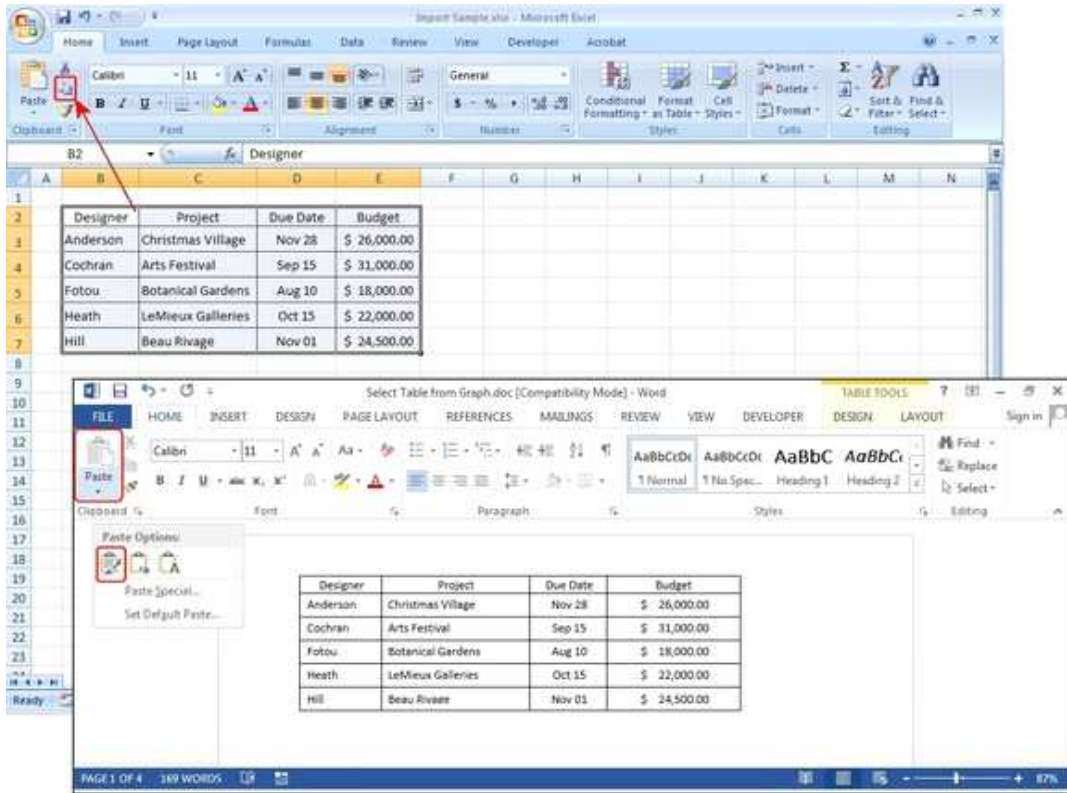
Copy and paste an existing table from Excel.

