

Excel 2016 Essentials

Corporate Training Materials



Module One: Getting Started

Motivation is what gets you started. Habit is what keeps you going.

Jim Rohn

Welcome to the Excel 2016 Essentials workshop.



Workshop Objectives



**Create
worksheets
and
workbooks**

**Navigate in
worksheets
and
workbooks**

**Format
worksheets
and
workbooks**

**Manage
data cells
and ranges**

**Perform
operations
with formulas
and functions**

Module Two: Create and Manage Worksheets and Workbooks

Worksheets live in workbooks in Excel and create the building blocks of documenting, analyzing, manipulating, and presenting data. This module will help you get started by creating worksheets and workbooks.

Before the beginning of great brilliance, there must be chaos. Before a brilliant person begins something great, they must look foolish in the crowd.

Lao Tsu

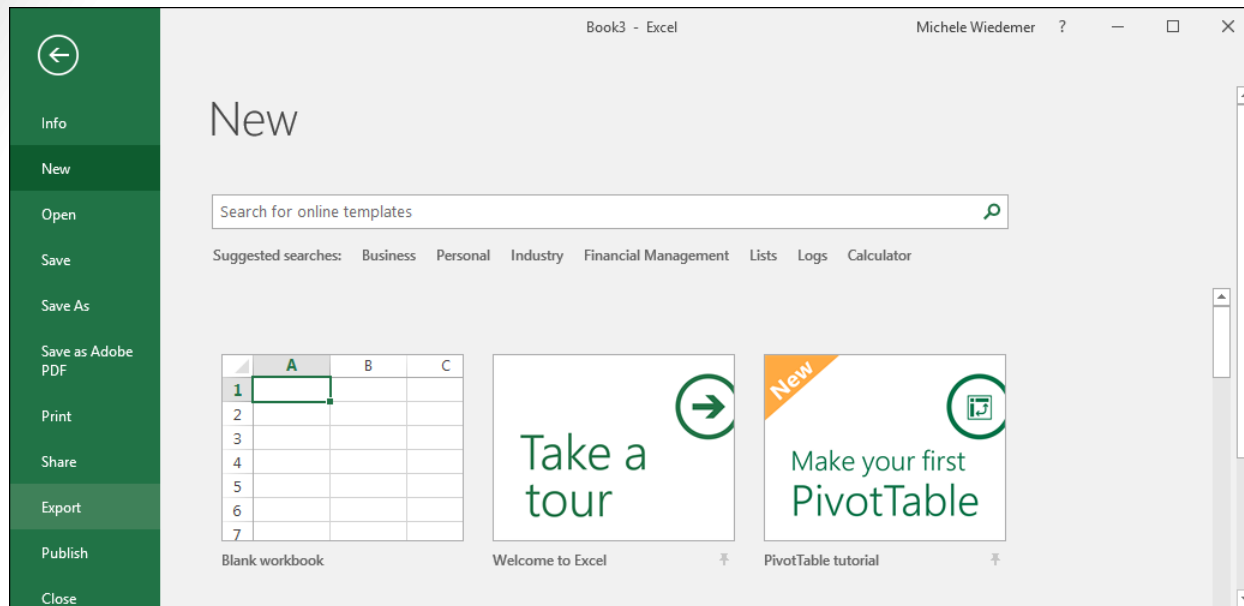


Lesson: Create Worksheets and Workbooks

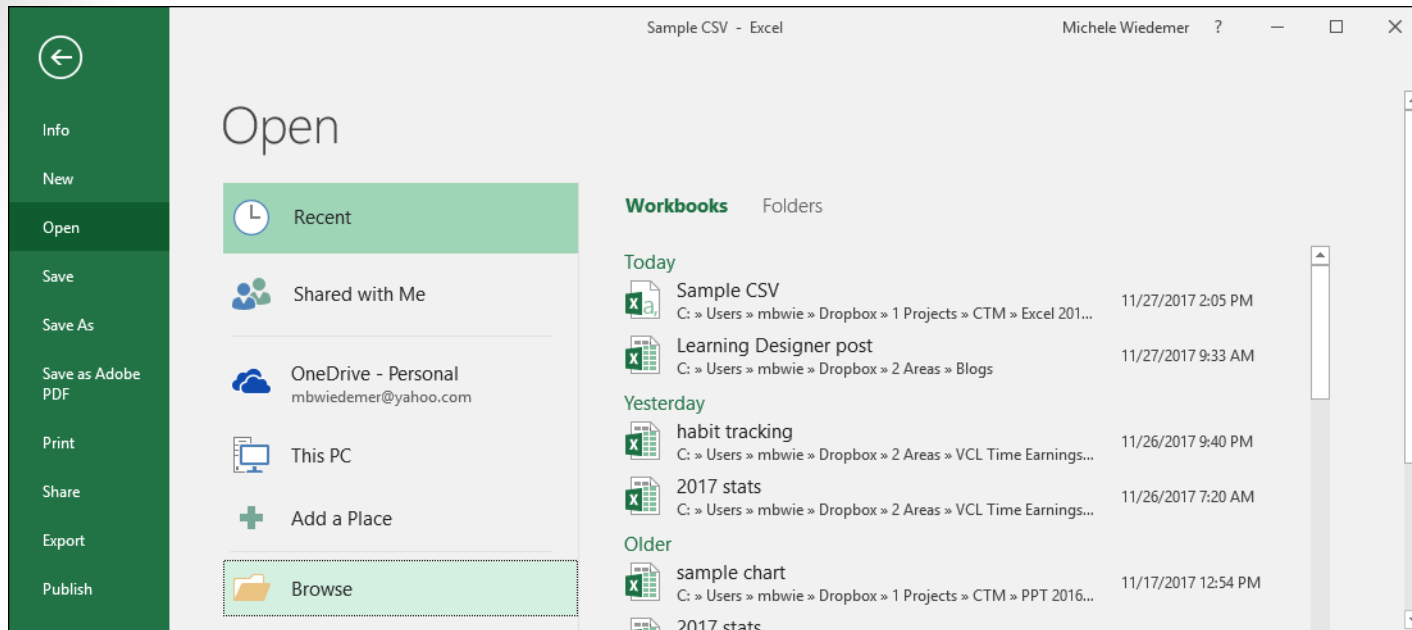
In this lesson, we'll introduce the following topics:

- Create a Workbook
- Import data from a delimited text file
- Add a worksheet to an existing workbook
- Copy and move a worksheet

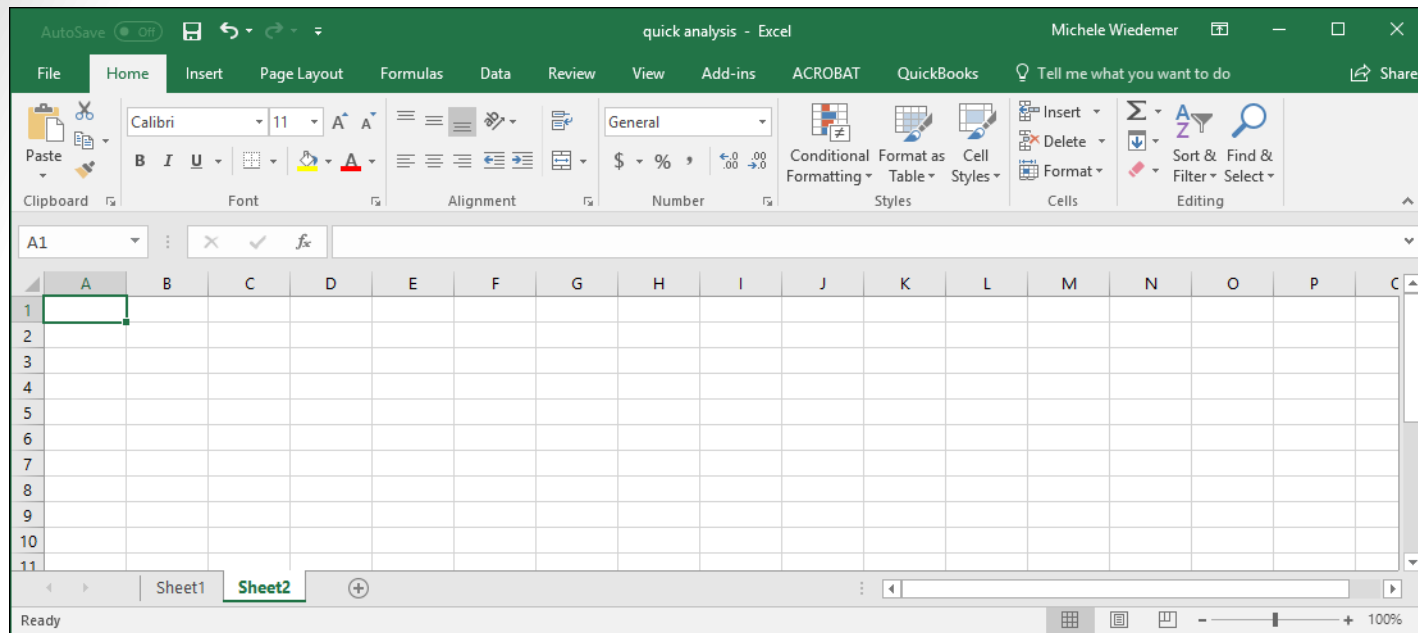
Create a Workbook



Import Data from a Delimited Text File



Add a Worksheet



Lesson: Navigate in Worksheets and Workbooks

In this lesson, we'll introduce the following topics:

- Search for data within a workbook
- Navigate to a named cell, range, or workbook element
- Insert and remove hyperlinks
- Hide or unhide columns and rows
- Hide or unhide sheets

Search for Data Within a Workbook

Find and Replace

Find Replace

Find what: Tech No Format Set Format...

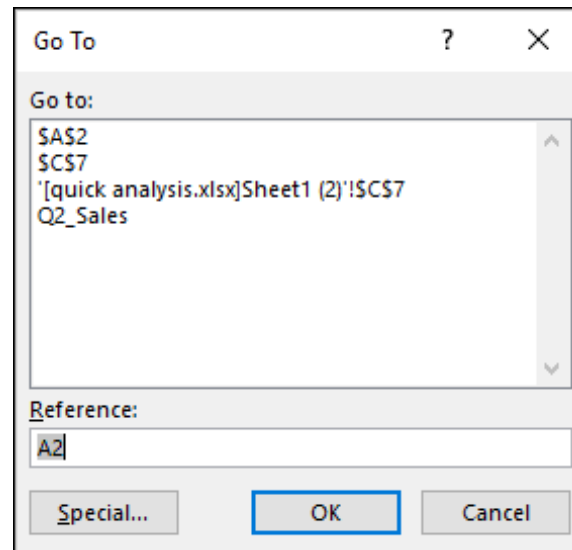
Within: Workbook ☐ Match case

Search: By Rows ☐ Match entire cell contents

Look in: Formulas Options <<

Find All Find Next Close

Navigate to a Named Cell or Range



Insert and Remove Hyperlinks

[illegible]

Hide or Unhide Columns and Rows

AutoSave Off | quick analysis - Excel | Michele Wiedemer

File Home Insert Page Layout Formulas Data Review View Add-ins ACROBAT QuickBooks Tell me what you want to do Share

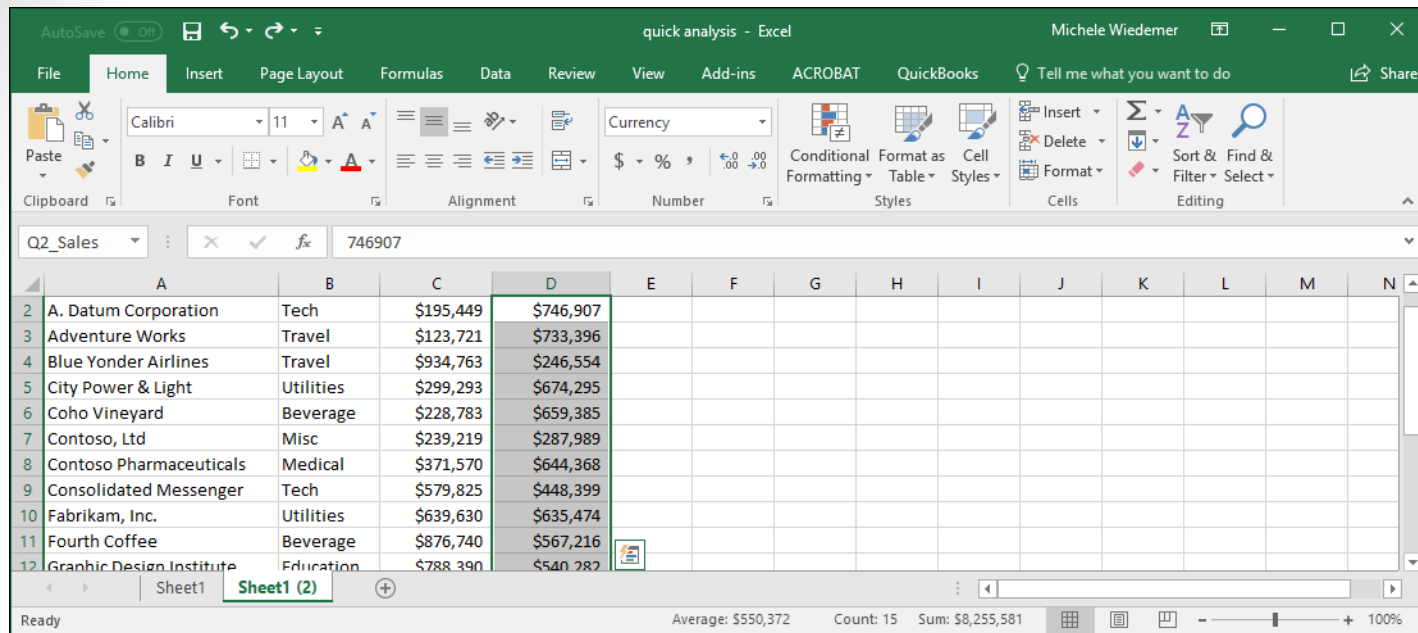
PivotTable Recommended PivotTables Tables | Illustrations | Store My Add-ins Add-ins | Recommended Charts | Charts | Maps PivotChart | 3D Map Tours | Line Column Win/Loss Sparklines | Slicer Timeline Filters | Link Links | Text Symbols

B1 | Industry

	A	D	E	F	G	H	I	J	K	L	M	N	O	P
1	Company	Q2 Sales												
2	A. Datum Corporation	\$746,907												
3	Adventure Works	\$733,396												
4	Blue Yonder Airlines	\$246,554												
5	City Power & Light	\$674,295												
6	Coho Vineyard	\$659,385												
7	Contoso, Ltd	\$287,989												
8	Contoso Pharmaceuticals	\$644,368												
9	Consolidated Messenger	\$448,399												
10	Fabrikam, Inc.	\$635,474												
11	Fourth Coffee	\$567,216												

Sheet1 | Sheet1 (2) | Ready | Average: 537177.8667 | Count: 32 | Sum: 8057668 | 100%

Hide or Unhide Sheets



AutoSave Off quick analysis - Excel Michele Wiedemer

File Home Insert Page Layout Formulas Data Review View Add-ins ACROBAT QuickBooks Tell me what you want to do Share

Clipboard Font Alignment Number Styles Cells Editing

Q2_Sales 746907

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
2	A. Datum Corporation	Tech	\$195,449	\$746,907										
3	Adventure Works	Travel	\$123,721	\$733,396										
4	Blue Yonder Airlines	Travel	\$934,763	\$246,554										
5	City Power & Light	Utilities	\$299,293	\$674,295										
6	Coho Vineyard	Beverage	\$228,783	\$659,385										
7	Contoso, Ltd	Misc	\$239,219	\$287,989										
8	Contoso Pharmaceuticals	Medical	\$371,570	\$644,368										
9	Consolidated Messenger	Tech	\$579,825	\$448,399										
10	Fabrikam, Inc.	Utilities	\$639,630	\$635,474										
11	Fourth Coffee	Beverage	\$876,740	\$567,216										
12	Graphic Design Institute	Education	\$788,390	\$540,282										

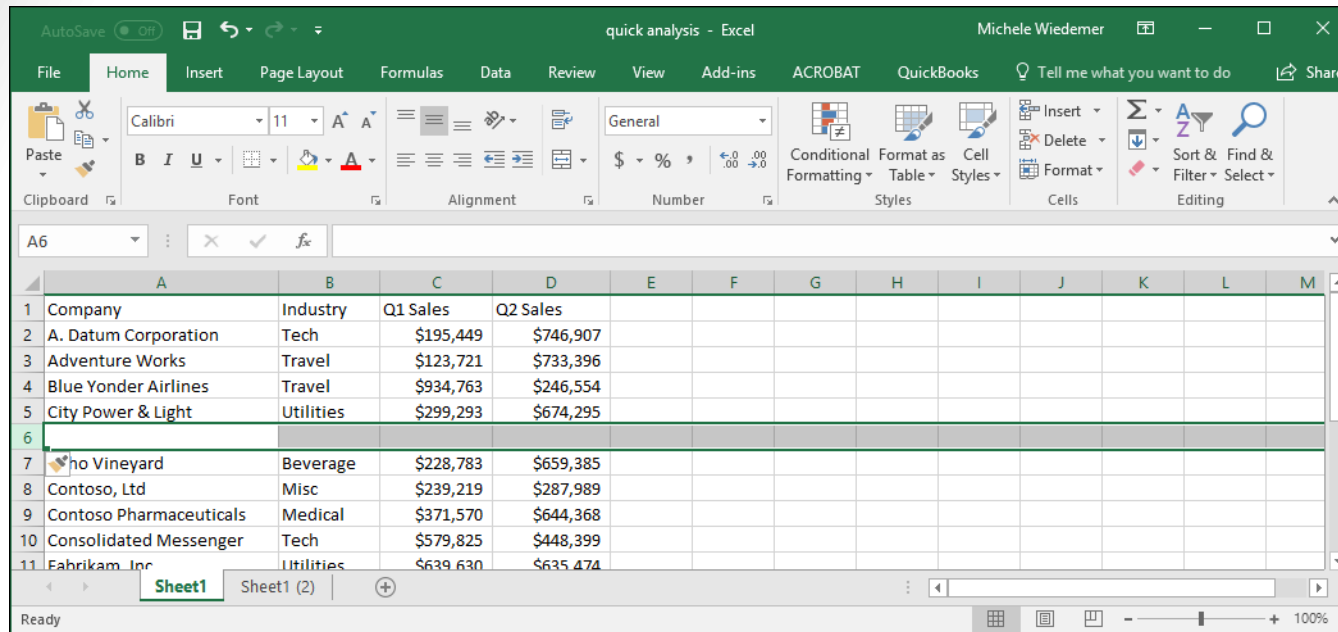
Ready Average: \$550,372 Count: 15 Sum: \$8,255,581 100%

Lesson: Modify Worksheets

In this lesson, we'll introduce the following topics:

- Insert and delete columns and rows
- Adjust row height and column width
- Insert headers and footers
- Change worksheet tab color
- Rename worksheet

Insert and Delete Table Rows and Columns



AutoSave Off quick analysis - Excel Michele Wiedemer

File Home Insert Page Layout Formulas Data Review View Add-ins ACROBAT QuickBooks Tell me what you want to do Share

