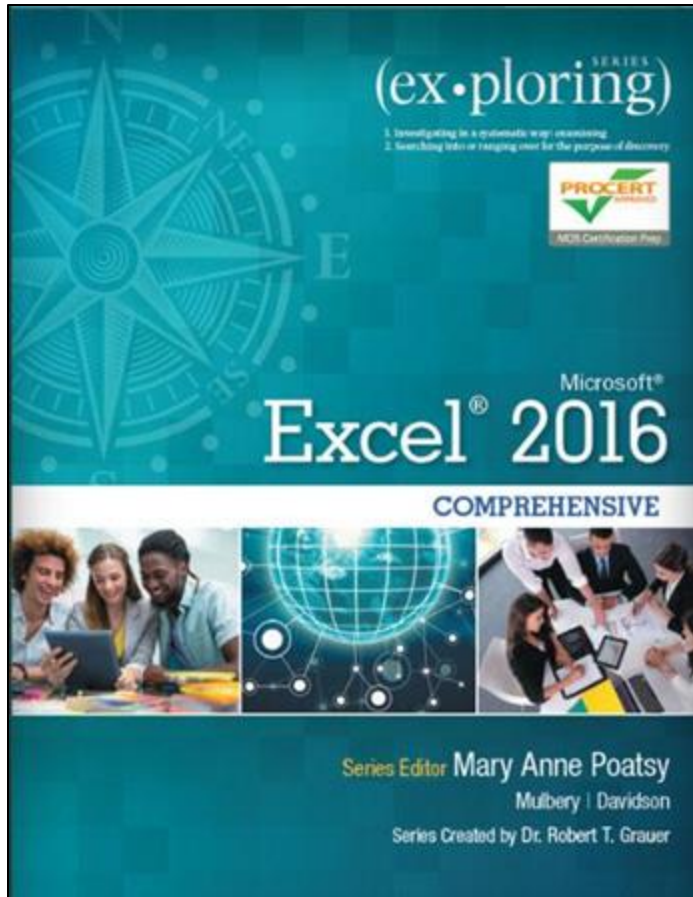


Exploring: Microsoft® Excel® 2016 Comprehensive

First Edition



Chapter 3

Charts Depicting Data Visually

Objectives

- Select the Data Source
- Choose a Chart Type
- Move, Size, and Print a Chart
- Add, Edit, and Format Chart Elements
- Apply a Chart Style and Colors
- Modify the Data Source
- Create and Customize Sparklines

Objective 1: Select the Data Source

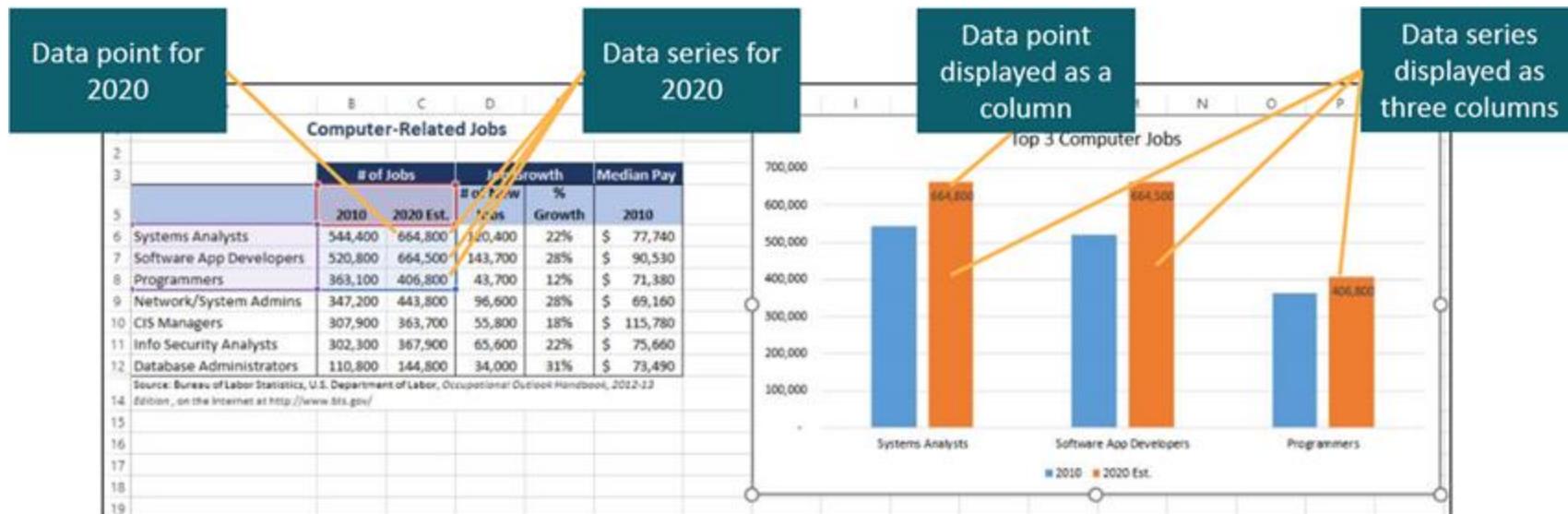
Skills:

- Select an Adjacent Range
- Select a Nonadjacent Range

Select the Data Source (1 of 4)

- Chart—visual representation of numerical data
- Data point—cell containing a value
- Data series—group of related data points

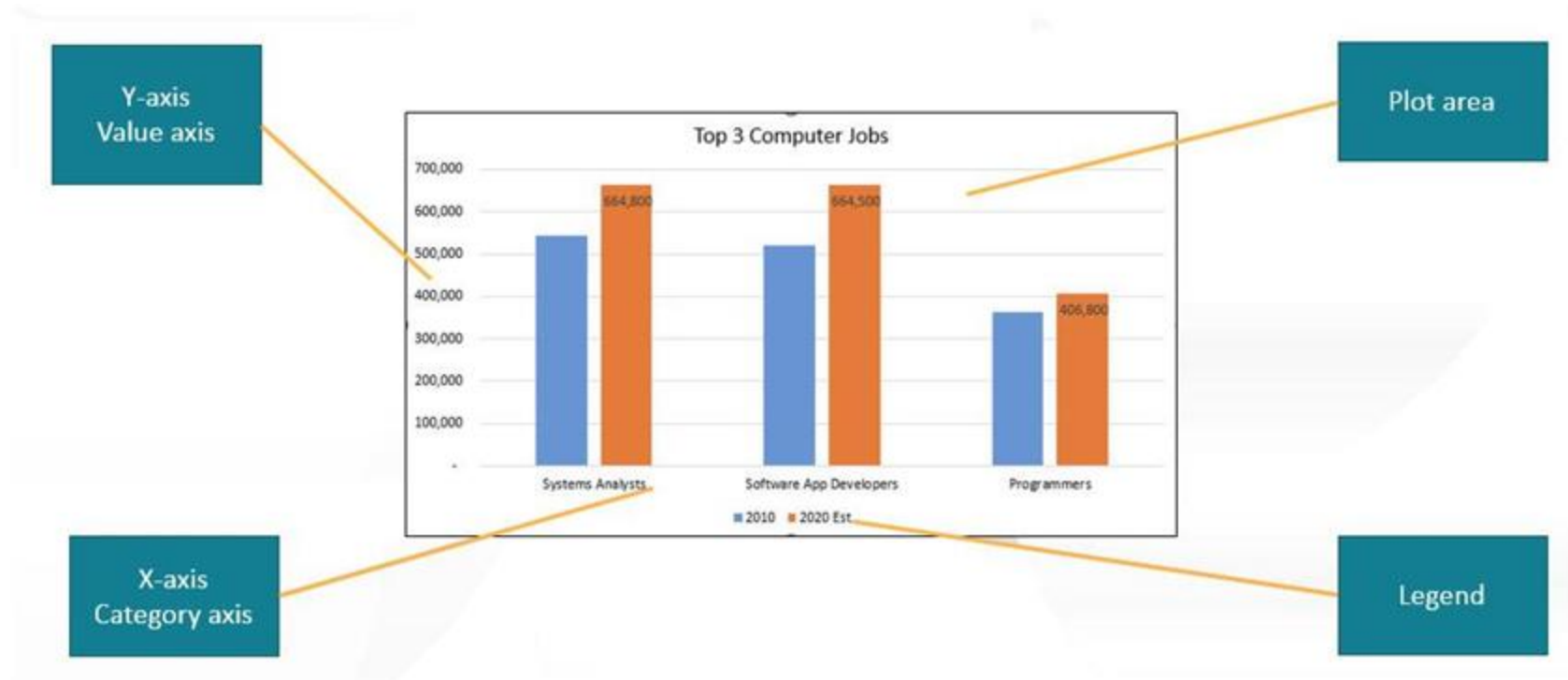
Select the Data Source (2 of 4)