Quick Tables

Quick Tables are Word's table templates. In addition to the nine templates provided, you can create your own designs and save them to the Quick Tables Gallery to use later. Click *Insert > Tables > Quick Tables*. Select a table template from the Quick Tables menu, then modify it to fit your project.
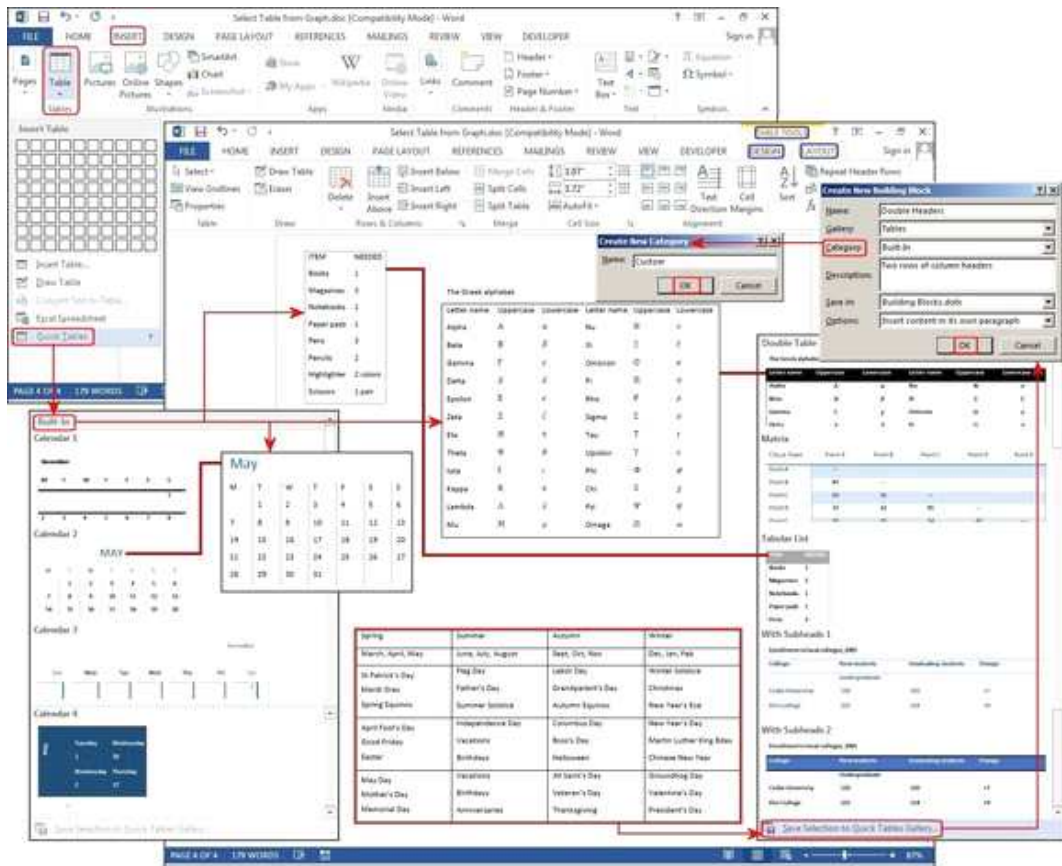
Create a new table using Quick Tables.

Convert Text to Table

The table tools can also make lists a lot easier to customize and even reorganize later. For our example, we'll turn a classic contact list into a table, using a list of names—first, middle, last—plus the city, state, region, and profession of each person on the list.

For eons, people have used tabs to separate the fields, adding a tab or two to accommodate longer strings of data. But if you do this, when you convert the table to text, it misplaces all the data.

With the Convert Text to Table feature, you can separate the fields (Name, City, State, etc.) with paragraphs, tabs, commas, or other separator character, but use only one separator between each field.
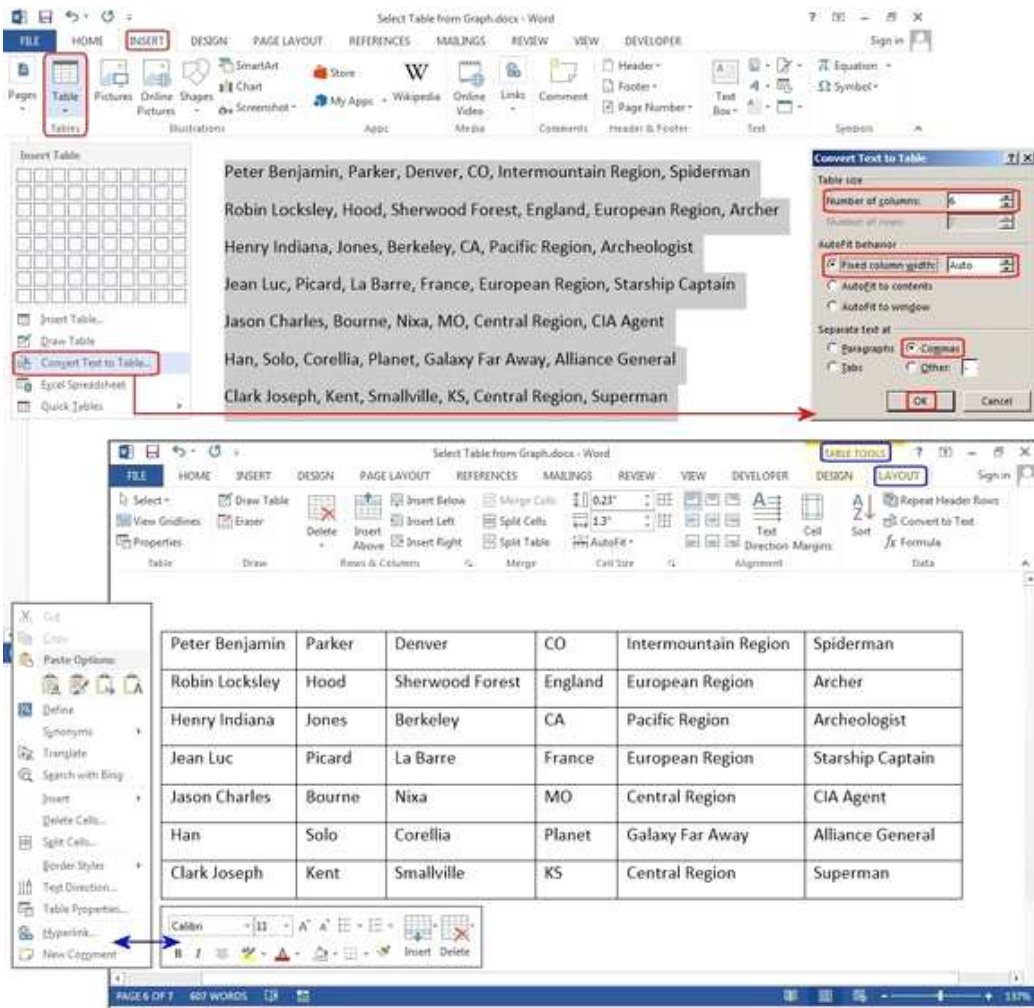
Convert an existing block of text to a table.