Paste Clipboard Font Alignment Number Styles Cells Editing

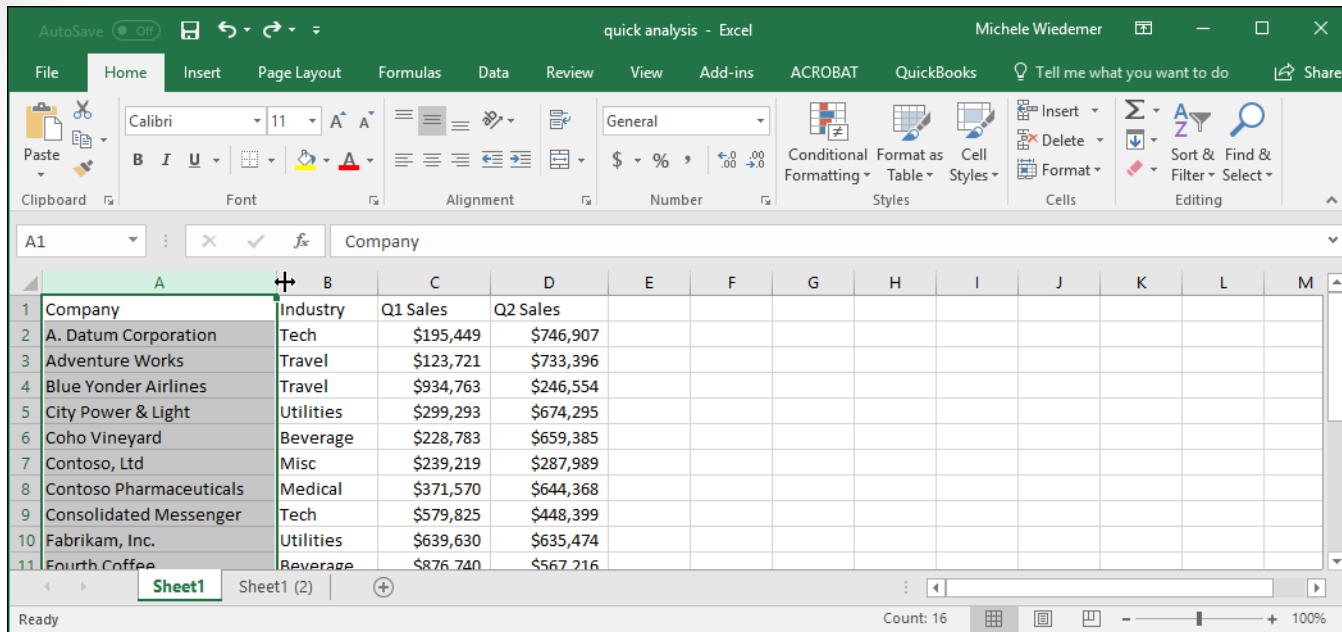
A6

	A	B	C	D	E	F	G	H	I	J	K	L	M
1	Company	Industry	Q1 Sales	Q2 Sales									
2	A. Datum Corporation	Tech	\$195,449	\$746,907									
3	Adventure Works	Travel	\$123,721	\$733,396									
4	Blue Yonder Airlines	Travel	\$934,763	\$246,554									
5	City Power & Light	Utilities	\$299,293	\$674,295									
6													
7	Contoso Vineyard	Beverage	\$228,783	\$659,385									
8	Contoso, Ltd	Misc	\$239,219	\$287,989									
9	Contoso Pharmaceuticals	Medical	\$371,570	\$644,368									
10	Consolidated Messenger	Tech	\$579,825	\$448,399									
11	Fabrikam, Inc	Utilities	\$639,630	\$635,474									

Sheet1 Sheet1 (2)

Ready 100%

Adjust Row Height and Column Width



quick analysis - Excel

Michele Wiedemer

File Home Insert Page Layout Formulas Data Review View Add-ins ACROBAT QuickBooks Tell me what you want to do Share

Clipboard Font Alignment Number Styles Cells Editing

A1 Company

	A	B	C	D	E	F	G	H	I	J	K	L	M
1	Company	Industry	Q1 Sales	Q2 Sales									
2	A. Datum Corporation	Tech	\$195,449	\$746,907									
3	Adventure Works	Travel	\$123,721	\$733,396									
4	Blue Yonder Airlines	Travel	\$934,763	\$246,554									
5	City Power & Light	Utilities	\$299,293	\$674,295									
6	Coho Vineyard	Beverage	\$228,783	\$659,385									
7	Contoso, Ltd	Misc	\$239,219	\$287,989									
8	Contoso Pharmaceuticals	Medical	\$371,570	\$644,368									
9	Consolidated Messenger	Tech	\$579,825	\$448,399									
10	Fabrikam, Inc.	Utilities	\$639,630	\$635,474									
11	Fourth Coffee	Beverage	\$876,740	\$567,216									

Sheet1 Sheet1 (2)

Ready Count: 16 100%

Insert Headers and Footers

AutoSave (OH) quick analysis - Excel Header & Footer Michele Wiedemer

File Home Insert Page Layout Formulas Data Review View Add-ins ACROBAT QuickBooks Design Tell me Share

Header Footer Page Number Current Date Current Time File Path File Name Sheet Name Picture Format Picture Go to Header Go to Footer

Header & Footer Elements Options

☐ Different First Page ☒ Scale with Document

☐ Different Odd & Even Pages ☒ Align with Page Margins

A3 X ✓ fx Adventure Works

Header				
Company	Industry	Q1 Sales	Q2 Sales	
A. Datum Corporation	Tech	\$195,449	\$746,907	
Adventure Works	Travel	\$123,721	\$733,396	
Blue Yonder Airlines	Travel	\$934,763	\$246,554	

Sheet1 Sheet1 (2)

Ready Page: 1 of 1 100%

Change Worksheet Tab Color

The screenshot displays the Microsoft Excel interface. The title bar shows 'quick analysis - Excel' and the user 'Michele Wiedemer'. The ribbon is set to 'Home', showing options for Font, Alignment, Number, Styles, Cells, and Editing. The active cell is D2, containing the value 746907. The worksheet contains a table with the following data:

Company	Industry	Q1 Sales	Q2 Sales
A. Datum Corporation	Tech	\$195,449	\$746,907
Adventure Works	Travel	\$123,721	\$733,396
Blue Yonder Airlines	Travel	\$934,763	\$246,554
City Power & Light	Utilities	\$299,293	\$674,295
Coho Vineyard	Beverage	\$228,783	\$659,385
Contoso, Ltd	Misc	\$239,219	\$287,989
Contoso Pharmaceuticals	Medical	\$371,570	\$644,368
Consolidated Messenger	Tech	\$579,825	\$448,399
Fabrikam, Inc.	Utilities	\$639,630	\$635,474
Fourth Coffee	Beverage	\$876,740	\$567,216

The 'Sheet1 (2)' tab is selected at the bottom of the window. The status bar at the bottom indicates 'Ready' and '100%' zoom.

Rename a Worksheet

The screenshot shows the Microsoft Excel interface. The 'View' tab is selected in the ribbon, displaying options for Workbook Views (Normal, Page Break Preview, Page Layout, Custom Views), Show (Ruler, Formula Bar, Gridlines, Headings), Zoom (Zoom 100%, Zoom to Selection), and Window (New Window, Arrange All, Freeze Panes, Split, View Side by Side, Synchronous Scrolling, Reset Window Position, Switch Windows, Macros). The worksheet 'Tech' is open, showing a table with columns A through N. The 'Name' box at the bottom left indicates the current selection is 'Tech'.

Company	Industry	Q1 Sales	Q2 Sales
A. Datum Corporation	Tech	\$195,449	\$746,907
Adventure Works	Travel	\$123,721	\$733,396
Blue Yonder Airlines	Travel	\$934,763	\$246,554
City Power & Light	Utilities	\$299,293	\$674,295
Coho Vineyard	Beverage	\$228,783	\$659,385
Contoso, Ltd	Misc	\$239,219	\$287,989
Contoso Pharmaceuticals	Medical	\$371,570	\$644,368
Consolidated Messenger	Tech	\$579,825	\$448,399
Fabrikam, Inc.	Utilities	\$639,630	\$635,474
Fourth Coffee	Beverage	\$876,740	\$567,216

Lesson: Format Workbooks

In this lesson, we'll introduce the following topics:

- Copy and move worksheets
- Modify page setup
- Change workbook themes

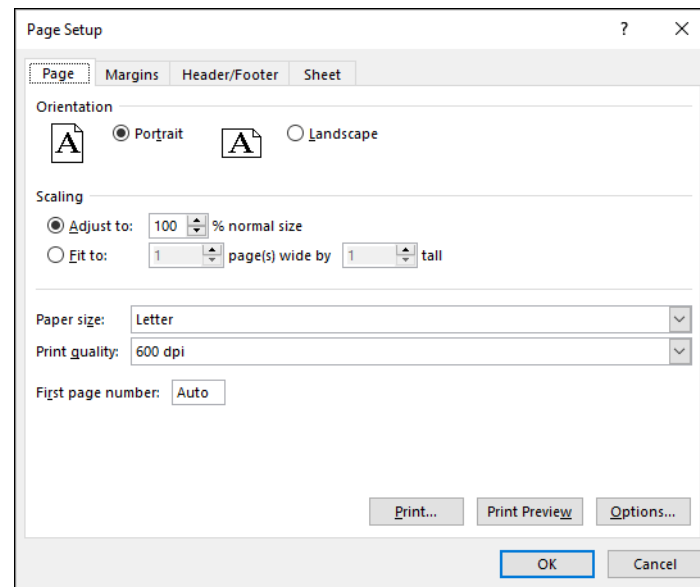
Copy and Move Worksheets

The screenshot shows the Microsoft Excel interface. The title bar indicates the file is 'quick analysis - Excel' and the user is 'Michele Wiedemer'. The 'Home' ribbon is active, showing options for Clipboard, Font, Alignment, Number, Styles, Cells, and Editing. The worksheet contains a table with 11 rows of data. The columns are labeled A through N. The data is organized into four main categories: Company, Industry, Q1 Sales, and Q2 Sales. The table is as follows:

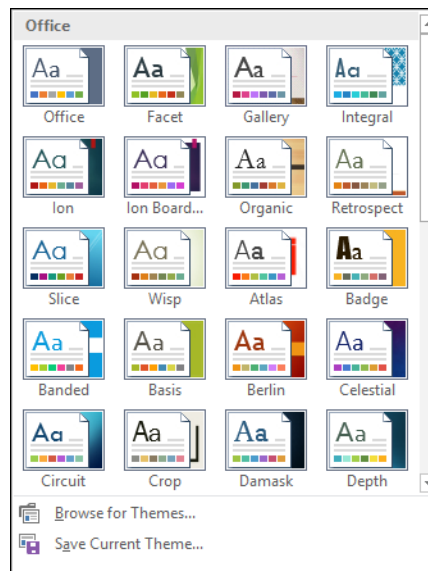
	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	Company	Industry	Q1 Sales	Q2 Sales										
2	A. Datum Corporation	Tech	\$195,449	\$746,907										
3	Adventure Works	Travel	\$123,721	\$733,396										
4	Blue Yonder Airlines	Travel	\$934,763	\$246,554										
5	City Power & Light	Utilities	\$299,293	\$674,295										
6	Coho Vineyard	Beverage	\$228,783	\$659,385										
7	Contoso, Ltd	Misc	\$239,219	\$287,989										
8	Contoso Pharmaceuticals	Medical	\$371,570	\$644,368										
9	Consolidated Messenger	Tech	\$579,825	\$448,399										
10	Fabrikam, Inc.	Utilities	\$639,630	\$635,474										
11	Fourth Coffee	Beverage	\$876,740	\$567,216										

The status bar at the bottom shows 'Ready' and a zoom level of 100%.

Modify Page Setup



Change Workbook Themes

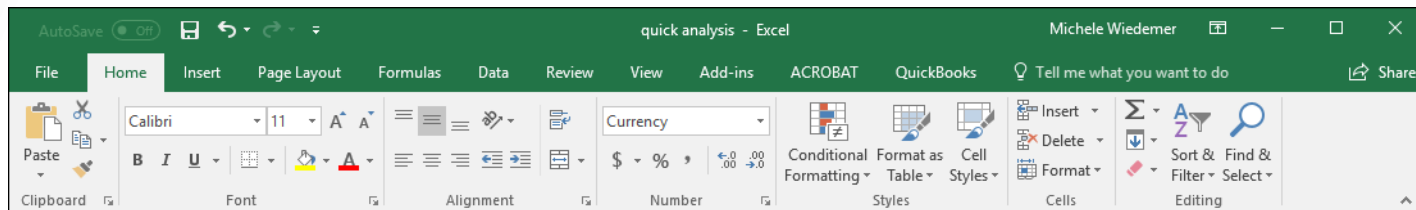


Lesson: Customize Options and Views

In this lesson, we'll introduce the following topics:

- Customize the Quick Access Toolbar
- Change magnification using zoom tools
- Change workbook views
- Change window views
- Modify document properties
- Display formulas

Customize the Quick Access Toolbar



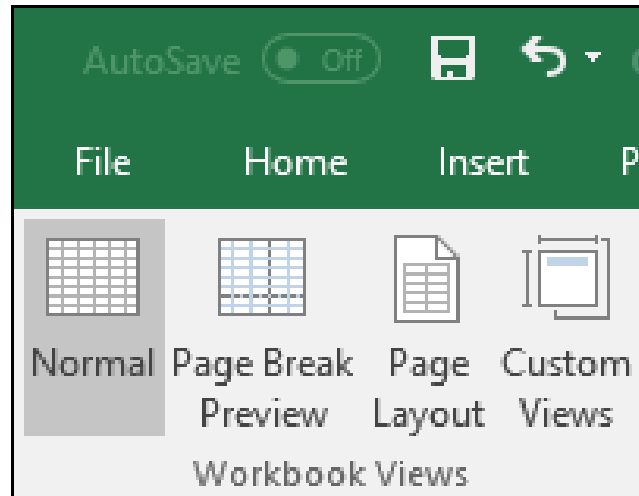
Use Zoom Tools

The screenshot displays the Microsoft Excel interface with the 'View' tab selected on the ribbon. The ribbon includes options for Workbook Views (Normal, Page Break Preview, Page Layout, Custom Views), Show (Ruler, Formula Bar, Gridlines, Headings), Zoom (Zoom, 100%, Zoom to Selection), Window (New Window, Arrange All, Freeze Panes, Split, Hide, Unhide, View Side by Side, Synchronous Scrolling, Reset Window Position), Switch Windows, and Macros. The formula bar shows 'A8' and the active cell contains 'Contoso Pharmaceuticals'. The worksheet 'Sheet1' contains the following data:

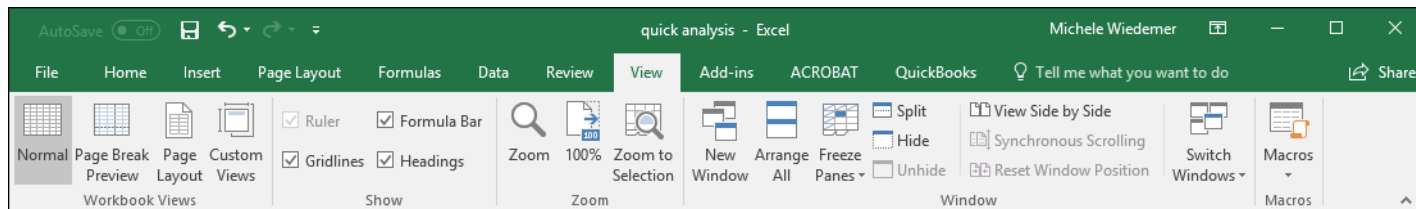
	A	B	C	D
7	Contoso, Ltd	Misc		\$287,989
8	Contoso Pharmaceuticals	Medical	\$371,570	\$644,368
9	Consolidated Messenger	Tech	\$579,825	\$448,399
10	Fabrikam, Inc.	Utilities	\$639,630	\$635,474

The status bar at the bottom shows 'Ready', 'Average: 553211', 'Count: 12', 'Sum: 3319266', and a zoom level of '231%'.

Change Workbook Views



Change Window Views



Modify Document Properties

The screenshot shows the Microsoft Excel 'Info' tab for a workbook named 'quick analysis'. The left sidebar contains navigation options: Info, New, Open, Save, Save As, Save as Adobe PDF, Print, Share, Export, Publish, Close, Account, Feedback, and Options. The main area is divided into sections for protecting, inspecting, and managing the workbook, as well as browser view options. On the right, a 'Properties' pane displays metadata such as size (9.98KB), title, tags, categories, related dates (last modified, created, last printed), related people (author, last modified by), and related documents (open file location).

quick analysis - Excel

Michele Wiedemer ? — □ ×

Info

quick analysis

C: » Users » mbwie » Dropbox » 1 Projects » CTM » Excel 2016 Essentials » Sample files

Protect Workbook

Control what types of changes people can make to this workbook.

Check for Issues

Before publishing this file, be aware that it contains:

- Document properties, printer path, author's name and absolute path
- Content that people with disabilities find difficult to read

Manage Workbook

- Today, 11:00 AM (autorecovery)
- Yesterday, 4:30 PM (when I closed without saving)

Browser View Options

Pick what users can see when this workbook is viewed on the Web.

Properties

Size 9.98KB

Title Add a title

Tags Add a tag

Categories Add a category

Related Dates

Last Modified Today, 11:00 AM

Created 1/30/2013 1:29 PM

Last Printed

Related People

Author

MW Michele Wiedemer

Add an author

Last Modified By

MW Michele Wiedemer

Related Documents

Open File Location

[Show All Properties](#)

Display Formulas

The screenshot shows the Microsoft Excel interface with the 'Formulas' tab selected. The 'Show Formulas' button in the Formula Auditing group is highlighted. The spreadsheet displays a table of cost centers and their annual costs. The formula bar shows the formula for cell B12: `=SUM(B2:B11)`.

Cost Center	Annual Cost
Parts and materials	1325000
Manufacturing equipment	900500
Salaries	575000
Maintenance	395000
Office lease	295000
Warehouse lease	250000
Insurance	180000
Benefits and pensions	130000
Vehicles	125000
Research	75000
Total	<code>=SUM(B2:B11)</code>

Lesson: Configure Worksheets and Workbooks for Distribution

In this lesson, we'll introduce the following topics:

- Print all or part of a workbook
- Set a print area
- Save workbooks in alternative file formats
- Repeat columns or rows across multiple pages
- Inspect a workbook for personal information and hidden properties
- Inspect a workbook for accessibility issues
- Inspect a workbook for compatibility issues

Print Workbooks

←

Info

New

Open

Save

Save As

Save as Adobe PDF

Print

Share

Export

Publish

Close

Account

Feedback

Options

quick analysis - Excel

Michele Wiedemer ? - □ ×

Print

Copies: 1

Printer

HP ePrint + JetAdvantage Ready

[Printer Properties](#)

Settings

Print Active Sheets

Only print the active sheets

Pages: to

Print One Sided

Only print on one side of th...