Select the Data Source (3 of 4)

- Chart elements:
 - Chart area
 - Plot area
 - X-axis
 - Y-axis
 - Legend

Select the Data Source (4 of 4)



Objective 2: Choose a Chart Type

Skills:

- Create a Clustered Column Chart
- Create a Bar Chart
- Change the Chart Type
- Create a Line Chart
- Create a Pie Chart
- Create a Combo Chart
- Create an Area Chart
- Create a Scatter Chart
- Create a Stock Chart

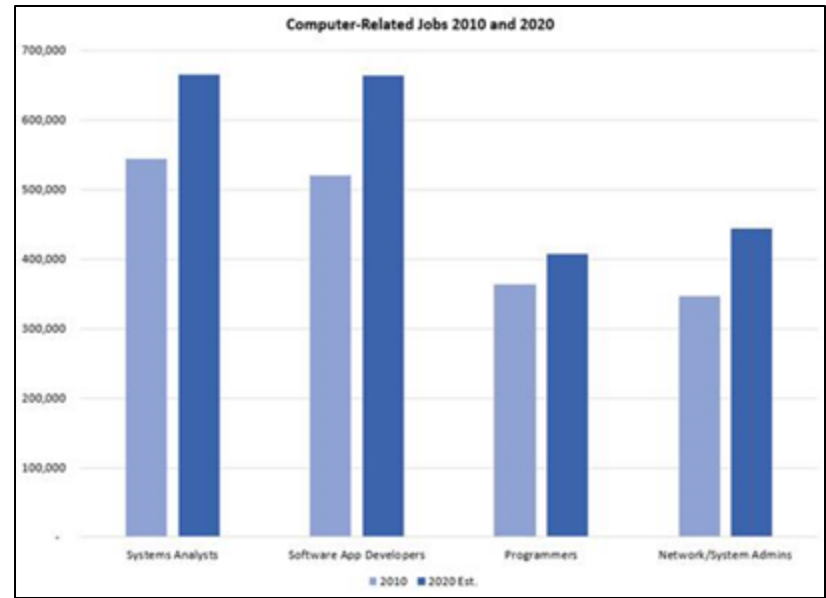
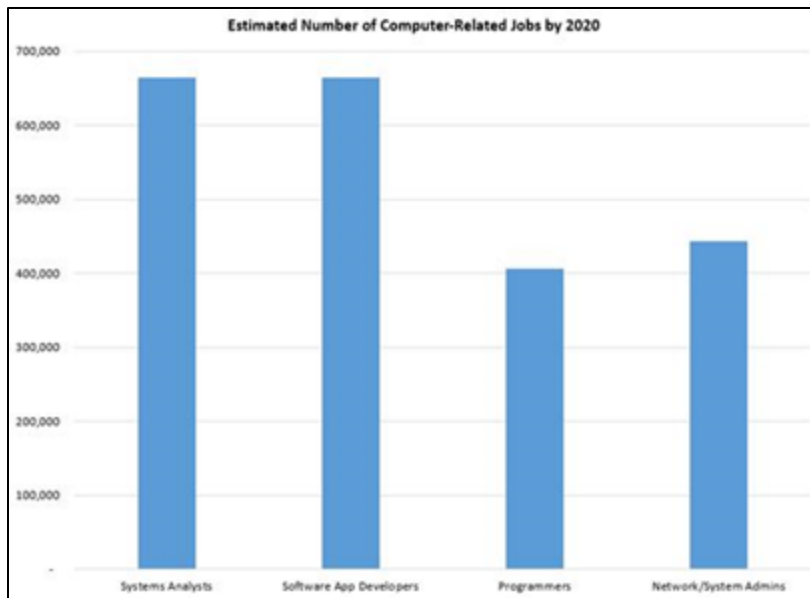
Choose a Chart Type (1 of 9)