Layout and Design

There are three options to modify and/or decorate tables:

1. Use the *Table Tools > Design*—or—*Table Tools > Layout* commands on the Ribbon menu.

2. Right-click and use the Shortcut popup menus.

3. Use the keyboard shortcuts, which become visible when you press the ALT key on your keyboard.

All of these methods are fast and easy, but using a combination of all three will always be quicker. For example, use your mouse to highlight, then right-click to copy with your right hand; then arrow down to the new location and press CTRL-V to paste with your left hand.

Layout tab

The Layout tab lets you modify the structure of the table. The menu is fairly self-explanatory, and you can roll your cursor over a feature to get further clarification.
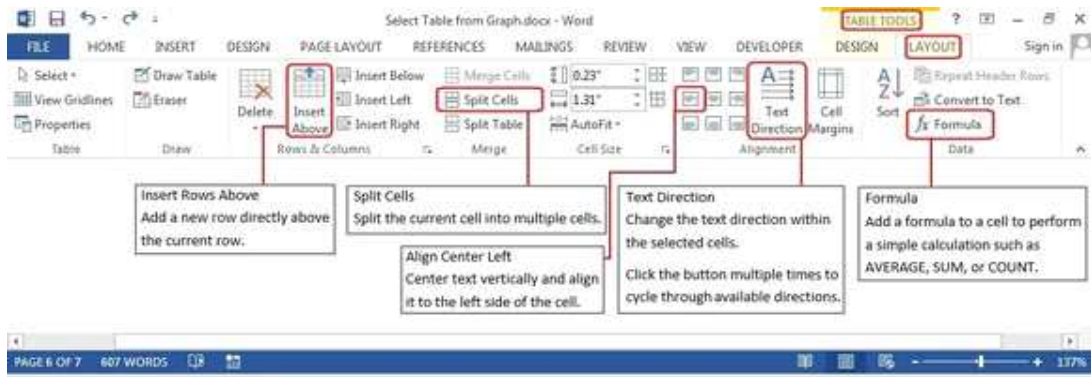
Roll your mouse over each button to view how each feature works.