Collated

1,2,3 1,2,3 1,2,3

Portrait Orientation

Letter

8.5" x 11"

Normal Margins

Left: 0.7" Right: 0.7"

No Scaling

Print sheets at their actual size

[Page Setup](#)

Company	Industry	Q1 Sales	Q2 Sales
A. Datum Corporation	Tech	\$195,449	\$746,907
Adventure Works	Travel	\$123,721	\$733,396
Blue Yonder Airlines	Travel	\$934,763	\$246,554
City Power & Light	Utilities	\$299,293	\$674,295
Coho Vineyard	Beverage	\$228,783	\$659,385
Contoso Ltd	Misc		\$287,989
Contoso Pharmaceuticals	Medical	\$371,570	\$644,368
Consolidated Messenger	Tech	\$579,825	\$448,399
Fabrikam, Inc.	Utilities	\$639,630	\$635,474
Fourth Coffee	Beverage	\$876,740	\$567,216
Graphic Design Institute	Education	\$788,390	\$540,282
Hammings Insurance	Financial	\$682,545	\$577,599
Liware, Inc.	Tech	\$902,364	\$206,331
Lucerne Publishing	Misc	\$905,906	\$443,552
Margie's Travel	Travel	\$289,570	\$843,834

1 of 1

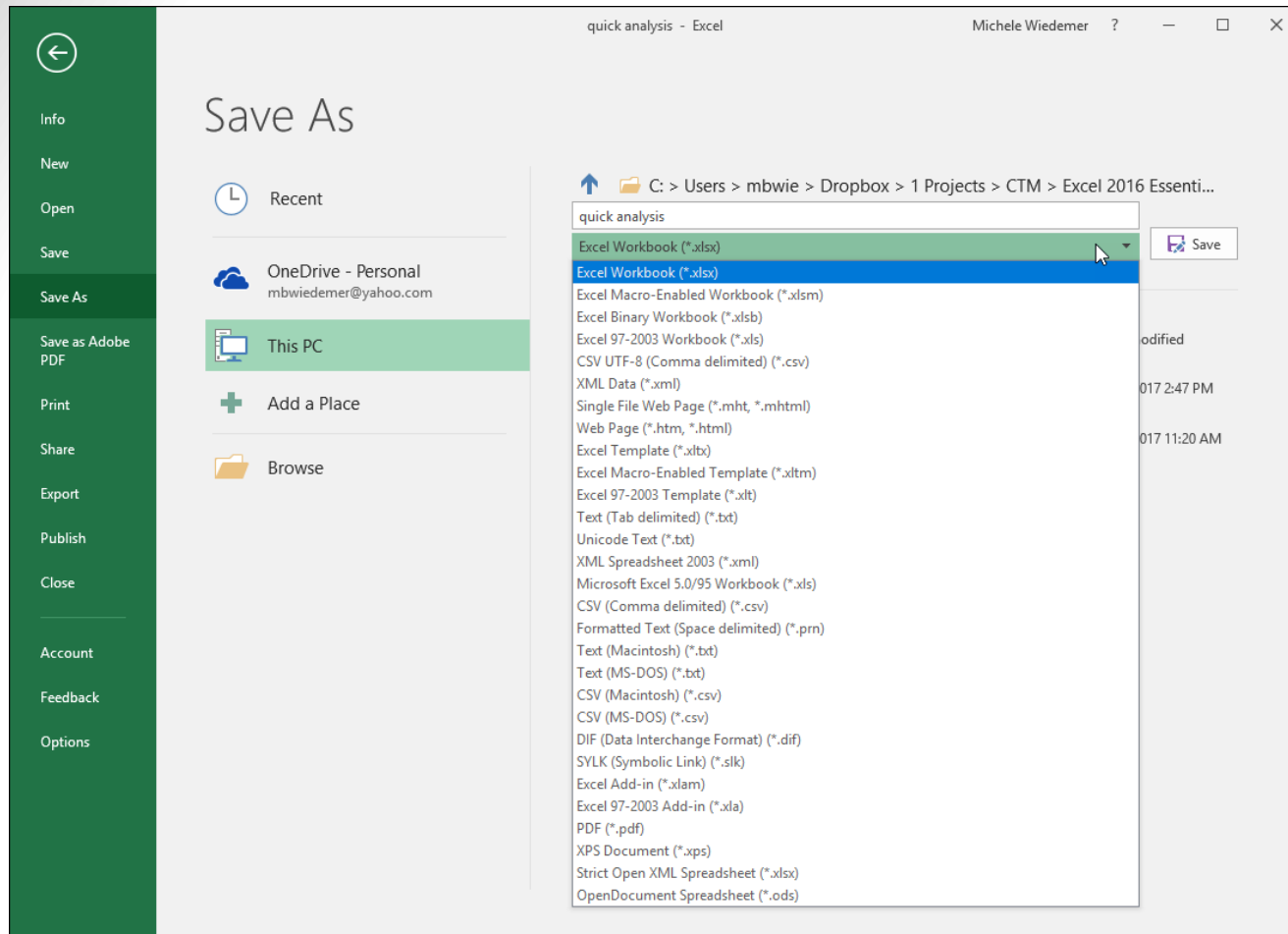
Set a Print Area

The screenshot shows the Microsoft Excel interface with the 'Page Layout' ribbon selected. The ribbon includes sections for Themes, Page Setup (Margins, Orientation, Size, Print Area, Breaks, Background, Print Titles), Scale to Fit, Sheet Options, and Arrange. The 'Print Area' section shows a green border around the range A6:D6, indicating the current selection. The spreadsheet data is as follows:

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	Company	Industry	Q1 Sales	Q2 Sales										
2	A. Datum Corporation	Tech	\$195,449	\$746,907										
3	Adventure Works	Travel	\$123,721	\$733,396										
4	Blue Yonder Airlines	Travel	\$934,763	\$246,554										
5	City Power & Light	Utilities	\$299,293	\$674,295										
6	Coho Vineyard	Beverage	\$228,783	\$659,385										
7	Contoso, Ltd	Misc		\$287,989										
8	Contoso Pharmaceuticals	Medical	\$371,570	\$644,368										
9	Consolidated Messenger	Tech	\$579,825	\$448,399										
10	Cobaltcom, Inc	Utilities	\$630,630	\$635,474										

The status bar at the bottom shows 'Ready', 'Average: 484254.6', 'Count: 24', 'Sum: 4842546', and a zoom level of 100%.

Save Workbooks in Alternative File Formats



Repeat Columns or Rows Across Multiple Pages

AutoSave Off

File Home Insert Page Layout Formulas Data Review View

Themes Colors Themes Fonts Effects Themes Margins Orientation Size Print Breaks Background Print Titles Page Setup

A1 Company

Company	Industry	Q1 Sales	Q2 Sales
A. Datum Corporation	Tech	\$195,449	\$746,907
Adventure Works	Travel	\$123,721	\$733,396
Blue Yonder Airlines	Travel	\$934,763	\$246,554
City Power & Light	Utilities	\$299,293	\$674,295
Coho Vineyard	Beverage	\$228,783	\$659,385
Contoso, Ltd	Misc		\$287,989
Contoso Pharmaceuticals	Medical	\$371,570	\$644,368
Consolidated Messenger	Tech	\$579,825	\$448,399
Fabrikam, Inc.	Utilities	\$639,630	\$635,474
Fourth Coffee	Beverage	\$876,740	\$567,216

Sheet1

Print

quick analysis - Excel Michele Wiedemer

Page Setup

Page Margins Header/Footer Sheet

Print area:

Print titles

Rows to repeat at top: \$1:\$1

Columns to repeat at left:

Print

☐ Gridlines

☐ Black and white

☐ Draft quality

☐ Row and column headings

Comments: (None)

Cell errors as: displayed

Page order

☒ Down, then over

☐ Over, then down

Print... Print Preview Options...

OK Cancel

Inspect a Workbook for Hidden Properties

The screenshot shows the Microsoft Excel interface with the 'quick analysis' task pane open. The task pane has a green sidebar on the left with navigation options: Info (selected), New, Open, Save, Save As, Save as Adobe PDF, Print, Share, Export, Publish, Close, Account, Feedback, and Options. The main area of the task pane is titled 'Info' and contains several sections:

- quick analysis**
C: » Users » mbwie » Dropbox » 1 Projects » CTM » Excel 2016 Essentials » Sample files
- Protect Workbook**
Control what types of changes people can make to this workbook.
- Inspect Workbook**
Before publishing this file, be aware that it contains:
 - Document properties, printer path, author's name and absolute path
 - Content that people with disabilities find difficult to read
- Manage Workbook**
 - Today, 12:45 PM (autorecovery)
 - Today, 12:33 PM (autorecovery)
 - Today, 11:25 AM (autorecovery)
 - Today, 11:00 AM (autorecovery)
 - Yesterday, 4:30 PM (when I closed without saving)
- Browser View Options**
Pick what users can see when this workbook is viewed on the Web.

On the right side of the task pane, there are sections for 'Properties', 'Related Dates', 'Related People', and 'Related Documents':

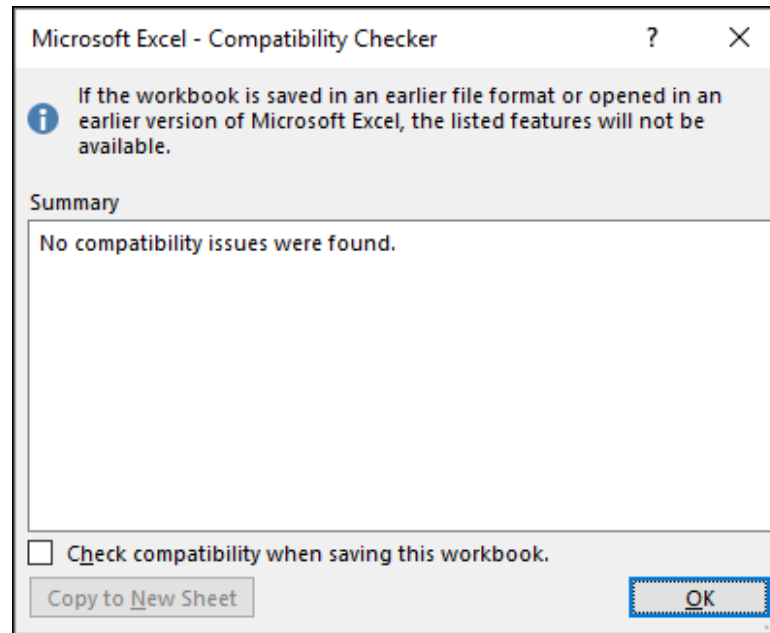
- Properties**
 - Size: 9.98KB
 - Title: Add a title
 - Tags: Add a tag
 - Categories: Add a category
- Related Dates**
 - Last Modified: Today, 12:45 PM
 - Created: 1/30/2013 1:29 PM
 - Last Printed: Today, 1:00 PM
- Related People**
 - Author: MW Michele Wiedemer (with 'Add an author' link)
 - Last Modified By: MW Michele Wiedemer
- Related Documents**
 - Open File Location
 - Show All Properties

Inspect a Workbook for Accessibility Issues

The screenshot shows the Microsoft Excel interface with the 'Page Layout' tab selected. The workbook is titled 'quick analysis - Excel' and is owned by 'Michele Wiedemer'. The data is organized in a table with the following columns: Company, Industry, Q1 Sales, and Q2 Sales. The table contains 16 rows of data, starting with 'Company' in row 1. The 'Accessibility Checker' pane is open on the right side of the window, showing 'Inspection Results' with a warning under 'Default Sheet Names' for 'Sheet1'. A link to 'Read more about making documents accessible' is provided in the 'Additional Information' section.

Company	Industry	Q1 Sales	Q2 Sales
A. Datum Corporation	Tech	\$195,449	\$746,907
Adventure Works	Travel	\$123,721	\$733,396
Blue Yonder Airlines	Travel	\$934,763	\$246,554
City Power & Light	Utilities	\$299,293	\$674,295
Coho Vineyard	Beverage	\$228,783	\$659,385
Contoso, Ltd	Misc		\$287,989
Contoso Pharmaceuticals	Medical	\$371,570	\$644,368
Consolidated Messenger	Tech	\$579,825	\$448,399
Fabrikam, Inc.	Utilities	\$639,630	\$635,474
Fourth Coffee	Beverage	\$876,740	\$567,216
Graphic Design Institute	Education	\$788,390	\$540,282
Humongous Insurance	Financial	\$682,545	\$577,599
Litware, Inc.	Tech	\$902,264	\$206,331
Lucerne Publishing	Misc	\$905,906	\$443,552
Margie's Travel	Travel	\$289,570	\$843,834

Inspect a Workbook for Compatibility Issues



Module Three: Manage Data Cells and Ranges

Now let's get more detailed by working with the data on your worksheets. This module introduces you to the tools you need to insert, format, summarize and organize your data.

Like tourists huffing and puffing to reach the peak we forget the view on the way up.

Friedrich Nietzsche



Lesson: Insert Data in Cells and Ranges

In this lesson, we'll introduce the following topics:

- Replace data
- Cut, copy, and paste data
- Paste data using special paste options
- Fill cells using Autofill
- Insert and delete cells

Replace Data

AutoSave Off Budget - Excel Michele Wiedemer

File Home Insert Page Layout Formulas Data Review View Add-ins Tell me what you want to do

Clipboard Font Alignment Number Styles Cells Editing

Calibri 11 A A⁺ B I U Wrap Text Merge & Center General \$ % .00 .00 Conditional Formatting Format as Table Cell Styles Insert Delete Format AutoSum Fill Clear Sort & Filter Find & Select

A12 Insurance

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
1	Household Budget																			
2																				
3																				
4		January	February	March	April	May	June	Total - first six months												
5	Mortgage	890	890	890	890	890	890													
6	Heat	250	250	175	125	80	0													
7	Power	225	225	175	175	150	150													
8																				
9	Phone	65	75	65	65	75	75													
10	Car Payment	275	275	275	275	275	275													
11	Gas	240	240	360	240	240	240													
12	Insurance	180	180	180	180	180	180													
13	Food	600	600	600	600	600	600													
14																				

Sheet1 Sheet2 Sheet3

100%

Cut, Copy and Paste Data

AutoSave Off Budget - Excel Michele Wiedemer

File Home Insert Page Layout Formulas Data Review View Add-ins Tell me what you want to do

Clipboard: Paste, Cut, Copy, Format Painter

Font: Calibri, 11, Bold, Italic, Underline, Text Color, Background Color

Alignment: Wrap Text, Merge & Center

Number: General, Currency, Percentage, Decimals

Styles: Conditional Formatting, Format as Table, Cell Styles

Cells: Insert, Delete, Format

Editing: AutoSum, Fill, Clear, Sort & Filter, Find & Select

A10: Car Payment

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
4		January	February	March	April	May	June	Total - first six months												
5	Mortgage	890	890	890	890	890	890													
6	Heat	250	250	175	125	80	0													
7	Power	225	225	175	175	150	150													
8																				
9	Phone	65	75	65	65	75	75													
10	Car Payment	275	275	275	275	275	275													
11	Gas	240	240	360	240	240	240													
12	Insurance	180	180	180	180	180	180													
13	Food	600	600	600	600	600	600													
14																				
15																				
16																				
17																				

Sheet1 Sheet2 Sheet3

Select destination and press ENTER or choose Paste

Average: 275 Count: 7 Sum: 1650 100%

Paste Data Using Special Paste Options

AutoSave Off Budget - Excel Michele Wiedemer

File Home Insert Page Layout Formulas Data Review View Add-ins Tell me what you want to do

Paste Options:

- Paste
- Paste Formulas
- Paste Values
- Paste All
- Paste Formulas and Values
- Paste Formulas and Values with Number Formatting
- Paste Formulas and Values with Text Formatting
- Paste Formulas and Values with All Formatting
- Paste Formulas and Values with All Formatting and Number Formatting
- Paste Formulas and Values with All Formatting and Text Formatting
- Paste Formulas and Values with All Formatting and Number and Text Formatting

Clipboard Font Alignment Number Styles Cells Editing

C15

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
4		January	February	March	April	May	June	Total - first six months												
5	Mortgage	890	890	890	890	890	890													
6	Heat	250	250	175	125	80	0													
7	Power	225	225	175	175	150	150													
8																				
9	Phone	65	75	65	65	75	75													
10	Car Payment	275	275	275	275	275	275													
11	Gas	240	240	360	240	240	240													
12	Insurance	180	180	180	180	180	180													
13	Food	600	600	600	600	600	600													
14	Car Payment	275	275	275	275	275	275													
15		3000	3010																	
16																				
17																				

Sheet1 Sheet2 Sheet3

Select destination and press ENTER or choose Paste

100%

Fill Cells Using Autofill

The screenshot shows the Microsoft Excel interface with a budget spreadsheet. The title bar indicates the file is named "Budget - Excel" and the user is Michele Wiedemer. The ribbon is set to "Home", showing options for Font, Alignment, Number, Styles, Cells, and Editing. The formula bar shows the active cell is J4, containing the text "July".

The spreadsheet data is as follows:

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
4		January	February	March	April	May	June	Total - first six months		July										
5	Mortgage	890	890	890	890	890	890													
6	Heat	250	250	175	125	80	0													
7	Power	225	225	175	175	150	150													
8																				
9	Phone	65	75	65	65	75	75													
10	Car Payment	275	275	275	275	275	275													
11	Gas	240	240	360	240	240	240													
12	Insurance	180	180	180	180	180	180													
13	Food	600	600	600	600	600	600													
14	Car Payment	275	275	275	275	275	275													
15		3000	3010																	
16																				
17																				

The status bar at the bottom indicates "Drag outside selection to extend series or fill; drag inside to clear" and shows the zoom level is 100%.

Insert and Delete Cells

The screenshot shows the Microsoft Excel interface with the 'Insert' menu open. The 'Insert Cells...' option is highlighted. The spreadsheet contains a budget table with the following data:

	January	February	March	April	May	June	Total - first six months	July	August	September	October	November	December
4													
5	Mortgage	890	890	890	890	890	890						
6	Heat	250	250	175	125	80	0						
7	Power	225	225	175	175	150	150						
8													
9	Phone	65	75	65	65	75	75						
10	Car Payment	275	275	275	275	275	275						
11	Gas	240	240	360	240	240	240						
12	Insurance	180	180	180	180	180	180						
13	Food	600	600	600	600	600	600						
14	Car Payment	275	275	275	275	275	275						
15		3000	3010										
16													
17													

The status bar at the bottom shows: Average: 280 Count: 3 Sum: 840. The zoom level is 100%.

Lesson: Format Cells and Ranges

In this lesson, we'll introduce the following topics:

- Merge Cells
- Align and Indent Cell Contents
- Wrap text within cells
- Apply number formats
- Apply cell formats
- Apply cell styles
- Format cells using the Format Painter

Merge Cells

The screenshot displays the Microsoft Excel interface with a budget spreadsheet. The title bar indicates the file is 'Budget - Saved' and the user is 'Michele Wiedemer'. The ribbon is set to 'Home', showing options for Clipboard, Font, Alignment, Number, Styles, Cells, and Editing. The spreadsheet has columns A through T and rows 4 through 31. The data is organized as follows:

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
4								Total												
5		January	February	March	April	May	June	First Six Months												
6	Mortgage	890	890	890	890	890	890													
7	Heat	250	250	175	125	80	0													
8	Power	225	225	175	175	150	150													
9																				
10	Phone	65	75	65	65	75	75													
11	Car Payment	275	275	275	275	275	275													
12	Gas	240	240	360	240	240	240													
13	Insurance	180	180	180	180	180	180													
14	Food	600	600	600	600	600	600													
15		1370																		
16																				
17																				
18																				
19																				
20																				
21																				
22																				
23																				
24																				
25																				
26																				
27																				
28																				
29																				
30																				
31																				

The status bar at the bottom shows 'Ready', 'Count: 2', and a zoom level of '100%'.