- Chart types:
 - Column—displays values in vertical columns and categories along horizontal axis
 - Bar—displays values in horizontal bars and categories along vertical axis
 - Line—displays category data on horizontal axis and value data on vertical axis
 - Pie—shows proportion of individual data points to the total

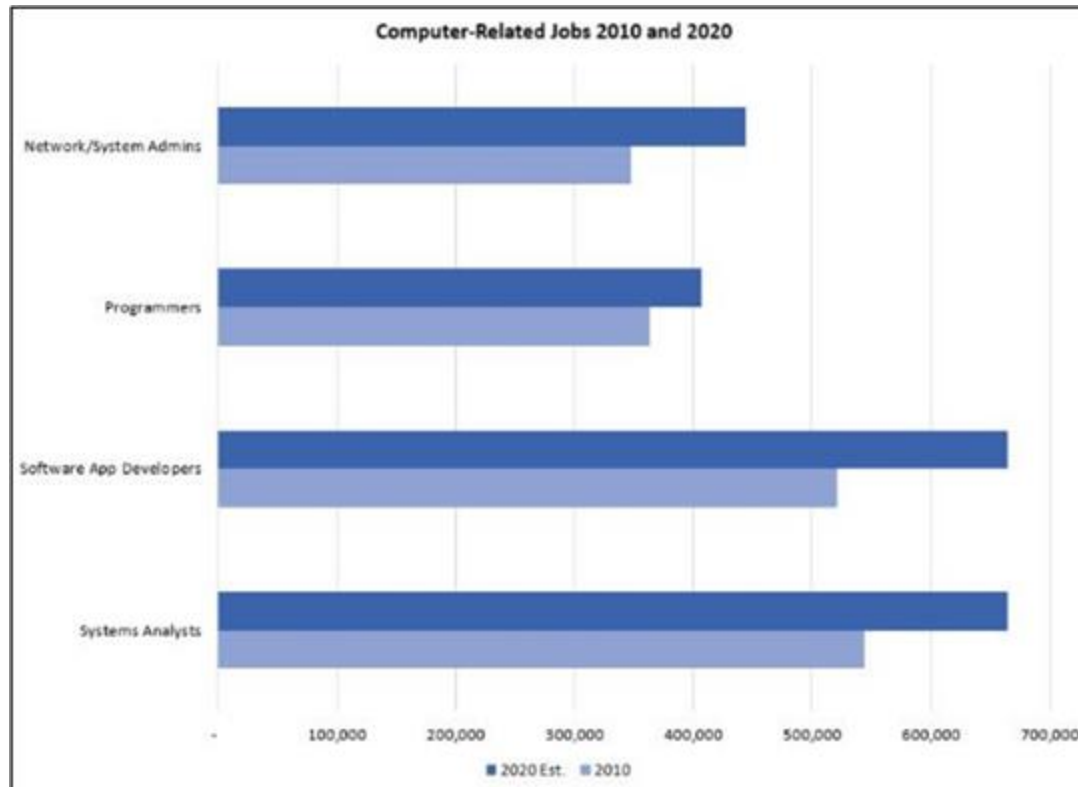
Choose a Chart Type (2 of 9)

- Chart types:
 - Combo—combines two chart types
 - Area—similar to a line chart
 - Scatter—shows relationship between two numerical variables
 - Stock—shows fluctuations in stock prices