The dialog boxes below also illustrate each feature. Click *Table Tools > Layout > Insert or Delete* (from Rows and Columns group) to add or remove them; *Merge* or *Split Cells* or *Split a Table* (from the Merge group); or *Text Direction* (from the alignment group) to rotate the text inside the table.
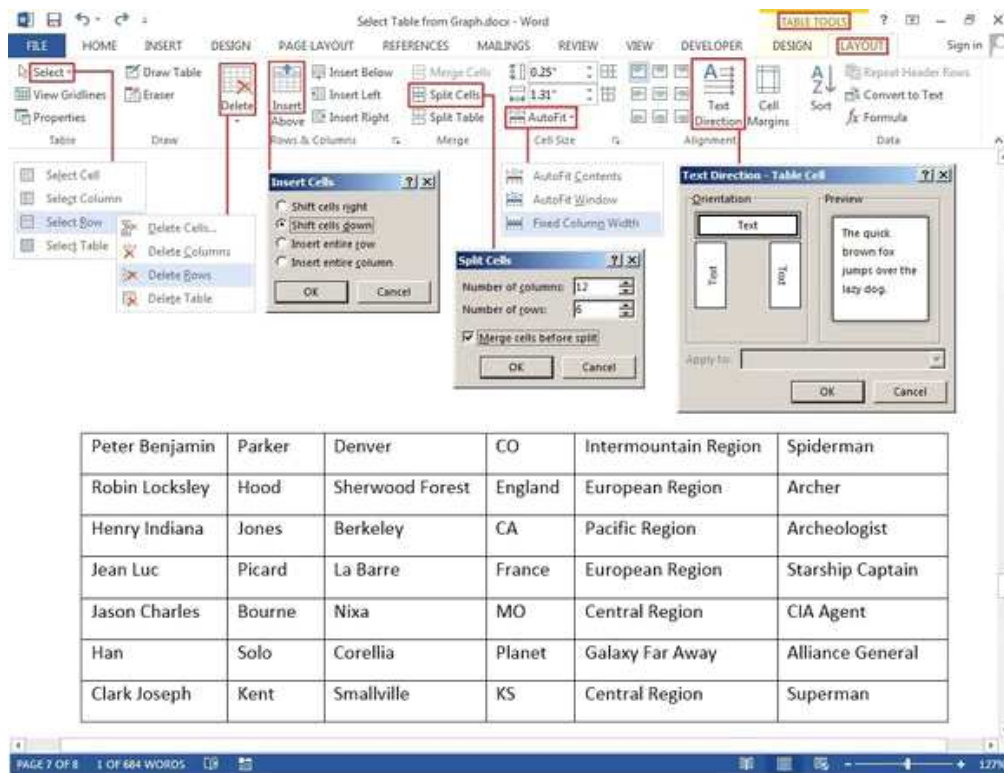
Menu options to modify a table structure.

Other features include Table Properties, which provides several options for aligning the table with the text or wrapping text around your table. Select *Cell Margins* to change the margins inside each cell. With the table still highlighted, click *Table Tools > Layout > Data > Sort* to sort the table data alphabetically or numerically, just like in Excel. You can sort by column numbers or by column headers, and it provides two sort levels. For example, you can sort by Last Name, then by First Name. The table below is sorted by Last Name.

You can also convert your table back to a text block. Just choose the separator you prefer, so when the table grid disappears, the data isn't all jumbled together.

You can even insert formulas to calculate your numeric data. I added a Salary column to the table below and entered some dollars, plus a new row at the bottom for the salary totals. To calculate the total salaries, position your cursor in the last row and the last column cell, and click the *Formula* button under the Data group. In the Formula dialog box type the SUM() formula [or Count() or Average()] in the Formula field box. If you are unfamiliar with the formulas Word provides, click the down arrow under the Paste Function field, and choose a formula from the list.

Type Above between the parentheses, choose a format under Number Format such as dollars, percent, or general, then click *OK*. Word calculates the column of numbers and places the calculation in the target cell (where your cursor resides). Review the Formula Format table in the graphic below for the correct commands that tell Word which direction to calculate (these go inside the parentheses).


F-Name	L-Name	City	State	Profession	Salary
Jason Charles	Bourne	Nixa	MO	CIA Agent	280,000
Robin Locksley	Hood	Sherwood Forest	England	Archer	46,000
Henry Indiana	Jones	Berkeley	CA	Archeologist	32,000
Peter Benjamin	Parker	Denver	CO	Spiderman	12,000
Jean Luc	Picard	La Barre	France	Starship Captain	220,000
Han	Solo	Corellia	Planet	Alliance General	91,000
				TOTAL SALARY	$681,000.00

Wrap text around a table, change cell margins, convert table back to text, sort the table data, and/or

add formulas.

Design tab

The Design tab is for adding borders, shading, styles, and customizing the header columns and rows. Highlight your table, then select Table *Tools > Design> Table Styles*, *Shading*, *Border Styles*, *Borders*, or *Border Painter* (see the graphic below for ideas). There's no learning curve, just play with the features and see what happens. If you don't like a feature you've added, just click the *Undo* button or press CTRL-Z.