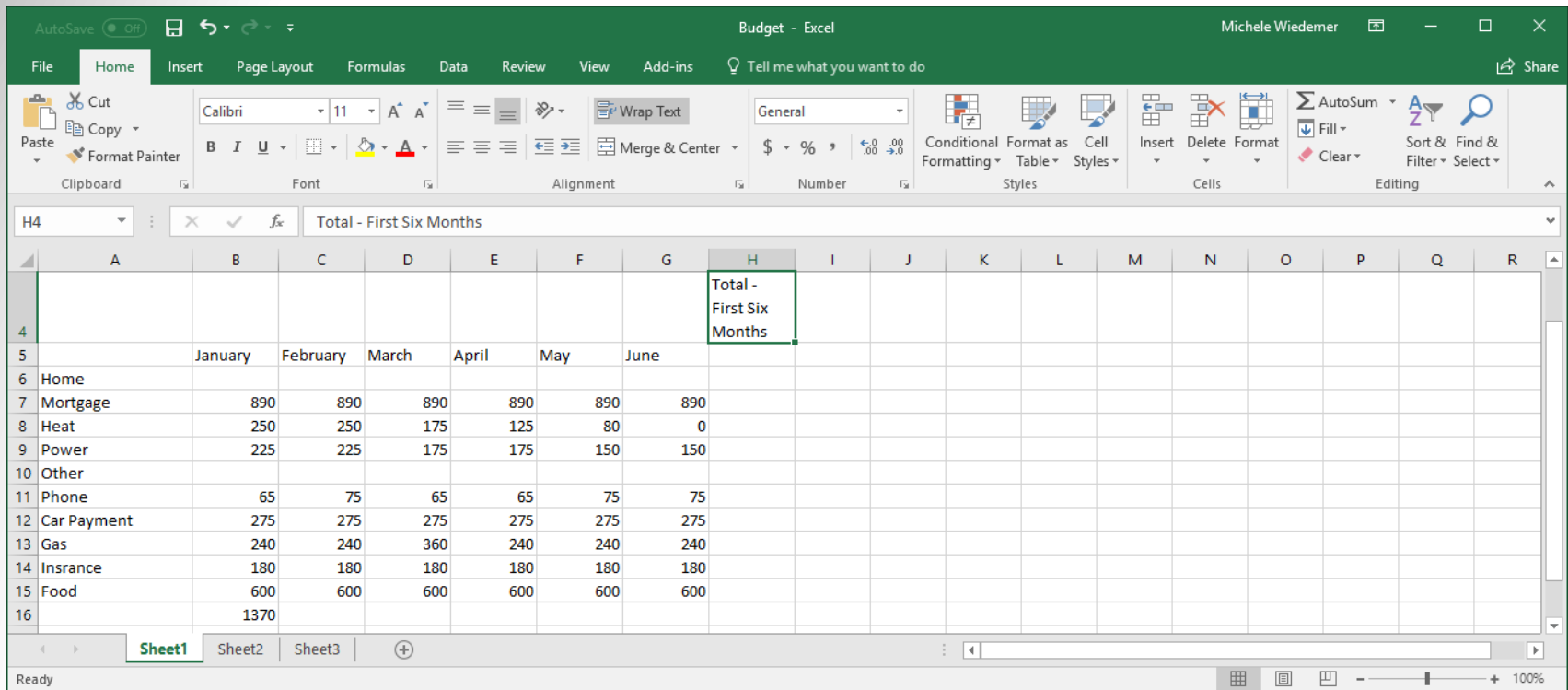
Modify Cell Alignment and Indentation

The screenshot displays the Microsoft Excel interface with the 'Home' tab selected. The ribbon shows various formatting options, including Font, Paragraph, Alignment, Number, Styles, Cells, and Editing. The 'Alignment' group is highlighted, showing options for text alignment (Left, Center, Right, Justify, Merge & Center), orientation (Horizontal, Vertical), and indentation (Increase Indent, Decrease Indent). The spreadsheet data is as follows:

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
4								Total										
5		January	February	March	April	May	June	First Six Months										
6	Home																	
7	Mortgage	890	890	890	890	890	890											
8	Heat	250	250	175	125	80	0											
9	Power	225	225	175	175	150	150											
10	Other																	
11	Phone	65	75	65	65	75	75											
12	Car Payment	275	275	275	275	275	275											
13	Gas	240	240	360	240	240	240											
14	Insurance	180	180	180	180	180	180											
15	Food	600	600	600	600	600	600											
16		1370																
17																		
18																		

The status bar at the bottom indicates 'Ready' and 'Count: 3'.

Wrap Text Within Cells



Apply Number Formats

The screenshot shows the Microsoft Excel interface with the 'Home' tab selected. The ribbon includes options for Clipboard, Font, Alignment, Number, Styles, Cells, and Editing. The 'Number' group is active, showing the 'Accounting' format selected. The spreadsheet displays a budget for the first six months of the year. The data is organized into columns for months (January to June) and rows for various expenses. The total for the first six months is calculated in cell H4.

	January	February	March	April	May	June	Total - First Six Months
Home							
Mortgage	\$ 890.00	890	890	890	890	890	
Heat	\$ 250.00	250	175	125	80	0	
Power	\$ 225.00	225	175	175	150	150	
Other							
Phone	\$ 65.00	75	65	65	75	75	
Car Payment	\$ 275.00	275	275	275	275	275	
Gas	\$ 240.00	240	360	240	240	240	
Insurance	\$ 180.00	180	180	180	180	180	
Food	\$ 600.00	600	600	600	600	600	
	\$1,370.00						

The status bar at the bottom shows: Ready, Average: \$455.00, Count: 9, Sum: \$4,095.00, 100% zoom.

Apply Cell Formats

The screenshot shows the Microsoft Excel interface with the 'Home' tab selected. The 'Number' group in the ribbon is active, and the 'Accounting' format is selected from the dropdown menu. The spreadsheet displays a budget for the first six months of the year. The columns are labeled A through R, and the rows are labeled 4 through 16. The data is organized as follows:

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
4								Total - First Six Months										
5		January	February	March	April	May	June											
6	Home																	
7	Mortgage	\$ 890.00	890	890	890	890	890											
8	Heat	\$ 250.00	250	175	125	80	0											
9	Power	\$ 225.00	225	175	175	150	150											
10	Other																	
11	Phone	\$ 65.00	75	65	65	75	75											
12	Car Payment	\$ 275.00	275	275	275	275	275											
13	Gas	\$ 240.00	240	360	240	240	240											
14	Insurance	\$ 180.00	180	180	180	180	180											
15	Food	\$ 600.00	600	600	600	600	600											
16		\$1,370.00																

The status bar at the bottom shows the following information: Ready, Average: \$455.00, Count: 9, Sum: \$4,095.00, and a zoom level of 100%.

Apply Cell Styles

AutoSave Off Budget - Excel Michele Wiedemer

File Home Insert Page Layout Formulas Data Review View Add-ins Tell me what you want to do Share

Clipboard Font Alignment Number Styles Cells Editing

A4

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
4								Total - First Six Months										
5		January	February	March	April	May	June											
6	Home																	
7	Mortgage	890	890	890	890	890	890											
8	Heat	250	250	175	125	80	0											
9	Power	225	225	175	175	150	150											
10	Other																	
11	Phone	65	75	65	65	75	75											
12	Car Payment	275	275	275	275	275	275											
13	Gas	240	240	360	240	240	240											
14	Insurance	180	180	180	180	180	180											
15	Food	600	600	600	600	600	600											
16		1370																

Sheet1 Sheet2 Sheet3

Ready 100%

Apply Conditional Formatting

The screenshot shows the Microsoft Excel interface with the 'Home' tab selected. The ribbon includes options for Clipboard, Font, Alignment, Number, Styles, Cells, and Editing. The spreadsheet is titled 'Budget - Excel' and is being edited by 'Michele Wiedemer'. The active cell is B9, which contains the value '225'. This cell is highlighted with a red background, indicating that conditional formatting has been applied. The spreadsheet data is as follows:

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
4								Total - First Six Months										
5		January	February	March	April	May	June											
6	Home																	
7	Mortgage	890	890	890	890	890	890											
8	Heat	250	250	175	125	80	0											
9	Power	225	225	175	175	150	150											
10	Other																	
11	Phone	65	75	65	65	75	75											
12	Car Payment	275	275	275	275	275	275											
13	Gas	240	240	360	240	240	240											
14	Insurance	180	180	180	180	180	180											
15	Food	600	600	600	600	600	600											
16		1370																
17																		
18																		

The status bar at the bottom indicates 'Ready', 'Average: 183.333333', 'Count: 6', 'Sum: 1100', and a zoom level of 100%.

Format Cells Using the Format Painter

The screenshot shows the Microsoft Excel interface with the 'Home' tab selected. The 'Format Painter' button is highlighted in the 'Clipboard' group of the ribbon. The worksheet is titled 'Budget - Excel' and contains a table with monthly expenses. The 'January' header in cell B5 is selected, and the mouse cursor is over cell G5, indicating the application of the copied format.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
4								Total - First Six Months										
5		January	February	March	April	May	June											
6	Home																	
7	Mortgage	890	890	890	890	890	890											
8	Heat	250	250	175	125	80	0											
9	Power	225	225	175	175	150	150											
10	Other																	
11	Phone	65	75	65	65	75	75											
12	Car Payment	275	275	275	275	275	275											
13	Gas	240	240	360	240	240	240											
14	Insurance	180	180	180	180	180	180											
15	Food	600	600	600	600	600	600											
16		1370																

Use the mouse to apply the copied format to another object

Count: 5

Lesson: Summarize and Organize Data

In this lesson, we'll introduce the following topics:

- Insert sparklines
- Group data
- Insert subtotals
- Outline data
- View grouped and outlined data

Insert Sparklines

The screenshot shows the Microsoft Excel interface with the 'Home' tab selected. The ribbon includes options for Clipboard, Font, Alignment, Number, Styles, Cells, and Editing. The active cell is A2, containing the text 'A. Datum Corporation'. The formula bar shows 'A. Datum Corporation'. The spreadsheet displays a table with the following data:

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
1	Company	Industry	Q1 Sales	Q2 Sales													
2	A. Datum Corporation	Tech	\$195,449	\$746,907													
3	Adventure Works	Travel	\$123,721	\$733,06													
4	Blue Yonder Airlines	Travel	\$934,763	\$246,554													
5	City Power & Light	Utilities	\$299,293	\$674,295													
6	Coho Vineyard	Beverage	\$228,783	\$659,385													
7	Contoso, Ltd	Misc	\$239,219	\$287,989													
8	Contoso Pharmaceuticals	Medical	\$371,570	\$644,368													
9	Consolidated Messenger	Tech	\$579,825	\$448,399													
10	Fabrikam, Inc.	Utilities	\$639,630	\$635,474													
11	Fourth Coffee	Beverage	\$876,740	\$567,216													
12	Graphic Design Institute	Education	\$788,390	\$540,282													
13	Humongous Insurance	Financial	\$682,545	\$577,599													
14	Litware, Inc.	Tech	\$902,264	\$206,331													
15	Lucerne Publishing	Misc	\$905,906	\$443,552													

The status bar at the bottom indicates 'Ready', 'Average: 471178', 'Count: 4', 'Sum: 942356', and '100%' zoom.

Group Data

The screenshot shows the Microsoft Excel interface with the 'Data' tab selected. The data table is as follows:

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
1	Country	Salesperson	Order Date	OrderID	Order Amount														
2	UK	Buchanan	7/16/2008	10248	\$440.00														
3	UK	Buchanan	7/23/2008	10254	\$556.62														
4	UK	Buchanan	8/9/2008	10269	\$642.20														
5	UK	Buchanan	9/10/2008	10297	\$1,420.00														
6	UK	Buchanan	10/18/2008	10320	\$516.00														
7	UK	Buchanan	10/25/2008	10333	\$877.20														
8	UK	Buchanan	11/27/2008	10358	\$429.40														
9	UK	Buchanan	11/26/2008	10359	\$3,471.68														
10	UK	Buchanan	4/29/2010	11043	\$210.00														
11		Buchanan Total			\$8,563.10														
12	UK	Dodsworth	7/15/2008	10255	\$2,490.50														
13	UK	Dodsworth	7/31/2008	10263	\$1,873.80														
14	UK	Dodsworth	10/10/2008	10324	\$5,275.71														
15	UK	Dodsworth	10/21/2008	10331	\$88.50														

The status bar at the bottom shows: Ready, Average: 16736.18571, Count: 52, Sum: 468613.2, 100% zoom.

Insert Subtotals

The screenshot shows the Microsoft Excel interface with the 'Data' tab selected. The ribbon includes 'Get & Transform Data', 'Queries & Connections', 'Sort & Filter', 'Data Tools', 'Forecast', and 'Outline'. The 'Outline' group on the right contains the 'Subtotal' button. The worksheet displays a table with 5 columns: Country, Salesperson, Order Date, OrderID, and Order Amount. The data is grouped by Salesperson, with a 'Buchanan Total' row inserted at row 11. The status bar at the bottom shows 'Average: 17375.74027', 'Count: 563', and 'Sum: 5786121.51'.

	A	B	C	D	E
1	Country	Salesperson	Order Date	OrderID	Order Amount
2	UK	Buchanan	7/16/2008	10248	\$440.00
3	UK	Buchanan	7/23/2008	10254	\$556.62
4	UK	Buchanan	8/9/2008	10269	\$642.20
5	UK	Buchanan	9/10/2008	10297	\$1,420.00
6	UK	Buchanan	10/18/2008	10320	\$516.00
7	UK	Buchanan	10/25/2008	10333	\$877.20
8	UK	Buchanan	11/27/2008	10358	\$429.40
9	UK	Buchanan	11/26/2008	10359	\$3,471.68
10	UK	Buchanan	4/29/2010	11043	\$210.00
11	Buchanan Total				\$8,563.10
12	UK	Dodsworth	7/15/2008	10255	\$2,490.50
13	UK	Dodsworth	7/31/2008	10263	\$1,873.80
14	UK	Dodsworth	10/10/2008	10324	\$5,275.71
15	UK	Dodsworth	10/21/2008	10331	\$88.50

Outline Data

The screenshot displays the Microsoft Excel interface with the 'Data' tab selected. The data table is as follows:

Country	Salesperson	Order Date	OrderID	Order Amount
UK	Buchanan	7/16/2008	10248	\$440.00
UK	Buchanan	7/23/2008	10254	\$556.62
UK	Buchanan	8/9/2008	10269	\$642.20
UK	Buchanan	9/10/2008	10297	\$1,420.00
UK	Buchanan	10/18/2008	10320	\$516.00
UK	Buchanan	10/25/2008	10333	\$877.20
UK	Buchanan	11/27/2008	10358	\$429.40
UK	Buchanan	11/26/2008	10359	\$3,471.68
UK	Buchanan	4/29/2010	11043	\$210.00
Buchanan Total				\$8,563.10
UK	Dodsworth	7/15/2008	10255	\$2,490.50
UK	Dodsworth	7/31/2008	10263	\$1,873.80
UK	Dodsworth	10/10/2008	10324	\$5,275.71
UK	Dodsworth	10/21/2008	10331	\$88.50

The status bar at the bottom indicates: Average: 16736.18571, Count: 52, Sum: 468613.2. The zoom level is set to 100%.

Viewing Grouped and Outlined Data

The screenshot displays the Microsoft Excel interface with the 'Data' tab selected. The PivotTable is structured as follows:

	Country	Salesperson	Order Date	OrderID	Order Amount
10		Buchanan Total			\$5,091.42
17		Dodsworth Total			\$10,861.31
26		King Total			\$5,663.08
65		Suyama Total			\$38,705.17
66	UK Total				\$60,320.98
118	USA Total				\$45,808.51
119	Grand Total				\$106,129.49

The PivotTable is located on 'Sheet1' and is grouped by 'Country' and 'Salesperson'. The 'Grand Total' row is highlighted in green. The status bar at the bottom indicates 'Ready' and '100%' zoom.

Module Four: Create Tables

In this module, you'll learn to create and manage tables, apply styles and configure table style options, and work with filtering and sorting strategies.

Whenever you are asked if you can do a job, tell 'em, 'Certainly I can!' Then get busy and find out how to do it.

Theodore Roosevelt



Lesson: Create and Manage Tables

In this lesson, we'll introduce the following topics:

- Create an Excel table from a cell range
- Add or remove table rows and columns
- Convert a table to a cell range

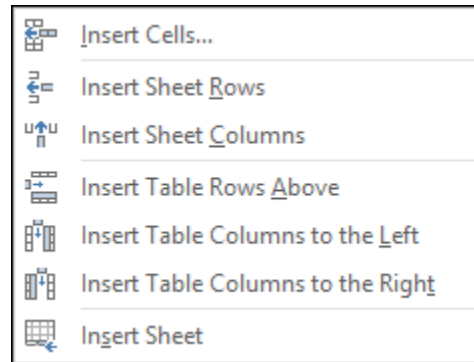
Create an Excel Table from a Cell Range

The screenshot displays the Microsoft Excel interface with a table of company data. The table is located in the range A1:D16 and is currently selected. The 'Format as Table' task pane is open on the right side of the screen, showing various table styles under the 'Light' category. The table data is as follows:

Company	Industry	Q1 Sales	Q2 Sales
A. Datum Corporation	Tech	\$195,449	\$746,907
Adventure Works	Travel	\$123,721	\$733,396
Blue Yonder Airlines	Travel	\$934,763	\$246,554
City Power & Light	Utilities	\$299,293	\$674,295
Coho Vineyard	Beverage	\$228,783	\$659,385
Contoso, Ltd	Misc	\$239,219	\$287,989
Contoso Pharmaceuticals	Medical	\$371,570	\$644,368
Consolidated Messenger	Tech	\$579,825	\$448,399
Fabrikam, Inc.	Utilities	\$639,630	\$635,474
Fourth Coffee	Beverage	\$876,740	\$567,216
Graphic Design Institute	Education	\$788,390	\$540,282
Humongous Insurance	Financial	\$682,545	\$577,599
Litware, Inc.	Tech	\$902,264	\$206,331
Lucerne Publishing	Misc	\$905,906	\$443,552
Margie's Travel	Travel	\$289,570	\$843,834

The Excel interface includes the ribbon with tabs for File, Home, Insert, Page Layout, Formulas, Data, Review, View, Add-ins, ACROBAT, QuickBooks, and Tell me what you want to do. The status bar at the bottom shows 'Ready', 'Average: 543774.9667', 'Count: 64', 'Sum: 16313249', and a zoom level of 100%.