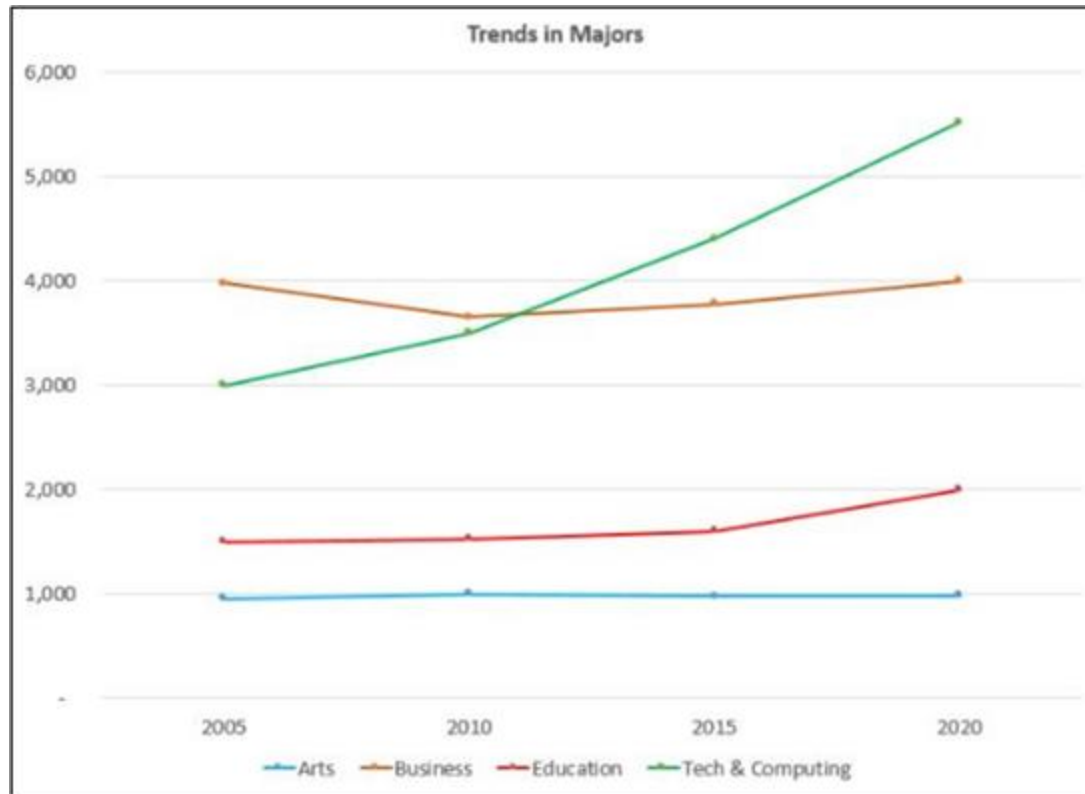
Choose a Chart Type (3 of 9)



Choose a Chart Type (4 of 9)