There's also an option to add artwork borders to your pages. Select *Table Tools > Design > Borders > Border Painter*, and click the *Page Border* tab in the Borders and Shading dialog box. Click the down arrow in the field box under Art, then choose a border—mostly simple clip art—from the list.
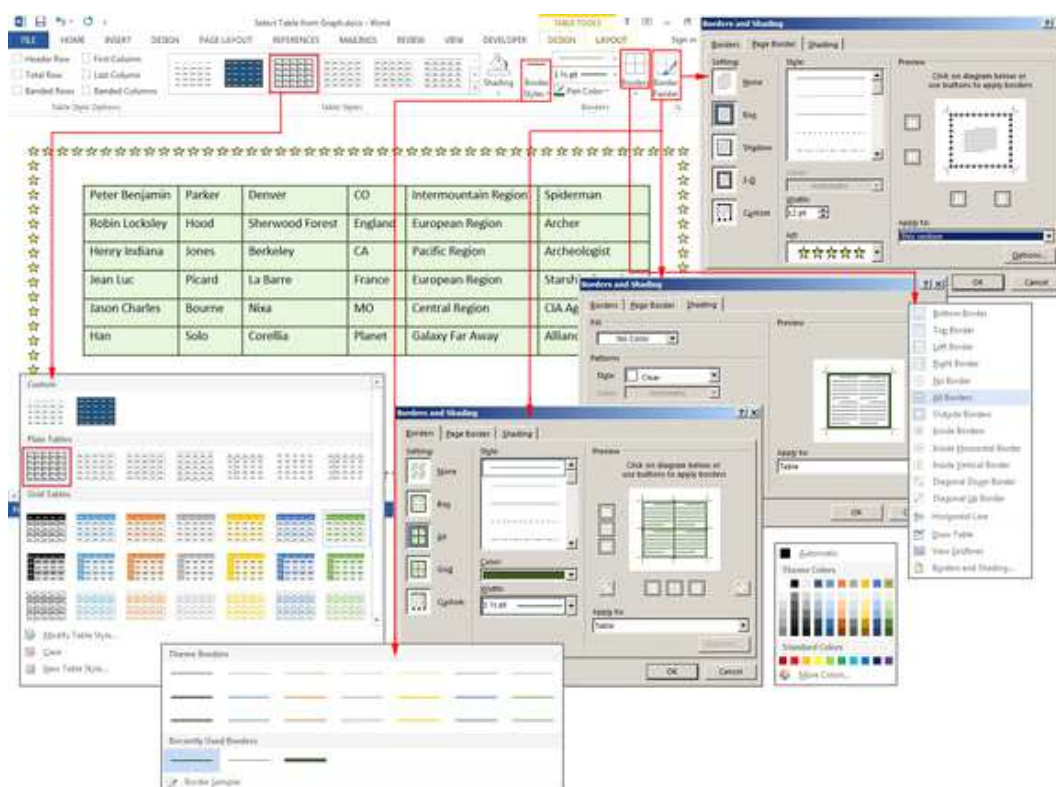
Make your table pop with Table Styles, Shading, Border Styles, Borders, or Border Painter.

The table below uses one of the many preset styles that comes with Word. Select *Table Tools > Design > Table Styles*, then scroll through the gallery of styles. If you want to change the font or customize the paragraphs inside the table, use the Format Shortcut menu. Right-click anywhere inside the table, and this small menu pops up adjacent to the longer Table Options menu. If the formatting feature you need is not on the Shortcut menu (which is fairly limited), click the Home Tab and select the features you need from the Font or Paragraph group. All of the buttons and groups on the Home tab are available for formatting tables as well as documents. The options are endless.
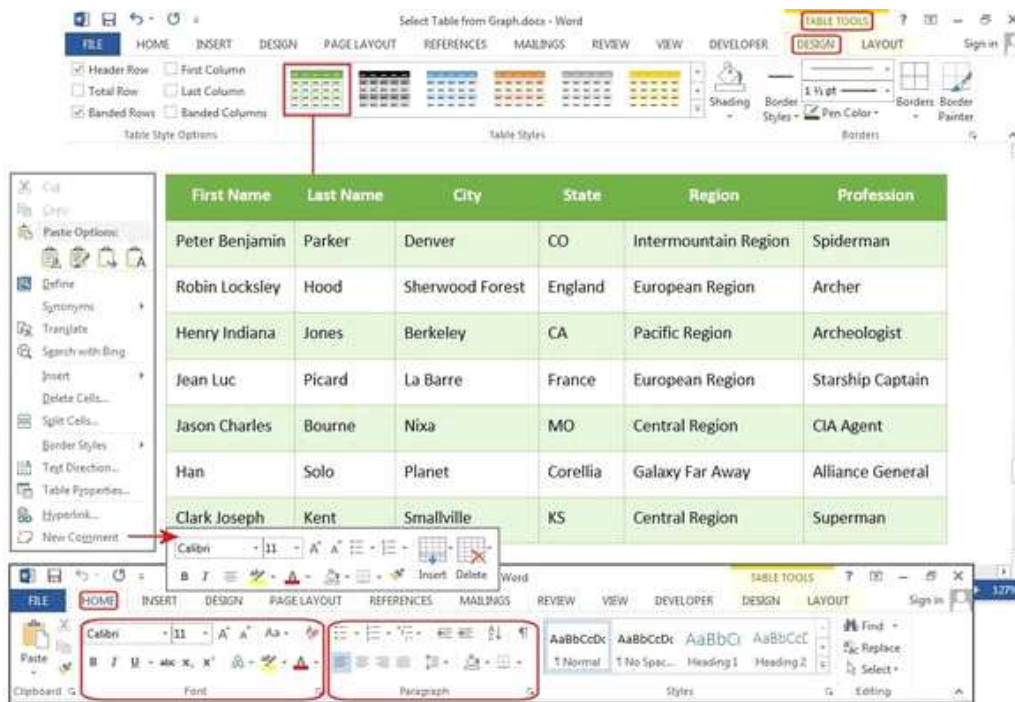
Choose a Table Style with Banded Rows (i.e., every other row is different for easier viewing), then customize the fonts and paragraph spacing.