Add or Remove Table Rows and Columns



Convert a Table to a Cell Range

The screenshot shows the Microsoft Excel interface with the 'Table Tools' ribbon active. The 'Design' tab is selected, showing options for 'Table Style Options' and 'Table Styles'. The 'Table Name' is 'Table3'. The 'Convert to Range' option is highlighted in the 'Tools' group. The table data is as follows:

Company	Industry	Q1 Sales	Q2 Sales
A. Datum Corporation	Tech	\$195,449	\$746,907
Adventure Works	Travel	\$123,721	\$733,396
Blue Yonder Airlines	Travel	\$934,763	\$246,554
City Power & Light	Utilities	\$299,293	\$674,295
Coho Vineyard	Beverage	\$228,783	\$659,385
Contoso, Ltd	Misc	\$239,219	\$287,989
Contoso Pharmaceuticals	Medical	\$371,570	\$644,368
Consolidated Messenger	Tech	\$579,825	\$448,399
Fabrikam, Inc.	Utilities	\$639,630	\$635,474
Fourth Coffee	Beverage	\$876,740	\$567,216
Graphic Design Institute	Education	\$788,390	\$540,282
Humongous Insurance	Financial	\$682,545	\$577,599
Litware, Inc.	Tech	\$902,264	\$206,331
Lucerne Publishing	Misc	\$905,906	\$443,552
Margie's Travel	Travel	\$289,570	\$843,834

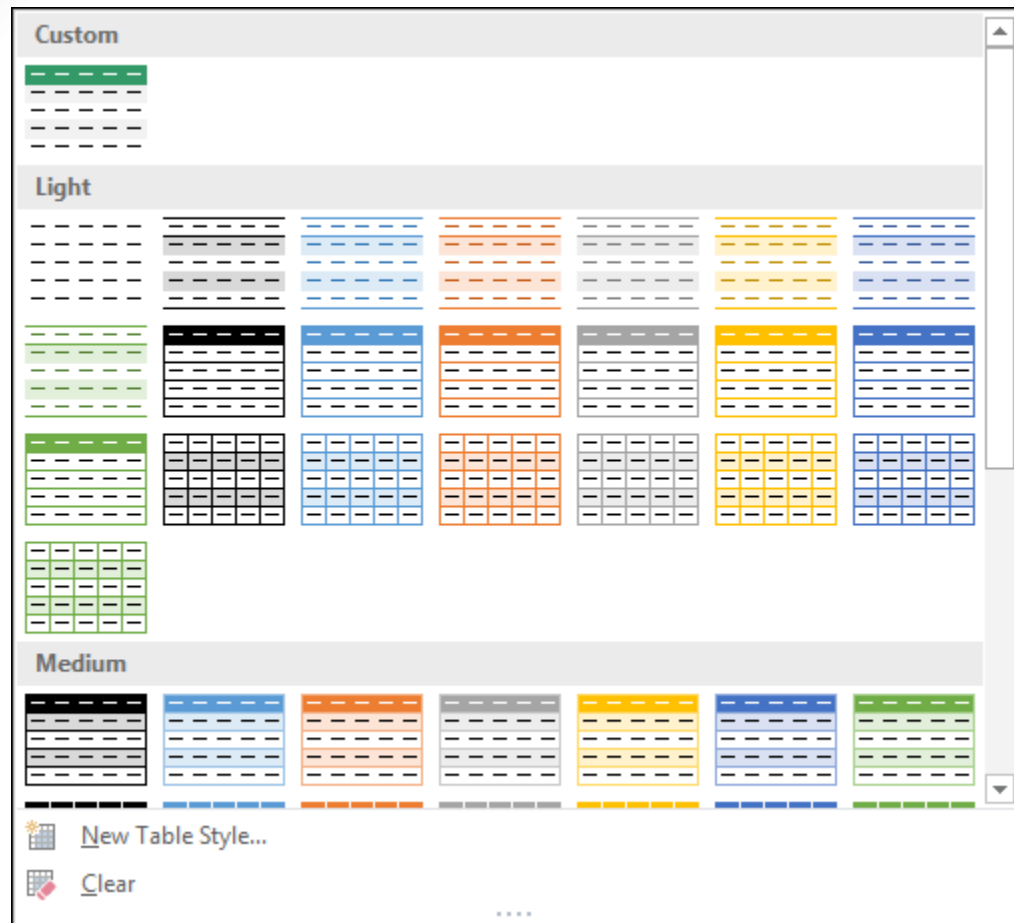
The status bar at the bottom shows 'Average: 543774.9667 Count: 64 Sum: 16313249'.

Lesson: Manage Table Styles and Options

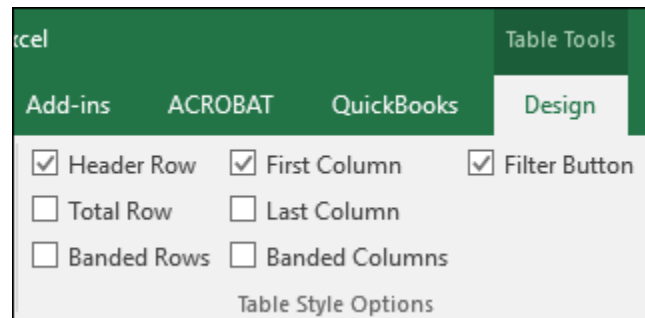
In this lesson, we'll introduce the following topics:

- Apply styles to tables
- Configure table style options
- Insert total rows

Apply Styles to Tables



Configure Table Style Options



Insert Total Rows

AutoSave Off

Tables - Excel

Table Tools

Michele Wiedemer

File Home Insert Page Layout Formulas Data Review View Add-ins ACROBAT QuickBooks Design Tell me what you want to do Share

Table Name: Table5

Summarize with PivotTable

Remove Duplicates

Convert to Range

Insert Slicer

Export

Refresh

Open in Browser

Unlink

Properties

External Table Data

☒ Header Row

☒ Total Row

☐ Banded Rows

☒ First Column

☐ Last Column

☐ Banded Columns

☒ Filter Button

Table Style Options

Table Styles

A1 Company

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
1	Company	Industry	Q1 Sales	Q2 Sales														
2	A. Datum Corporation	Tech	\$195,449	\$746,907														
3	Adventure Works	Travel	\$123,721	\$733,396														
4	Blue Yonder Airlines	Travel	\$934,763	\$246,554														
5	City Power & Light	Utilities	\$299,293	\$674,295														
6	Coho Vineyard	Beverage	\$228,783	\$659,385														
7	Contoso, Ltd	Misc	\$239,219	\$287,989														
8	Contoso Pharmaceuticals	Medical	\$371,570	\$644,368														
9	Consolidated Messenger	Tech	\$579,825	\$448,399														
10	Fabrikam, Inc.	Utilities	\$639,630	\$635,474														
11	Fourth Coffee	Beverage	\$876,740	\$567,216														
12	Graphic Design Institute	Education	\$788,390	\$540,282														
13	Humongous Insurance	Financial	\$682,545	\$577,599														
14	Litware, Inc.	Tech	\$902,264	\$206,331														
15	Lucerne Publishing	Misc	\$905,906	\$443,552														
16	Margie's Travel	Travel	\$289,570	\$843,834														
17	Total			\$8,255,581														
18																		

Sheet1

Ready

Average: 543774.9667 Count: 64 Sum: 16313249

100%

Lesson: Filter and Sort Tables

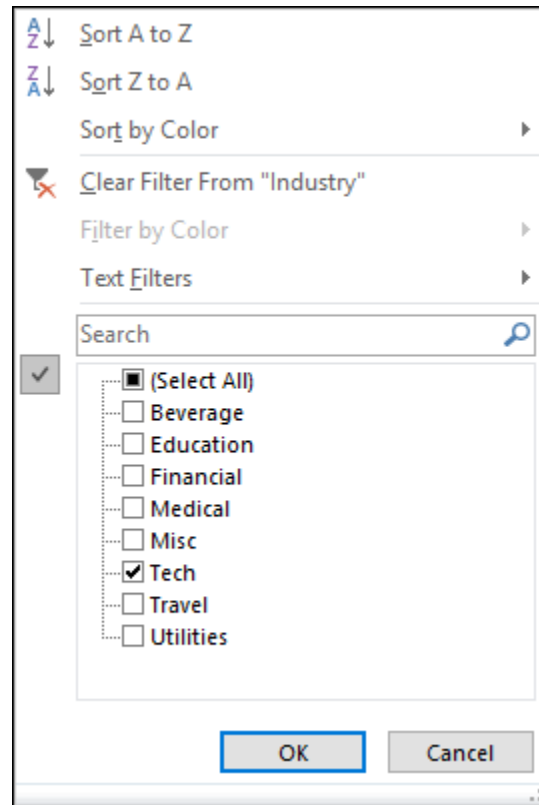
In this lesson, we'll introduce the following topics:

- Filter records
- Use a Number Filter
- Sort data by multiple columns
- Clear Filters
- Change sort order
- Remove duplicate records

Filter Records

[illegible]

Clear Filters



Use a Number Filter

AutoSave Off

Tables - Excel

Table Tools

Michele Wiedemer

File Home Insert Page Layout Formulas Data Review View Add-ins ACROBAT QuickBooks Design Tell me what you want to do Share

Table Name: Table5

Summarize with PivotTable

Remove Duplicates

Convert to Range

Insert Slicer

Export Refresh Unlink

Properties

Open in Browser

External Table Data

Header Row

First Column

Filter Button

Total Row

Last Column

Banded Rows

Banded Columns

Table Style Options

Table Styles

A1

Company

Company	Industry	Q1 Sales	Q2 Sales
Sort A to Z		\$195,449	\$746,907
Sort Z to A		\$123,721	\$733,396
Sort by Color		\$934,763	\$246,554
Clear Filter From "Industry"		\$299,293	\$674,295
Filter by Color		\$228,783	\$659,385
Text Filters		\$239,219	\$287,989
Search			
(Select All)			
Beverage			
Education			
Financial			
Medical			
Misc			
Tech			
Travel			
Utilities			
		\$8,255,581	

OK Cancel

Average: 543774.9667 Count: 64 Sum: 16313249

100%

Sort Data by Multiple Columns

AutoSave Off Tables - Excel Michele Wiedemer

File Home Insert Page Layout Formulas Data Review View Add-ins ACROBAT QuickBooks Design Tell me Share

Paste Font Alignment Number Styles Cells Editing

Clipboard Font Alignment Number Styles Cells Editing

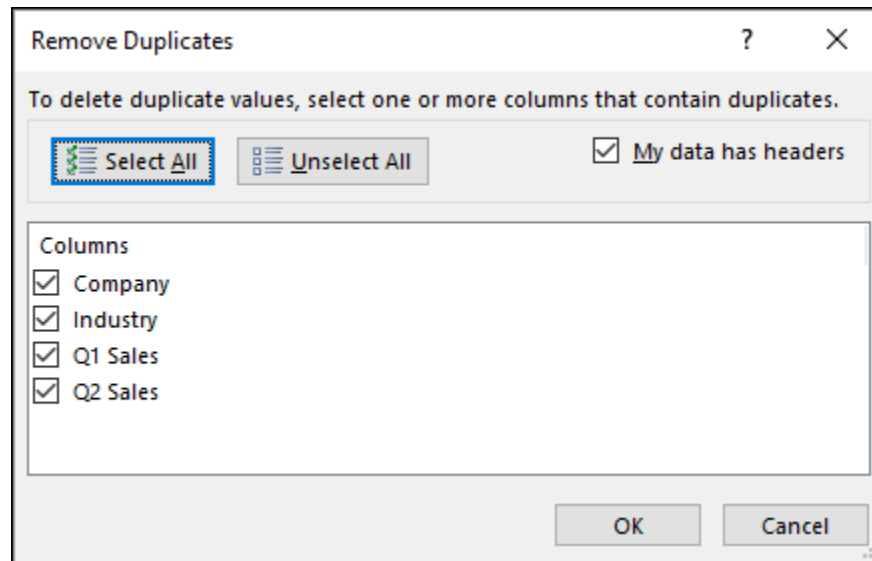
B1 Industry

	A	B	C	D	E	F	G	H	I	J	K	L
1	Company	Industry	Q1 Sales	Q2 Sales								
2	A. Datum Corporation	Tech	\$195,449	\$746,907								
3	Adventure Works	Travel	\$123,721	\$733,396								
4	Blue Yonder Airlines	Travel	\$934,763	\$246,554								
5	City Power & Light	Utilities	\$299,293	\$674,295								
6	Coho Vineyard	Beverage	\$228,783	\$659,385								
7	Contoso, Ltd	Misc	\$239,219	\$287,989								
8	Contoso Pharmaceuticals	Medical	\$371,570	\$644,368								
9	Consolidated Messenger	Tech	\$579,825	\$448,399								
10	Fabrikam, Inc.	Utilities	\$639,630	\$635,474								
11	Fourth Coffee	Beverage	\$876,740	\$567,216								
12	Graphic Design Institute	Education	\$788,390	\$540,282								
13	Humongous Insurance	Financial	\$682,545	\$577,599								
14	Litware, Inc.	Tech	\$902,264	\$206,331								

Sheet1

Ready 100%

Remove Duplicate Records



Module Five: Perform Operations with Formulas and Functions

Excel's power lies in its ability to make calculations that help you analyze data. This module explains how to build the formulas and use the functions that can help you make your calculations.

*All which is
beautiful and
noble is the
result of reason
and calculation.*

**Charles
Baudelaire**



Lesson: Summarize Data Using Functions

In this lesson, we'll introduce the following topics:

- Math basics
- Build a formula
- Edit a formula
- Copy a formula
- Relative vs. absolute references

Math Basics of Excel

Arithmetic operators: $+$ $-$ $*$ $/$ $\%$ $^$

Comparison operators: $=$ $>$ $<$ \leq \geq \neq

Text concatenation: $\&$

Reference operators: Colon Comma Space

Build a Formula

[illegible]

Edit a Formula

[illegible]

Copy a Formula

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	Inventory													
2														
3	Part No.	# In Stock	Unit Price	Total Value	Reorder level	# left to reorder								
4	QS12578	26	\$248.89	\$ 6,471.14	20	6								
5	DSP4543	14	\$124.50	\$ 1,743.00	10									
6	DS45848	2	\$588.00		1									
7	SS12566	18	\$224.67		10									
8	SSP2777	12	\$118.00											
9	QS12585	5	\$555.22											
10	DS12566	2	\$470.99											
11	DS12556	8	\$430.37											
12	KSP4333	4	\$585.00											
13	QP133	12	\$255.23		10									
14	KS36678	3	\$685.75		1									
15														
16	Tax rate	10%												
17														

Paste Options:

Formulas (F)

Relative vs Absolute References

The screenshot displays an Excel spreadsheet titled "Inventory". The formula bar at the top shows the active cell D4 containing the formula $=B\$16 \times D4$. The spreadsheet has columns A through M and rows 1 through 17.

	A	B	C	D	E	F	G	H	I	J	K	L	M
1	Inventory												
2													
3	Part No.	# In Stock	Unit Price	Total Value	Taxes	Reorder level	# left to reorder						
4	QS12578	26	\$248.89	\$ 471.14	$=B\$16 \times D4$	20	6						
5	DSP4543	14	\$124.50	\$ 1,743.00		10	4						
6	DS45848	2	\$588.00	\$ 1,176.00		1	1						
7	SS12566	18	\$224.67	\$ 4,044.06		10	8						
8	SSP2777	12	\$118.00	\$ 1,416.00		5	7						
9	QS12585	5	\$555.22	\$ 2,776.10		5	-						
10	DS12566	2	\$470.99	\$ 941.98		1	1						
11	DS12556	8	\$430.37	\$ 3,442.96		5	3						
12	KSP4333	4	\$585.00	\$ 2,340.00		2	2						
13	QP133	12	\$255.23	\$ 3,062.76		10	2						
14	KS36678	3	\$685.75	\$ 2,057.25		1	2						
15													
16	Tax rate	10%											
17													

The bottom of the spreadsheet shows tabs for "Sheet1", "Sheet2", and "Sheet3". The status bar at the very bottom indicates "Point" and a zoom level of 90%.

Lesson: Perform Basic Functions

In this lesson, we will introduce the following topics:

- Understand Formulas vs. Functions
- Calculate using the status bar
- Perform basic functions
- AutoComplete a function
- Create functions using the Formulas tab

Understanding Formulas vs. Functions

The screenshot displays the Microsoft Excel interface. The title bar indicates the file is 'Budget - Excel' and the user is 'Michele Wiedemer'. The ribbon is set to 'Home', showing options for Font, Alignment, Number, Styles, Cells, and Editing. The active cell is H5, and the formula bar shows an equals sign (=).

An 'Insert Function' dialog box is open, allowing the user to search for a function. The 'Search for a function' field contains the text 'Type a brief description of what you want to do and then click Go'. The 'Or select a category' dropdown is set to 'Most Recently Used'. The 'Select a function' list shows several functions, with 'SUM' selected. Below the list, the syntax 'SUM(number1,number2,...)' and a description 'Adds all the numbers in a range of cells.' are displayed. A 'Help on this function' link is at the bottom left, and 'OK' and 'Cancel' buttons are at the bottom right.

In the background, a spreadsheet is visible. Column A contains a list of expenses: 'Household Budget', 'Mortgage', 'Heat', 'Power', 'Phone', 'Car Payment', 'Gas', 'Insurance', and 'Food'. Column H contains a list of values: '890', '0', '150', '75', '275', '240', '180', and '600'. The formula bar shows the formula '=890' in cell H5, and the text 'Total - first six months' is visible in the background.

Calculate Using the Status Bar

B7													
	A	B	C	D	E	F	G	H	I	J	K	L	M
1	Household Budget												
2	2013												
3													
4		January	February	March	April	May	June	Total - first six months					
5	Mortgage	890	890	890	890	890	890						
6	Heat	250	250	175	125	80	0						
7	Power	225	225	175	175	150	150						
8													
9	Phone	65	75	65	65	75	75						
10	Car Payment	275	275	275	275	275	275						
11	Gas	240	240	360	240	240	240						
12	Insurance	180	180	180	180	180	180						
13	Food	600	600	600	600	600	600						
14													
15													
16													

Ready Average: 183.3333333 Count: 6 Sum: 1100 100%

Perform Basic Functions

[illegible]

Autocomplete a Function

	A	B	C	D	E	F	G	H	I
1	Household Budget								
2	2013								
3									
4		January	February	March	April	May	June	Total - first six months	
5	Mortgage	890	890	890	890	890	890		
6	Heat	250	250	175	125	80	0		
7	Power	225	225	175	175	150	150	=S	
8									
9	Phone	65	75	65	65	75	75		
10	Car Payment	275	275	275	275	275	275		
11	Gas	240	240	360	240	240	240		
12	Insurance	180	180	180	180	180	180		
13	Food	600	600	600	600	600	600		
14									
15									
16									

SEARCH
 SEC
 SECH
 SECOND
 SERIESSUM
 SHEET
 SHEETS
 SIGN
 SIN
 SINH
 SKEW
 SKEW.P

Create Functions Using the Formulas Tab

The screenshot shows the Microsoft Excel interface with the **Formulas** tab selected. The formula bar displays `=AVERAGE(B11,C11,D11,E11)` for cell H11. The **Function Arguments** dialog box is open, showing the **AVERAGE** function with the argument `B11,C11,D11,E11` entered in the **Number1** field. The dialog also shows the formula result as 270.

Excel Interface Details:

- File Name:** Budget - Excel
- User:** Michele Wiedemer
- Formulas Tab:** Includes sections for **Function Library** (AutoSum, Logical, Text, Date & Time, Financial, More Functions), **Defined Names** (Define Name, Use in Formula, Create from Selection), and **Formula Auditing** (Trace Precedents, Trace Dependents, Remove Arrows, Evaluate Formula).

Worksheet Data:

	A	B	C	D	E
1	Household Budget				
2	2013				
3					
4		January	February	March	April
5	Mortgage	890	890	890	890
6	Heat	250	250	175	125
7	Power	225	225	175	175
8					
9	Phone	65	75	65	65
10	Car Payment	275	275	275	275
11	Gas	240	240	360	240
12	Insurance	180	180	180	180
13	Food	600	600	600	600
14					
15					
16					

Function Arguments Dialog Box:

AVERAGE

Number1: B11,C11,D11,E11

Number2: (empty)

Formula result = 270

Description: Returns the average (arithmetic mean) of its arguments, which can be numbers or names, arrays, or references that contain numbers.

Number1: number1,number2,... are 1 to 255 numeric arguments for which you want the average.

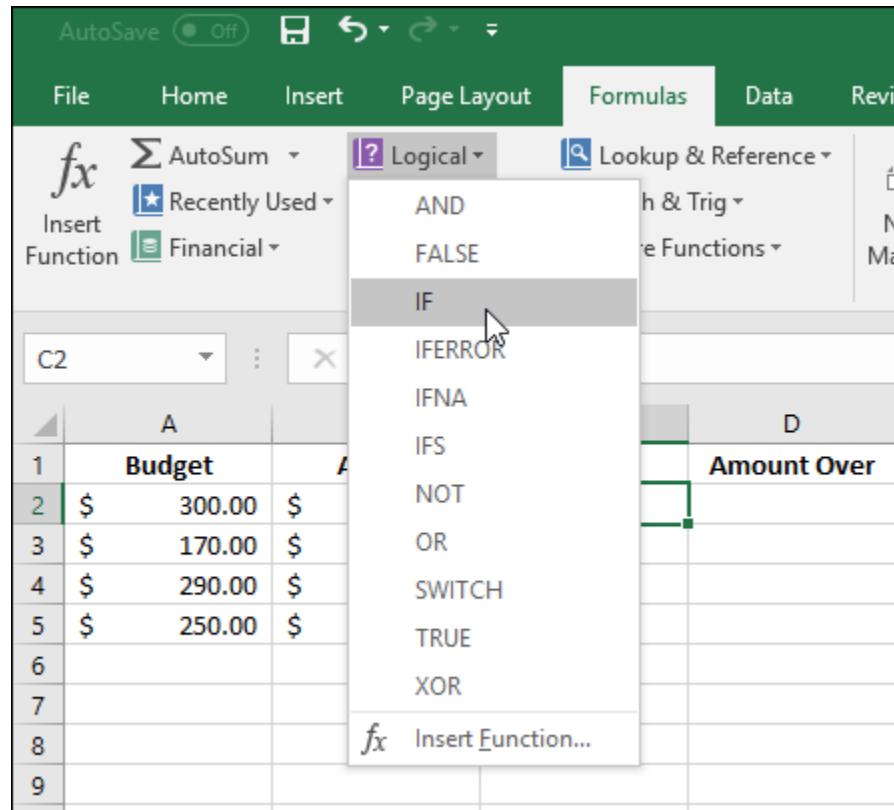
Buttons: OK, Cancel, Help on this function

Lesson: Perform Conditional Operations Using Functions

In this lesson, we'll introduce the following topics:

- Perform logical operations by using the IF function
- Perform logical operations by using the SUMIF function
- Perform logical operations by using the AVERAGEIF function
- Perform statistical operations by using the COUNTIF function

Perform Logical Operations Using the IF Function



Perform Logical Operations Using the SUMIF Function

D7					=SUMIF(D2:D5,">10")
	A	B	C	D	E
1	Budget	Actual	Status	Amount Over	
2	\$ 300.00	\$ 325.00	Over Budget	\$ 25.00	
3	\$ 170.00	\$ 168.00			
4	\$ 290.00	\$ 295.00	Over Budget	\$ 5.00	
5	\$ 250.00	\$ 400.00	Over Budget	\$ 150.00	
6					
7			Sum of Overages over \$10	\$ 175.00	
8					
9					

Perform Logical Operations Using the AVERAGEIF Function

D7					=AVERAGEIF(D2:D5,">10")
	A	B	C	D	E
1	Budget	Actual	Status	Amount Over	
2	\$ 300.00	\$ 325.00	Over Budget	\$ 25.00	
3	\$ 170.00	\$ 168.00			
4	\$ 290.00	\$ 295.00	Over Budget	\$ 5.00	
5	\$ 250.00	\$ 400.00	Over Budget	\$ 150.00	
6					
7			Average of Overages over \$10	\$ 87.50	
8					

Perform Logical Operations Using the COUNTIF Function

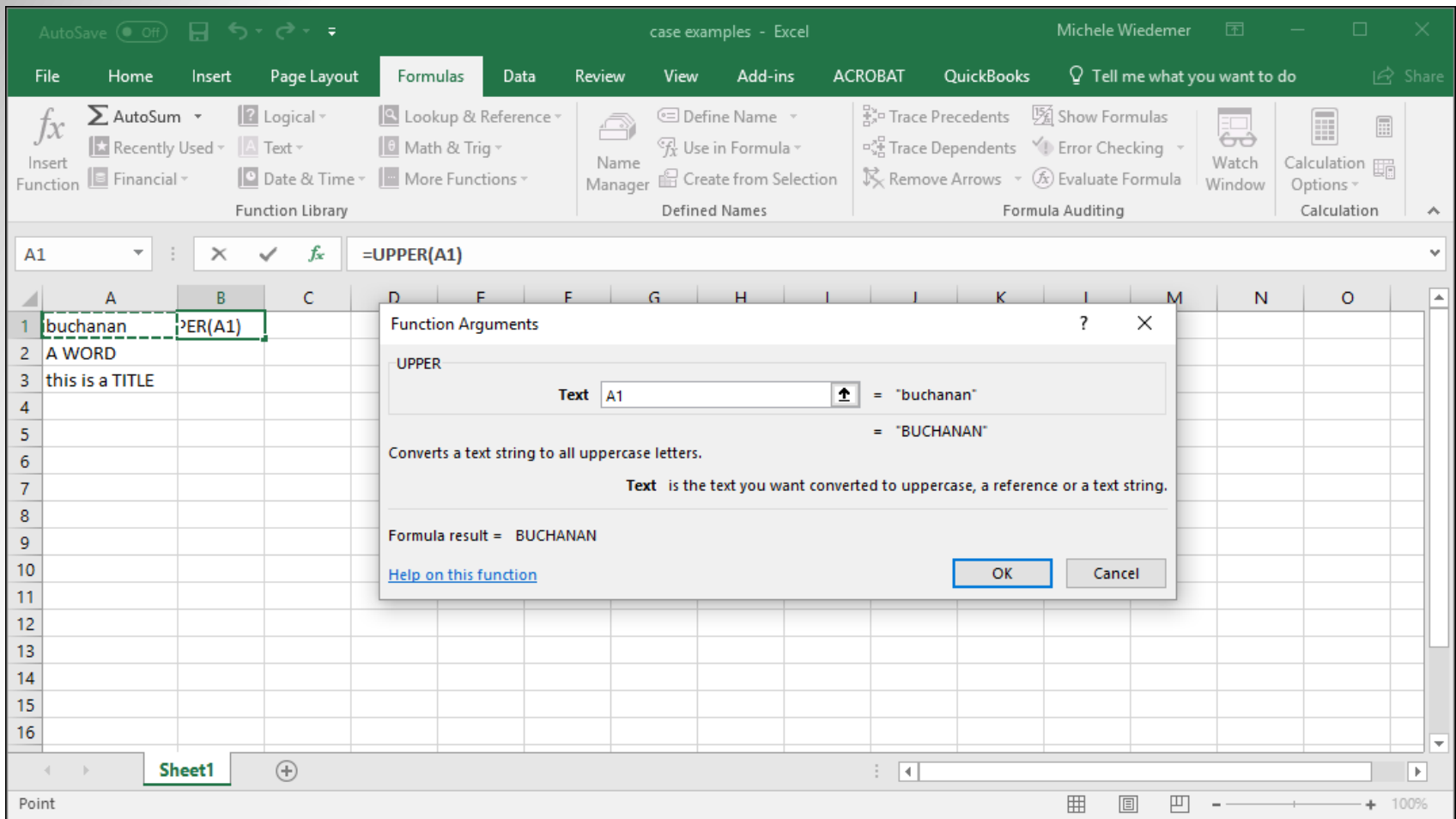
D7					=COUNTIF(D2:D5,">10")
	A	B	C	D	E
1	Budget	Actual	Status	Amount Over	
2	\$ 300.00	\$ 325.00	Over Budget	\$ 25.00	
3	\$ 170.00	\$ 168.00			
4	\$ 290.00	\$ 295.00	Over Budget	\$ 5.00	
5	\$ 250.00	\$ 400.00	Over Budget	\$ 150.00	
6					
7			Number of Overages over \$10	2	
8					

Lesson: Format Text Using Functions

In this lesson, we'll introduce the following topics:

- Format text by using UPPER, LOWER, and PROPER functions
- Format text by using the CONCATENATE function
- Format text by using RIGHT, LEFT, and MID functions

Format Text Using UPPER, LOWER, and PROPER Functions



Format Text Using the CONCATENATE Function

C2					
	A	B	C	D	E
1	First Name	Last Name			
2	Todd	Buchanan	Buchanan, Todd		
3	Joyce	Suyama			
4	Nina	Peacock			
5	Joseph	Leverling			
6	Brian	Dodsworth			
7	Leo	Davolio			
8					

Format Text Using RIGHT, LEFT, and MID Functions

Function Library

Defined Names

G4

✕

✓

fx

=LEFT(A4,2)

	A	B	C	D	E	F	G	H
1	Inventory							
2								
3	Part No.	# In Stock	Unit Price	Total Value	Reorder level	# left to reorder		
4	QS12578	26	\$ 248.89		20		QS	
5	DSP4543	14	\$ 124.50		10			
6	DS45848	2	\$ 588.00		1			
7	SS12566	18	\$ 224.67		10			
8	SSP2777	12	\$ 118.00		5			
9	QS12585	5	\$ 555.22		5			
10	DS12566	2	\$ 470.99		1			
11	DS12556	8	\$ 430.37		5			
12	KSP4333	4	\$ 585.00		2			
13	QP133	12	\$ 255.23		10			
14	KS36678	3	\$ 685.75		1			
15								

Module Six: Create Charts and Objects

Quick Analysis includes a number of formatting, charts, and totals shortcuts to help you visualize your data. Recommended Charts are another way of quickly visualizing your information. This module looks at these shortcuts, as well as creating and formatting your own charts and using and formatting other types of objects.

*The wisest mind
has something
yet to learn.*

**George
Santayana**

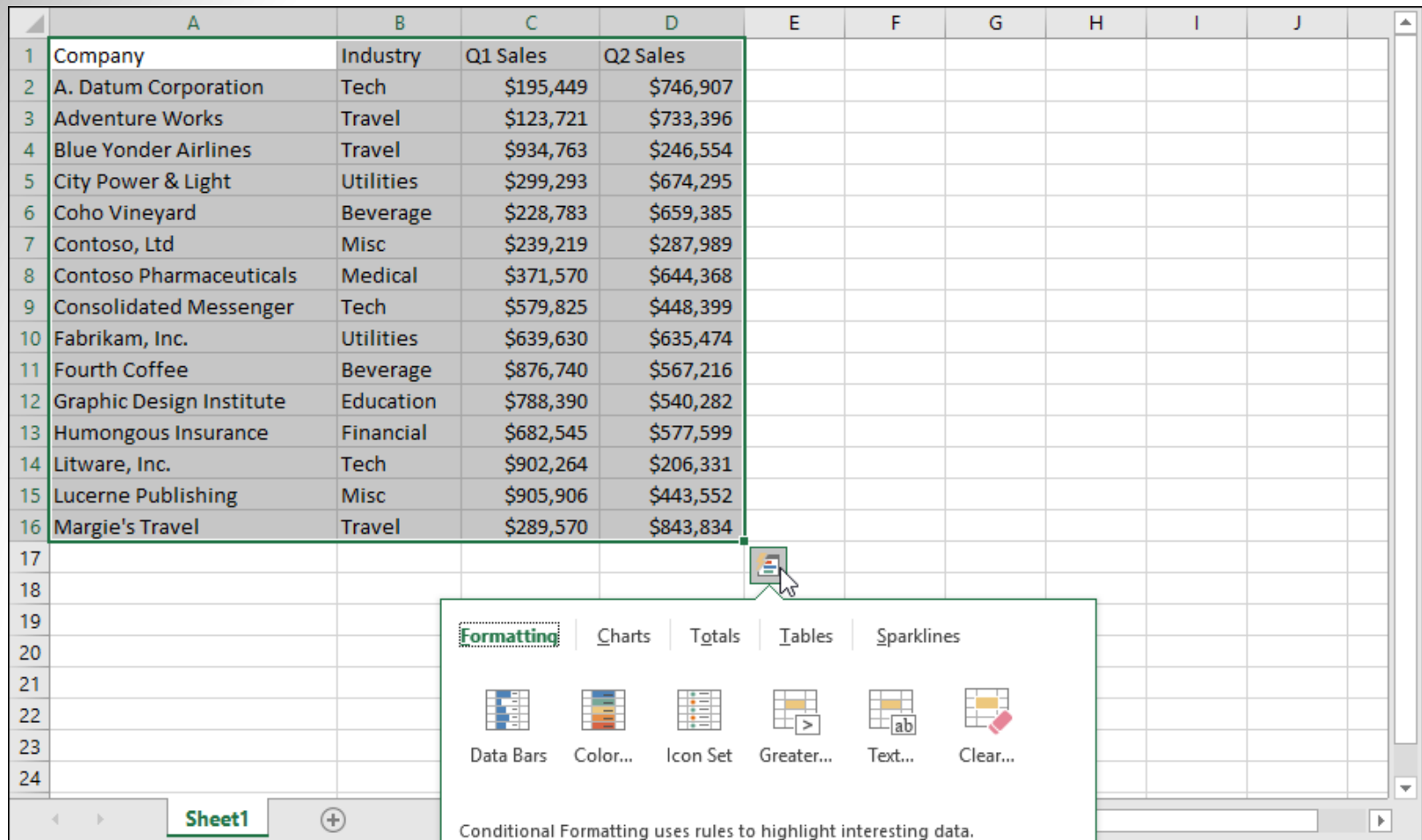


Lesson: Analyze Data using Quick Analysis

In this lesson, we'll introduce the following topics:

- Format with Quick Analysis
- Create charts with Quick Analysis
- Calculate totals with Quick Analysis

Format With Quick Analysis



The screenshot shows an Excel spreadsheet with a table of company sales data. The table has four columns: Company, Industry, Q1 Sales, and Q2 Sales. The data is as follows:

Company	Industry	Q1 Sales	Q2 Sales
A. Datum Corporation	Tech	\$195,449	\$746,907
Adventure Works	Travel	\$123,721	\$733,396
Blue Yonder Airlines	Travel	\$934,763	\$246,554
City Power & Light	Utilities	\$299,293	\$674,295
Coho Vineyard	Beverage	\$228,783	\$659,385
Contoso, Ltd	Misc	\$239,219	\$287,989
Contoso Pharmaceuticals	Medical	\$371,570	\$644,368
Consolidated Messenger	Tech	\$579,825	\$448,399
Fabrikam, Inc.	Utilities	\$639,630	\$635,474
Fourth Coffee	Beverage	\$876,740	\$567,216
Graphic Design Institute	Education	\$788,390	\$540,282
Humongous Insurance	Financial	\$682,545	\$577,599
Litware, Inc.	Tech	\$902,264	\$206,331
Lucerne Publishing	Misc	\$905,906	\$443,552
Margie's Travel	Travel	\$289,570	\$843,834

A Quick Analysis tool is open over the data, displaying the 'Formatting' tab. The tool includes the following options:

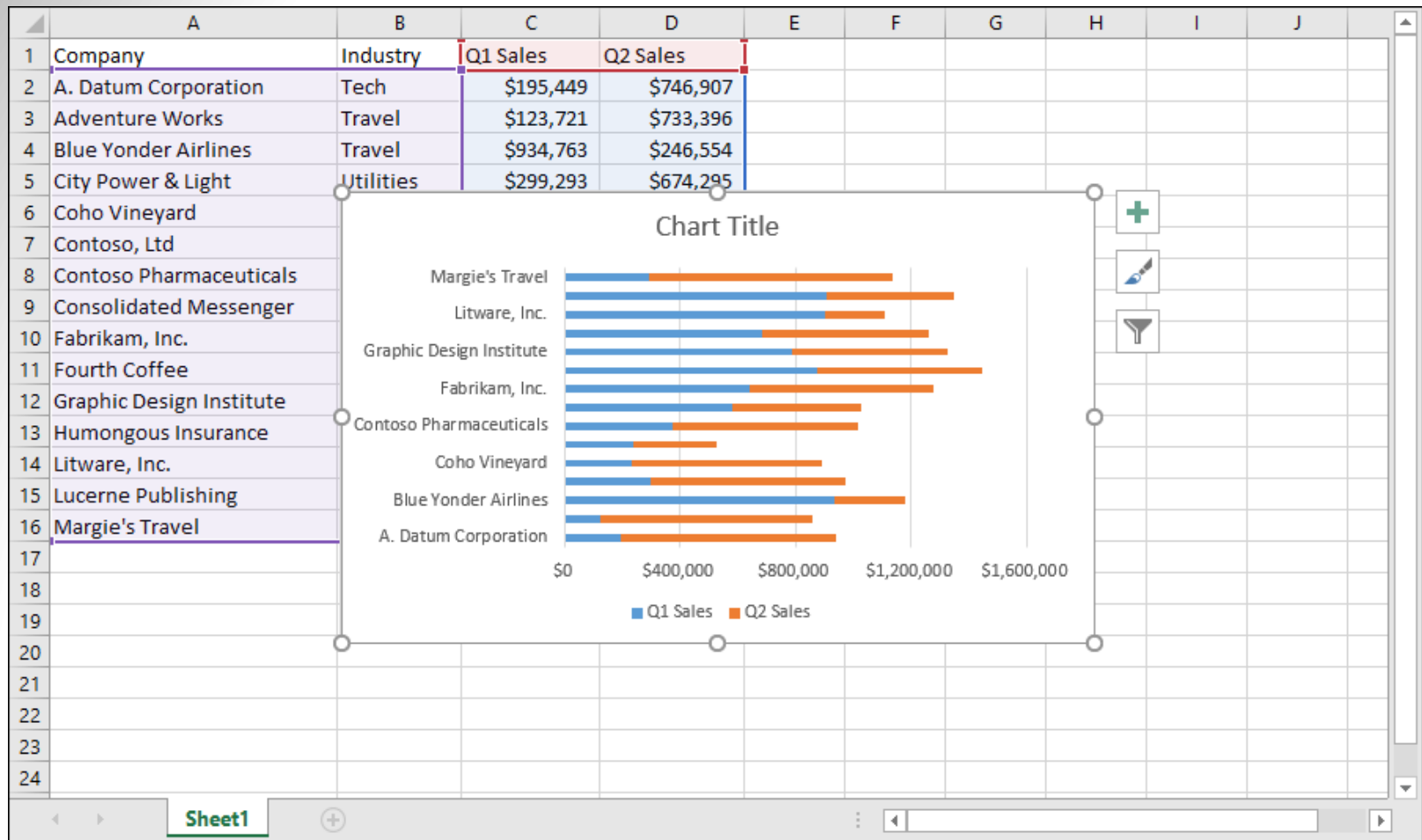
- Formatting (selected)
- Charts
- Totals
- Tables
- Sparklines

The Formatting tab shows the following options:

- Data Bars
- Color...
- Icon Set
- Greater...
- Text...
- Clear...

Conditional Formatting uses rules to highlight interesting data.