Drawing Custom Tables in Microsoft Word 2007

You don't have to have any artistic abilities whatsoever to take advantage of the drawing tools available in Microsoft Word 2007. The Draw Table and Eraser options allow you to easily create a custom table with just a few clicks.

- If you're looking to create a table with a more customized appearance than the basic structures we went over in Part 1 of this series, then you'll want to try out the flexible drawing tools included with Microsoft Word 2007. We'll start by going over the steps needed to create a new table using this methodology.

- **Creating a New Table Using the Draw Feature**

Open the **Insert** tab on the Word ribbon, and click on the arrow underneath **Table**. Select the **Draw Table** option.
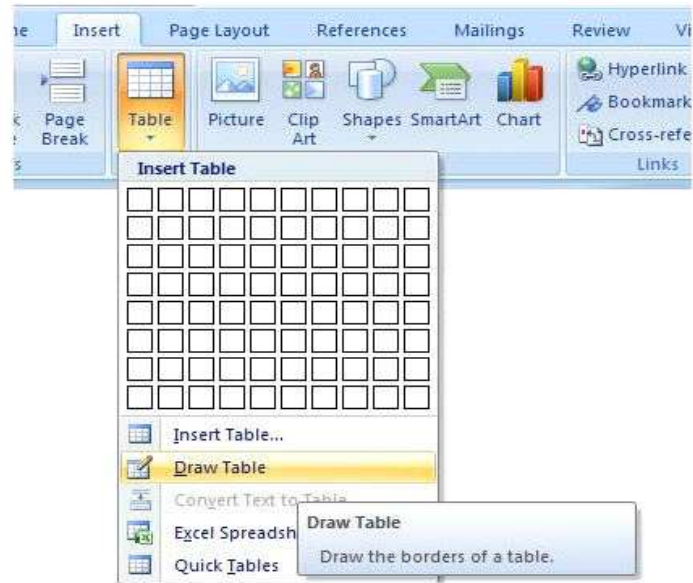
After choosing this option, you'll be returned to your Word document, and the mouse pointer will now be in the shape of a small pencil. Click and drag the mouse anywhere on the document page to draw a rectangle. This rectangle will be the first cell of your table.
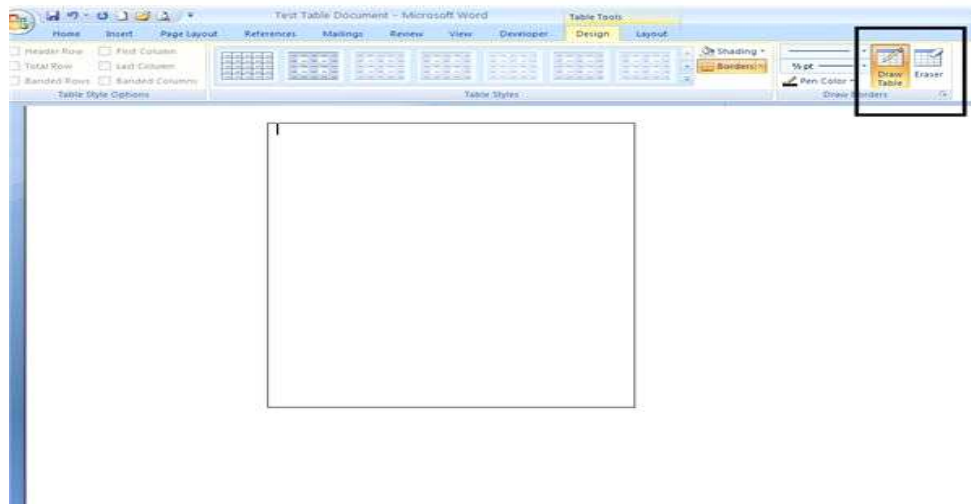
Note that after you draw this first cell, two new tabs, **Design** and **Layout**, will appear on the Word ribbon on a larger tab entitled **Table Tools**. For the moment we are mostly concerned with the tools labeled **Draw Table** and **Eraser** that appear on the **Design** tab.

With the **Draw Table** tool, you can add additional cells either by drawing another rectangle as you did to create the first cell or by inserting additional lines that divide existing cells.

One great advantage that this method has over the basic table creation options discussed in Part 1 of this series is it gives you greater control over the size and shape of each cell in your table. In fact, this feature even lets you create tables with shapes other than the common rectangular ones that we're all used to. To create some more interesting shapes, we'll have to use the **Eraser** tool.

The **Eraser** tool allows you to remove a border from a cell in a table without changing the rest of the table. To use this feature, select **Eraser** from **Design** tab. This will change your mouse pointer into an object that is supposed to represent one of those white office erasers, but it looks more like a piece of chalk to me. After making this selection, you can erase any of the border lines in your table by clicking on them.
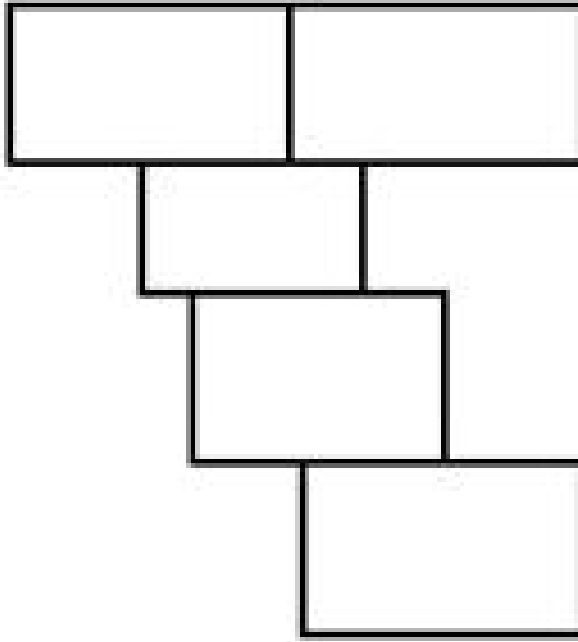
Combining the utility of the **Draw Table** and **Eraser** tools opens the door to being able to create a variety of custom tables that are more suited to hold your information. The table in the screenshot above could easily be converted into a step hierarchy table. With these functions, you could also easily construct a process flow chart or other business-related diagram.

- **Editing an Existing Table Using the Draw Feature**

If you really want to optimize table creation in Microsoft Word, you can combine the basic table creation options with the more advanced drawing features. You can start out be creating a table with a predefined number of rows and columns as discussed in Part 1 of this series. The following screenshot shows a sample 10 x 5 table created this way.
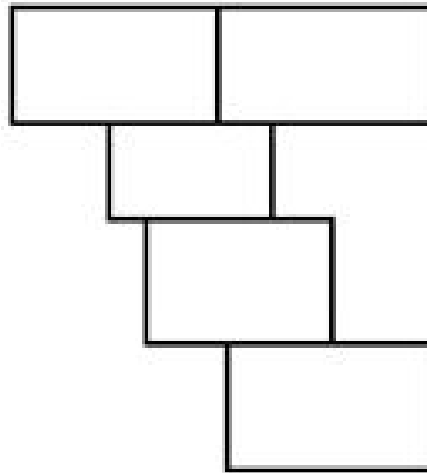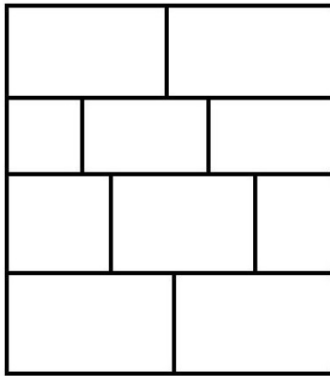
With the table selected, open the **Design** tab on the Word ribbon. You can now use the **Draw Table** and **Eraser** tools to modify this existing table. A few simple clicks with the **Eraser** tool gives us the following modified table.