Create Charts with Quick Analysis



Calculate Totals with Quick Analysis

The screenshot shows an Excel spreadsheet with the following data:

Company	Industry	Q1 Sales	Q2 Sales
A. Datum Corporation	Tech	\$195,449	\$746,907
Adventure Works	Travel	\$123,721	\$733,396
Blue Yonder Airlines	Travel	\$934,763	\$246,554
City Power & Light	Utilities	\$299,293	\$674,295
Coho Vineyard	Beverage	\$228,783	\$659,385
Contoso, Ltd	Misc	\$239,219	\$287,989
Contoso Pharmaceuticals	Medical	\$371,570	\$644,368
Consolidated Messenger	Tech	\$579,825	\$448,399
Fabrikam, Inc.	Utilities	\$639,630	\$635,474
Fourth Coffee	Beverage	\$876,740	\$567,216
Graphic Design Institute	Education	\$788,390	\$540,282
Humongous Insurance	Financial	\$682,545	\$577,599
Litware, Inc.	Tech	\$902,264	\$206,331
Lucerne Publishing	Misc	\$905,906	\$443,552
Margie's Travel	Travel	\$289,570	\$843,834

The Quick Analysis tool is open, showing the following options:

- Formatting
- Charts
- Totals** (selected)
- Tables
- Sparklines

The 'Totals' tab is active, displaying the following options:

- Sum (selected)
- Average
- Count
- % Total
- Running...
- Sum (with bar chart icon)

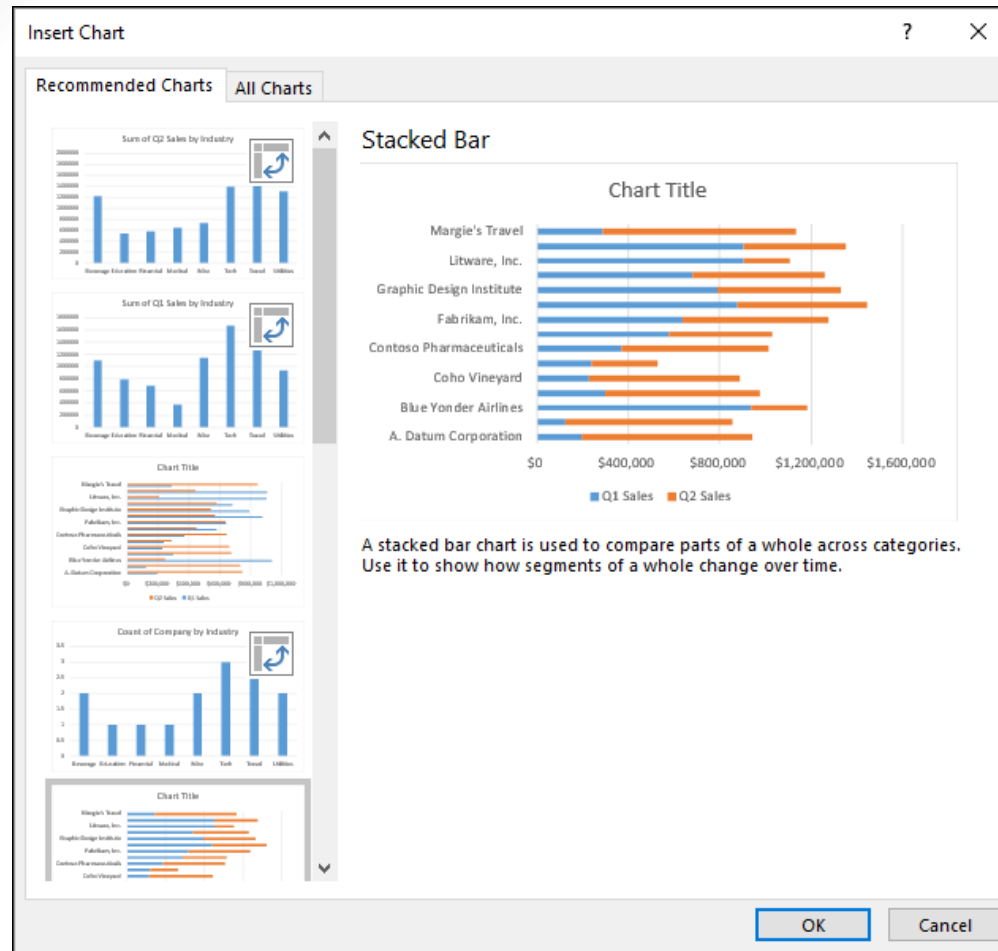
Formulas automatically calculate totals for you.

Lesson: Create Charts

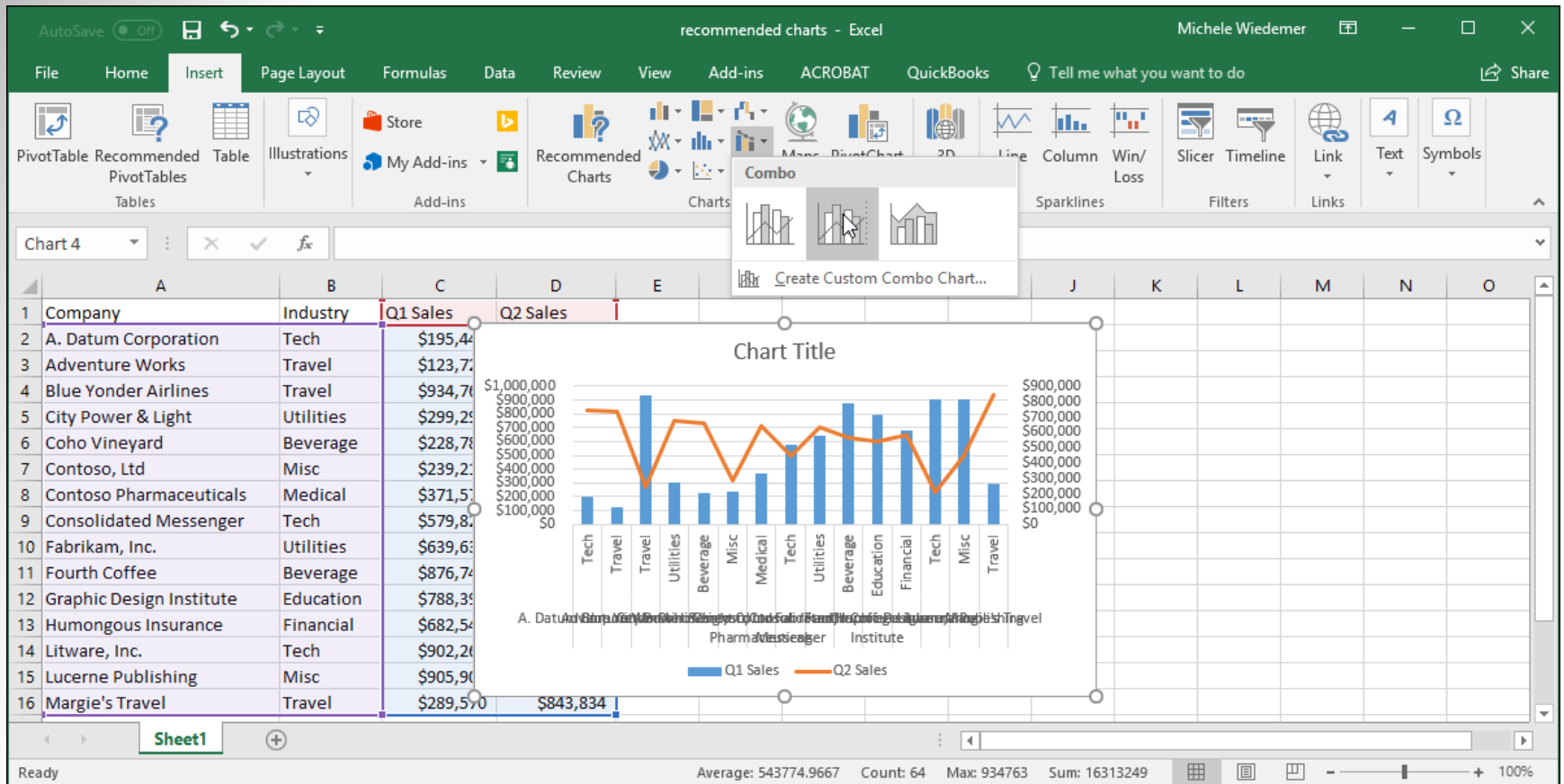
In this lesson, we'll introduce the following topics:

- Use recommended charts
- Create a new chart
- Add additional data series
- Switch between rows and columns in source data

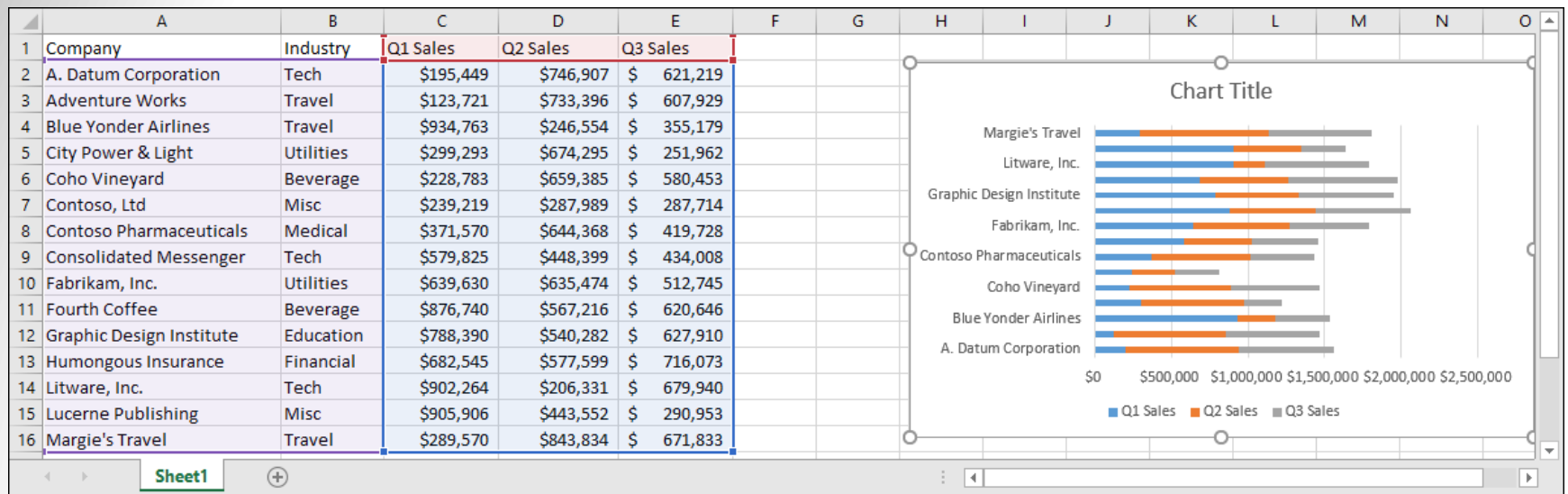
Use Recommended Charts



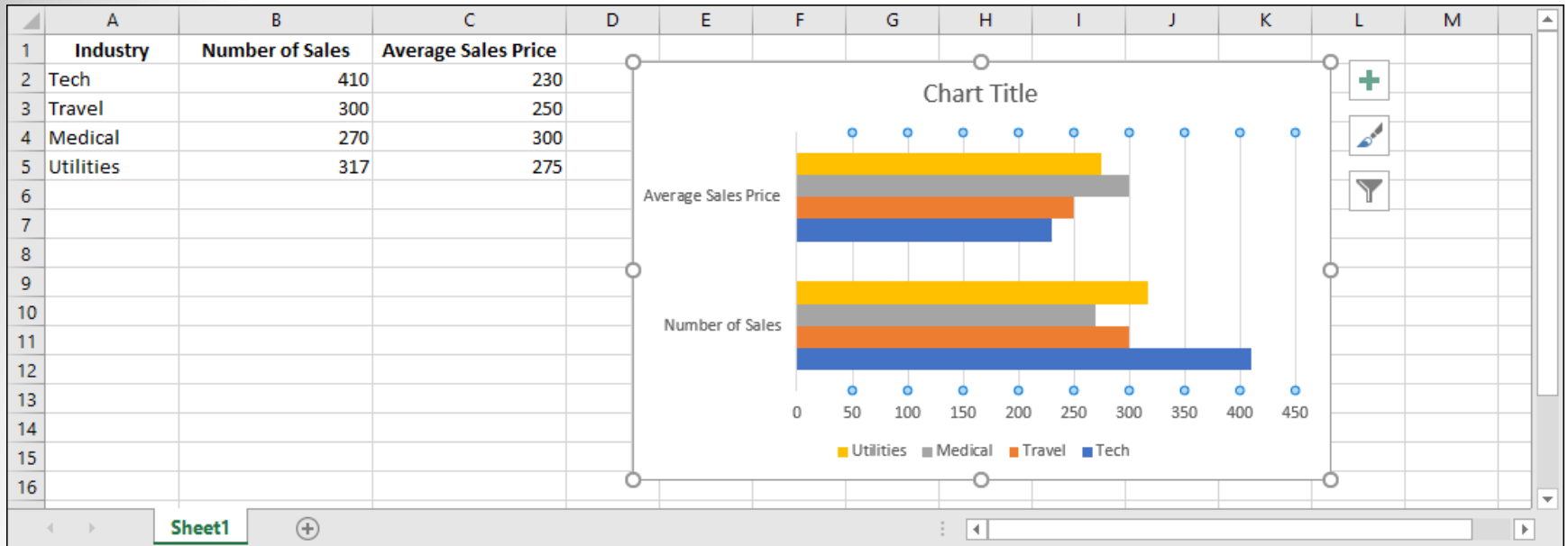
Create a New Chart



Add Additional Data Series



Switch Between Rows and Columns in Source Data

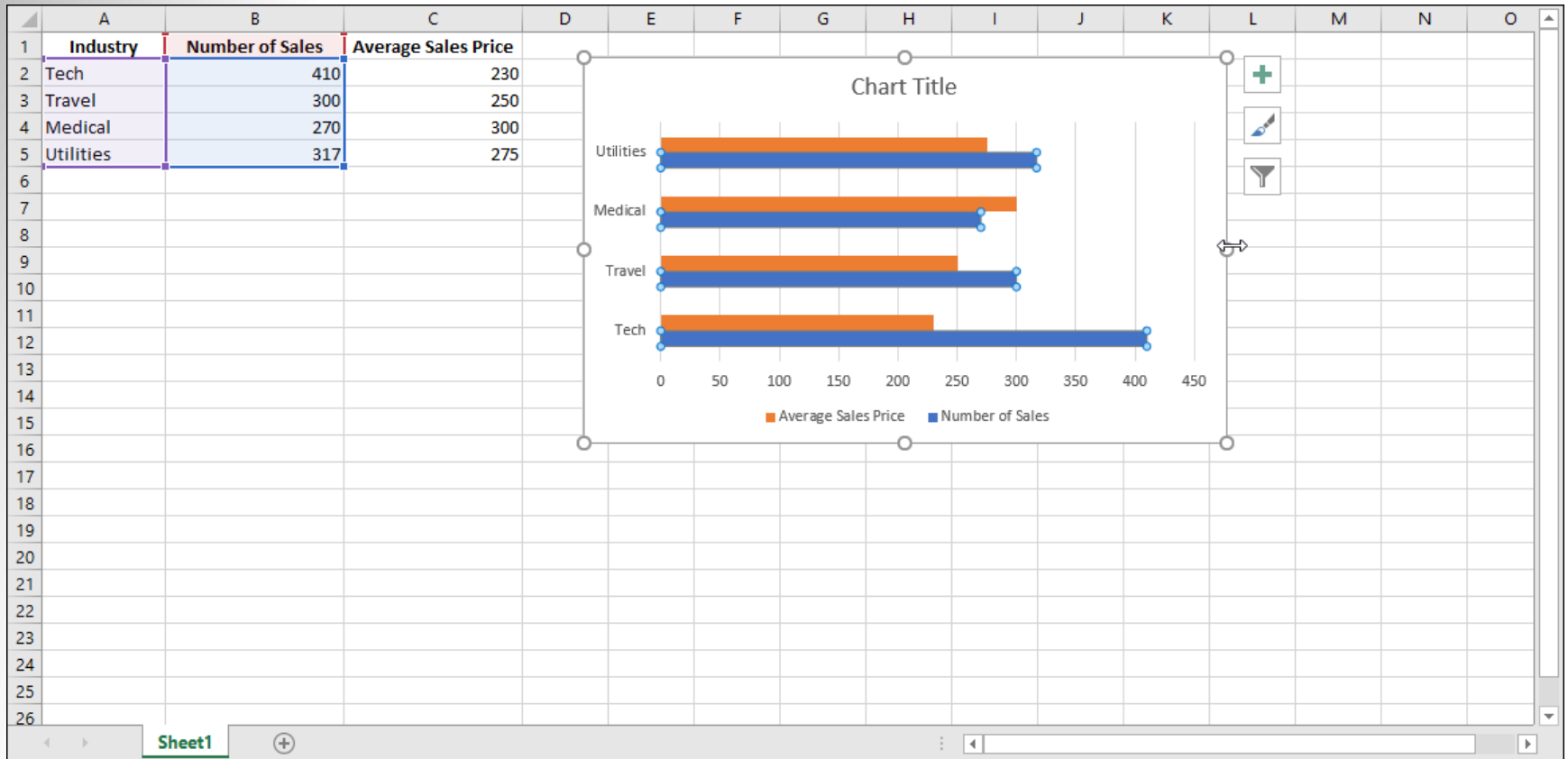


Lesson: Format Charts

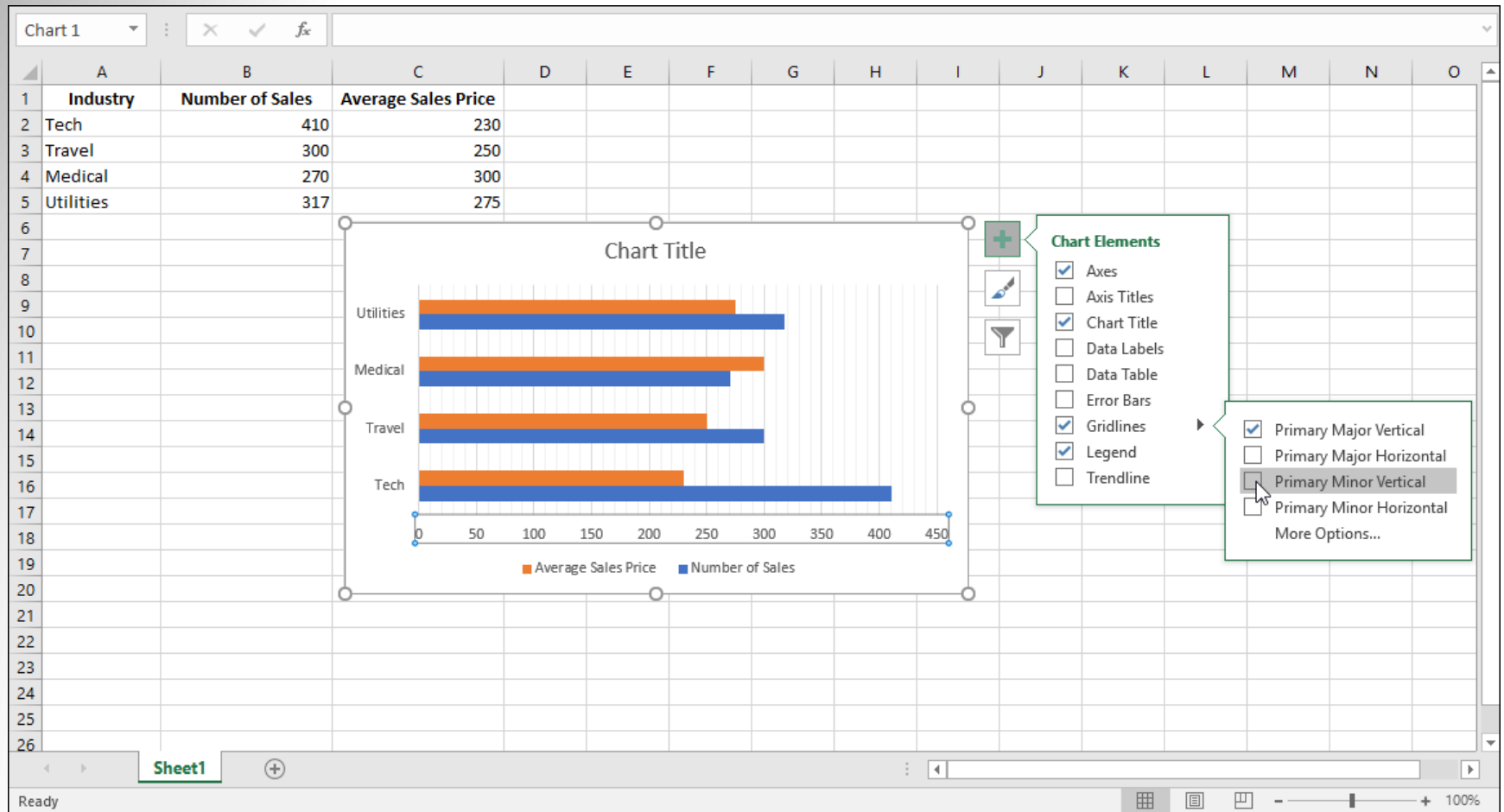
In this lesson, we'll introduce the following topics:

- Resize charts
- Add and modify chart elements
- Apply chart layouts and styles
- Move charts to a chart sheet
- Add data to a chart on a chart sheet

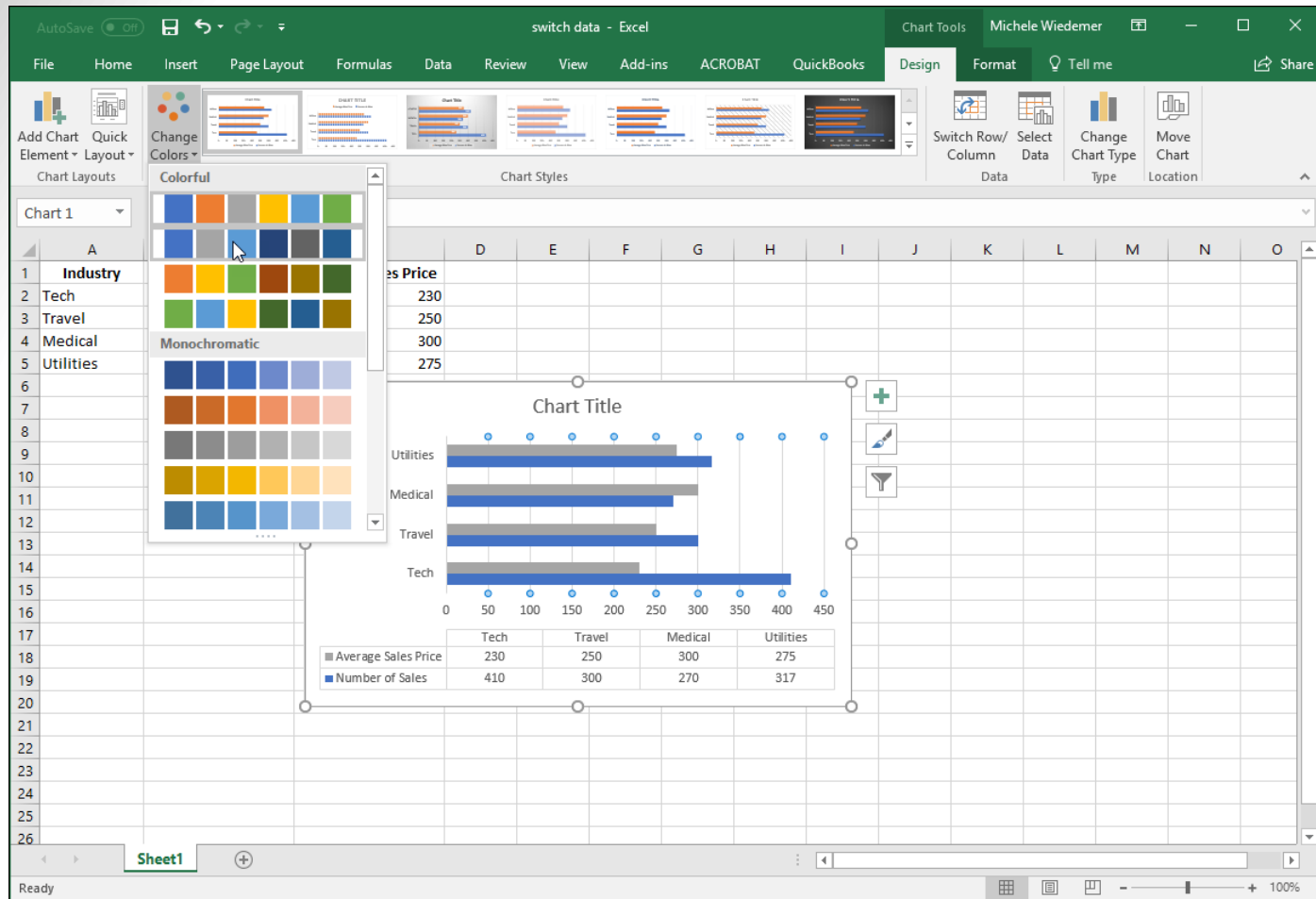
Resize Charts



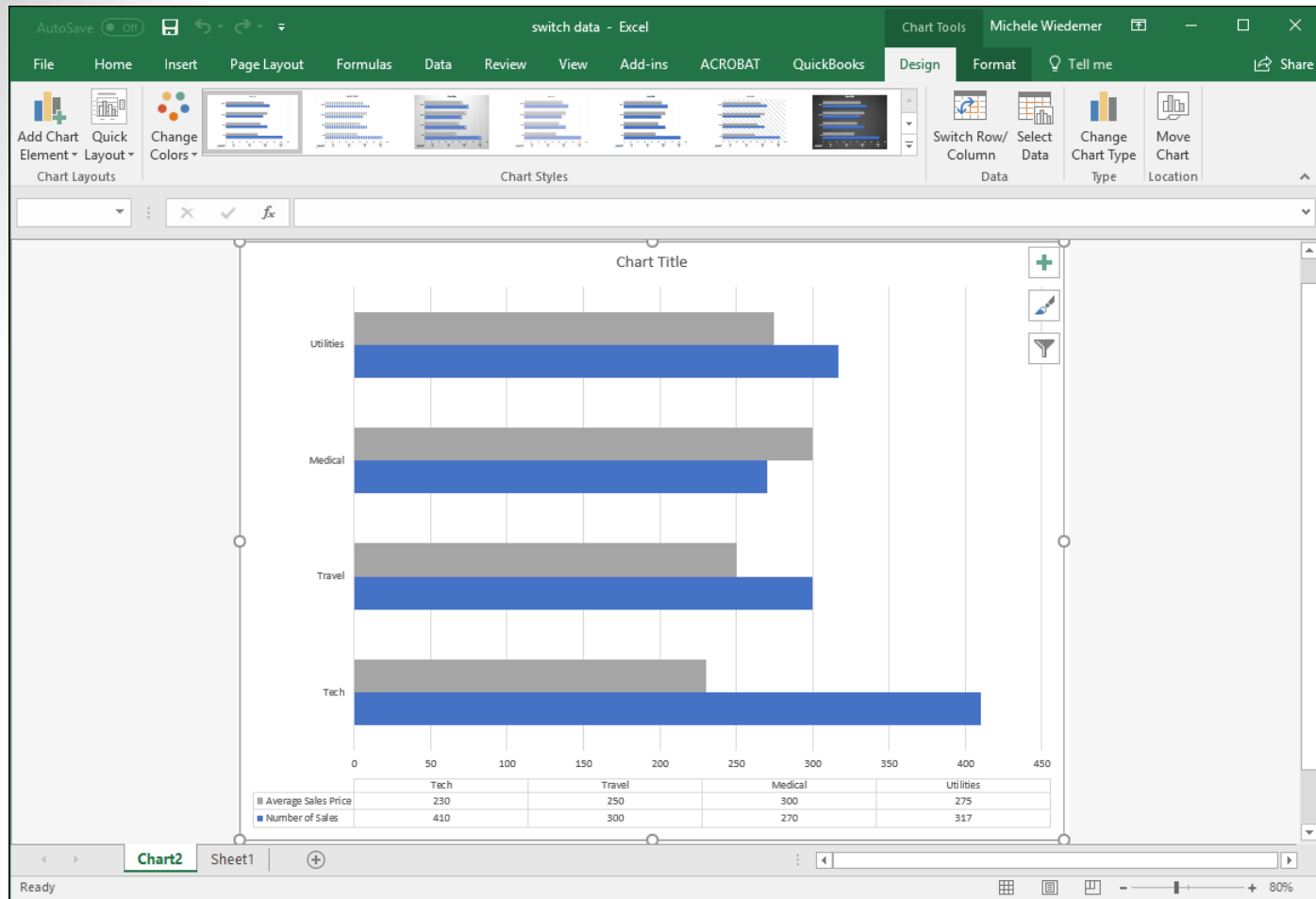
Add and Modify Chart Elements



Apply Chart Layouts and Styles



Move Charts to a Chart Sheet



Add Data to a Chart on a Chart Sheet

The screenshot shows the Microsoft Excel interface with a chart sheet named 'Chart2' active. The background spreadsheet contains the following data:

Industry	Number of Sales	Average Sales Price
Tech	410	
Travel	300	
Medical	270	
Utilities	317	
Entertainment	250	

The 'Select Data Source' dialog box is open, showing the following configuration:

- Chart data range:** =Sheet1!\$A\$1:\$C\$6
- Legend Entries (Series):**
 - ☒ Number of Sales
 - ☒ Average Sales Price
- Horizontal (Category) Axis Labels:**
 - ☒ Tech
 - ☒ Travel
 - ☒ Medical
 - ☒ Utilities
 - ☒ Entertainment

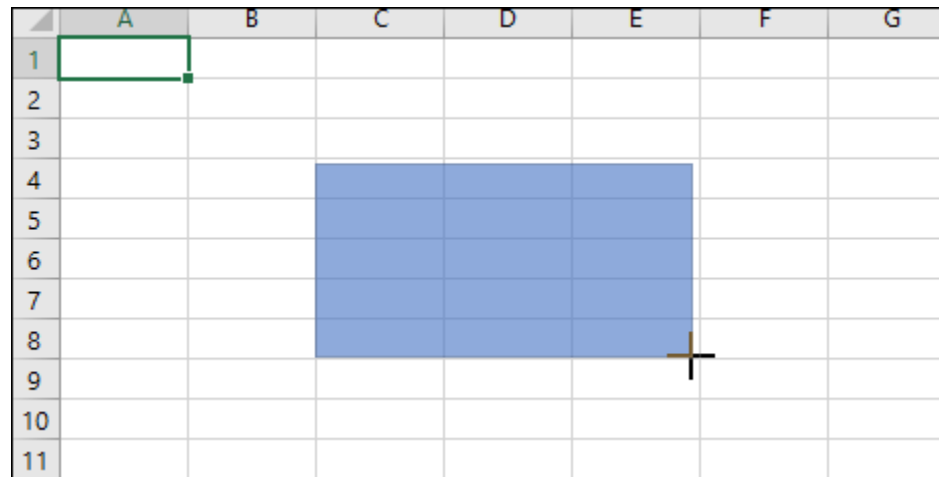
The dialog box also includes a 'Switch Row/Column' button and 'OK' and 'Cancel' buttons at the bottom.

Lesson: Insert and Format Objects

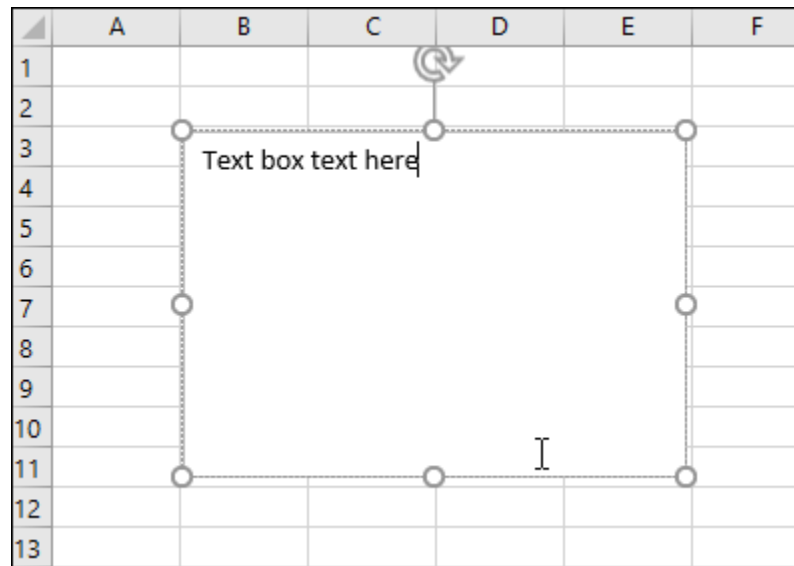
In this lesson, we'll introduce the following topics:

- Insert shapes
- Insert text boxes
- Insert pictures
- Format shapes and text boxes
- Add alternative text

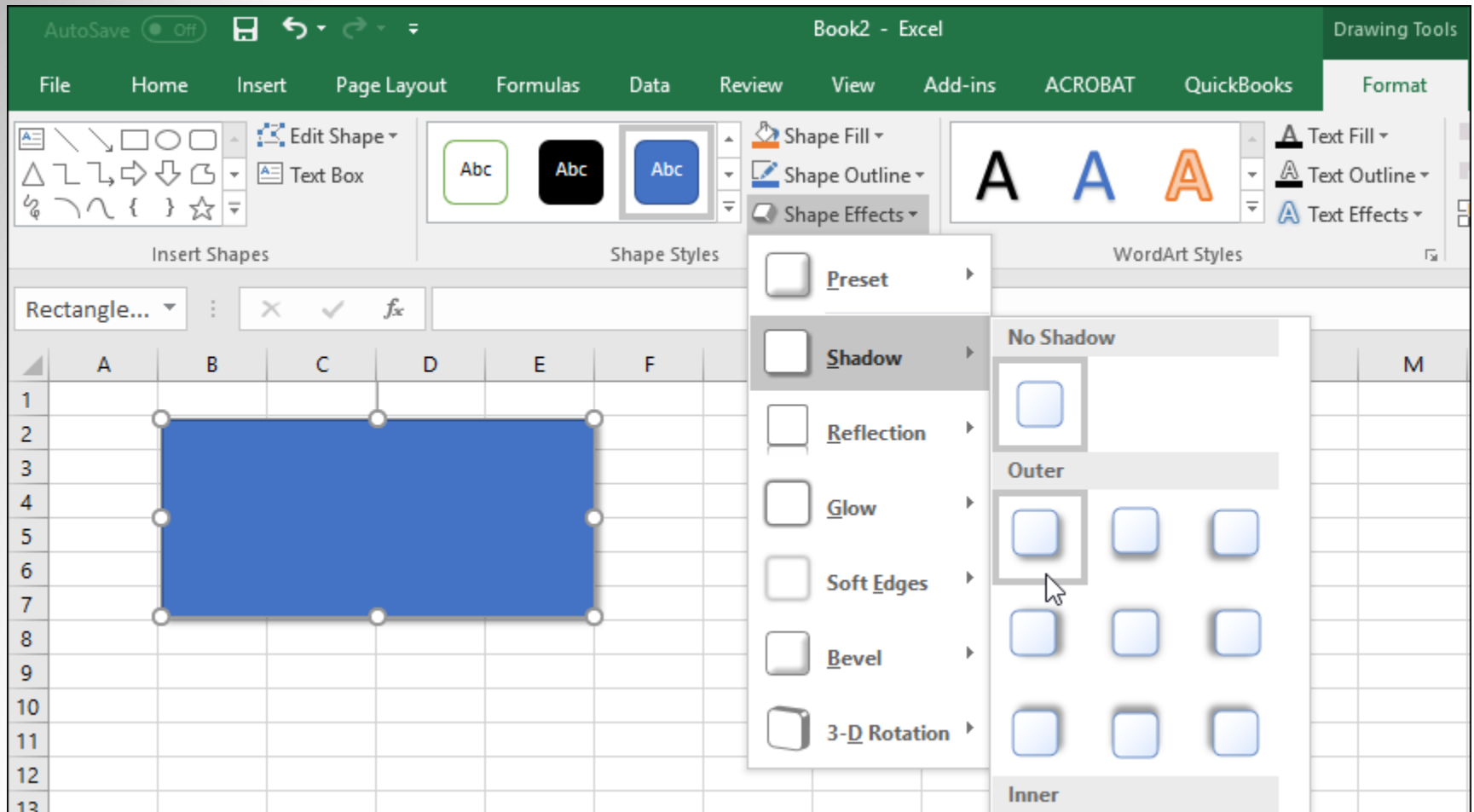
Insert Shapes



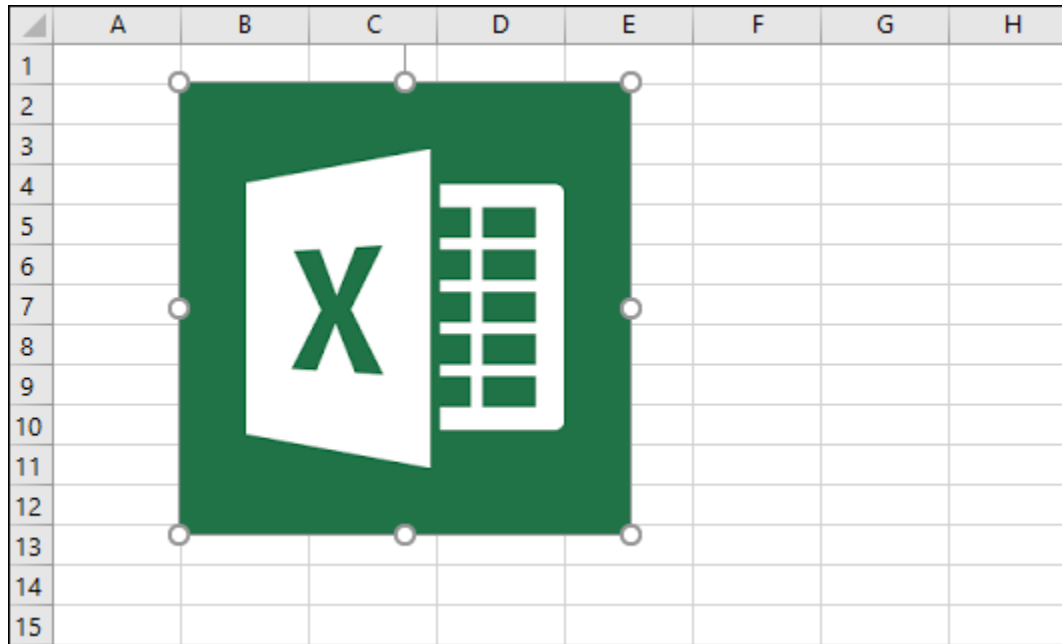
Insert Text Boxes



Format Shapes and Text Boxes



Insert Images



Add Alternative Text to Objects for Accessibility