Later in this series, we'll go into more details about additional types of formatting you can apply to tables that will even further customize their appearance.

II. Task to perform

- Open Microsoft Word.
- Create the new document.
- Create the tables below.
- Insert the images into table.
- Save document in your work folder.
- Close document.
- Close Microsoft Word.

Region and State		1998			
		Q1	Q2	Q3	Q4
E	New York	320	310	302	343
a	Massachusetts	222	236	239	256
s	Maine	243	240	225	232
t	New Hampshire	261	275	230	260
	Region Total	**1046**	**1061**	**996**	**1091**
W	California	334	380	392	418
e	Oregon	267	290	299	311
s	Nevada	276	276	289	302
t	**Region Total**	**877**	**946**	**980**	**1031**
Company Total		*1923*	*2007*	*1986*	*2122*

Supplementary Table 1 | Inflammatory mediators in human epilepsy

Mediator	Changes in brain			References	Cha
	Rasmussen	MCD	TLE		Infantile spa
NFκB	n.a.	+	+	1,2	n.a.
Interleukins	+	+	+	3–8	+/=
Interferons	n.a.	n.a.	n.a.	-	+
TNF or p55 receptor	n.a.	+	+	16,18,19	+
Complement system	+	+	+	18,20	n.a.
COX-2/PGs	n.a.	n.a.	+	22	n.a.
Chemokines	n.a.	+	+	6,18,24	+
Adhesion molecules	n.a.	+	+	18	n.a.
Plasminogen activator*	n.a.	+	+	7	n.a.
HMGB1	n.a.	+	+	25	n.a.
TLR4	n.a.	+	+	25	n.a.
mTOR	n.a.	+	n.a.	26–30	n.a.

Vendor No	Vendor Name	Address	City	S
3501	Cacor Corporation	161 Southfield Rd	Southfield	OH
3502	Underwater	50 N 3rd Street	Indianapolis	IN
3503	J.W. Luscher Mfg.	65 Addams Street	Berkely	MA
3504	Scuba Professionals	3105 East Brace	Rancho Dominguez	CA
3505	Divers' Supply Shop	5208 University Dr	Macon	GA
3506	Techniques	52 Dolphin Drive	Redwood City	CA
3507	Perry Scuba	3443 James Ave	Hapeville	GA
3508	Beauchat, Inc.	45900 SW 2nd Ave	Ft Lauderdale	FL

BOX 4.3 SPATIAL DISTRIBUTION OF ACTIVITIES / PROJECTS AND COS

Name of District:									
Thematic Area:									
Focus Area	Programme / Projects / Activities	Number of Programme / Projects / Activities	Total Cost			Programme / Projects /			
				District Capital	Total Cost (GH□)	Urban	Total Cost (GH□)		

EmployeeID	LastName	FirstName	Title	Birthdate	Address	City	
1	Davolio	Nancy	Sales Representative	December 8, 1968	507 - 20th Ave. E. Apt. 2A	Seattle	
2	Fuller	Andrew	Vice President, Sales	February 19, 1952	908 W. Capital Way	Tacoma	
3	Leverling	Janet	Sales Representative	August 30, 1963	722 Moss Bay Blvd.	Kirkland	
4	Peacock	Margaret	Sales Representative	September 19, 1958	4110 Old Redmond Rd.	Redmond	
5	Buchanan	Steven	Sales Manager	March 4, 1955	14 Garrett Hill	London	

III. Checklist

- How to insert a new table into MS Word document?
- How to draw a new table?
- How to create new MS Excel spreadsheet in MS Word document?
- Now to copy and paste existing worksheet in you Ms Word document?
- Quick table. What does it use for?
- How to convert text to table?
- How to design table?
- How to use the Draw Feature?
- How to edit an existing table using the Draw Feature?

Literature

- J. Walkenbach. Microsoft Excel 2010 Formulas. – Wiley Publishing Inc., 2010. – 818p.
- W. Wang. Office 2010 for Dummies. – John Wiley & Sons Inc, 2010. – 434 p.
- G. Hart-Davis. Beginning Microsoft Office 2010. – Apress, 2010. – 719 p.
- H. Tyson. Microsoft Word 2010. – Wiley Publishing Inc., 2010. – 941 p.
- J. Walkenbach, H. Tyson, M.R. Groh, F. Wempen, L.A. Bucki. Bible Microsoft Office 2010. – Wiley Publishing Inc., 2010 – 1301 p.
- K. Murray. First Look Microsoft Office 2010. – Microsoft Press, 2010. – 184 p.
-