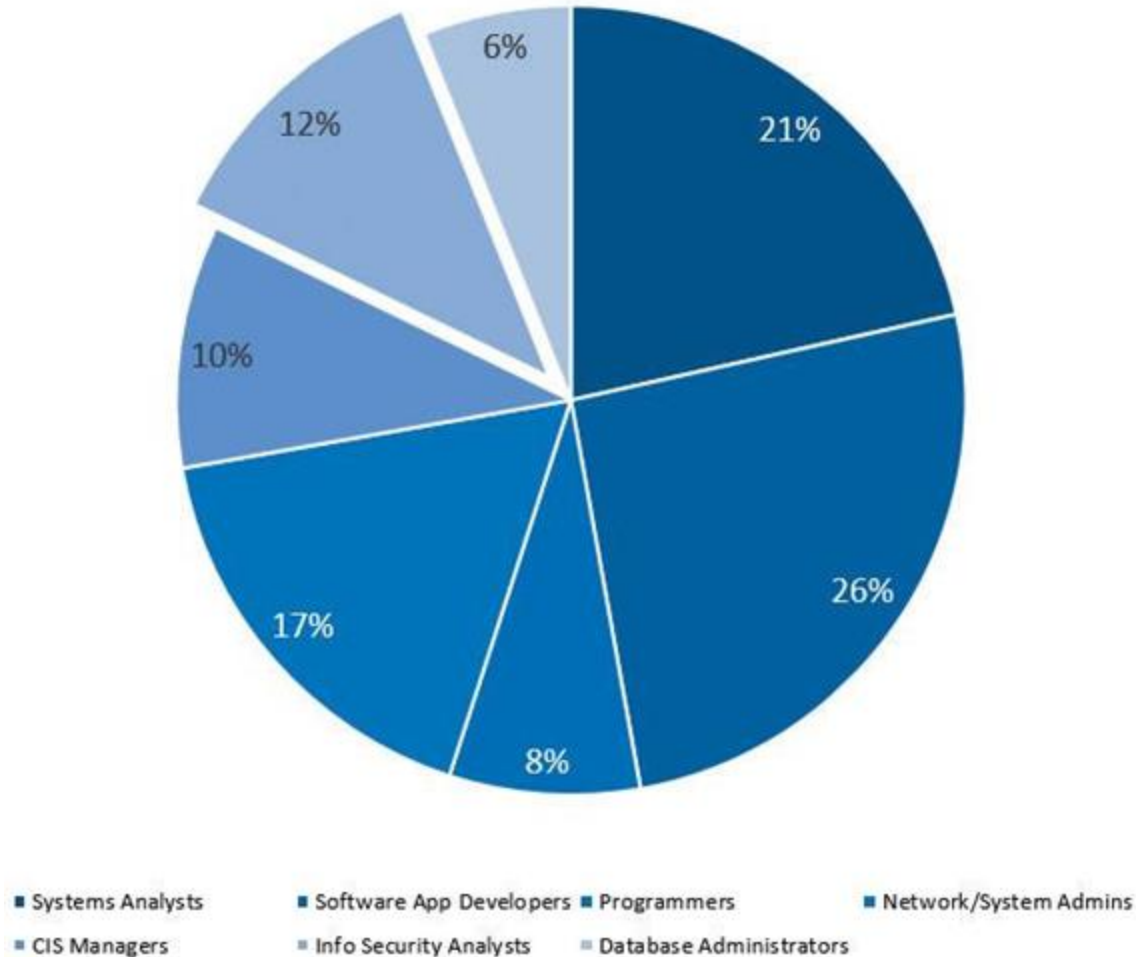


Choose a Chart Type (5 of 9)

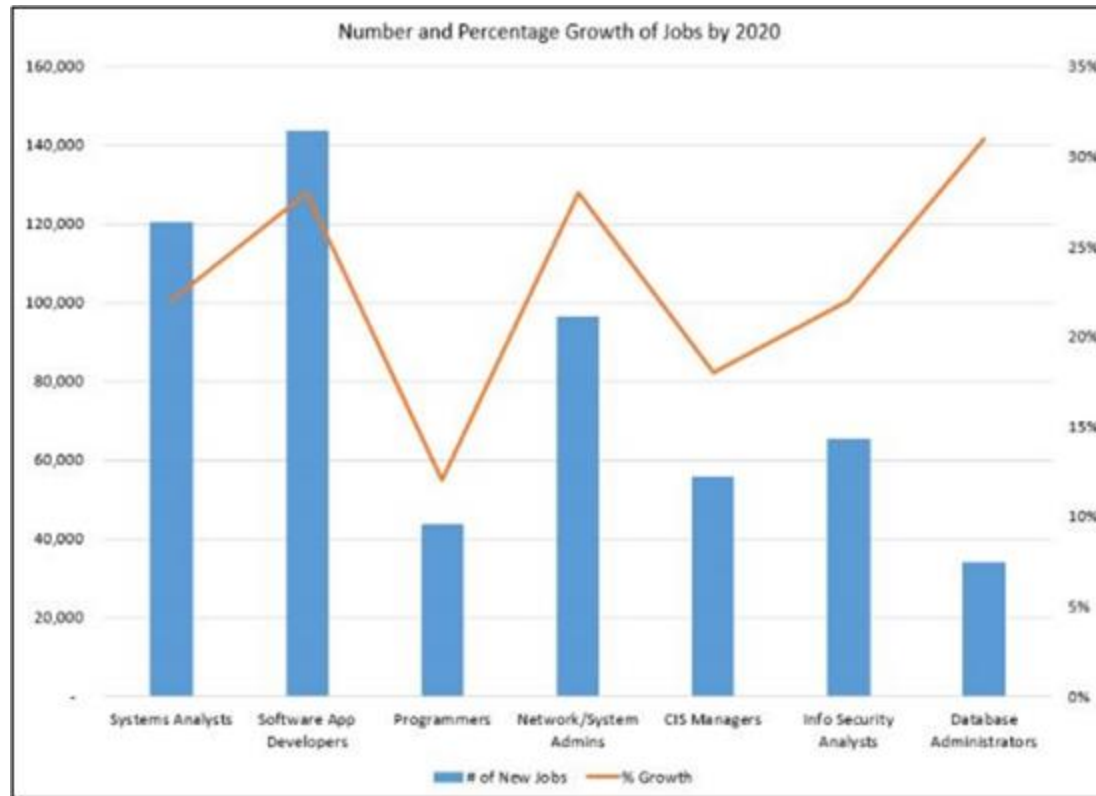


Choose a Chart Type (6 of 9)

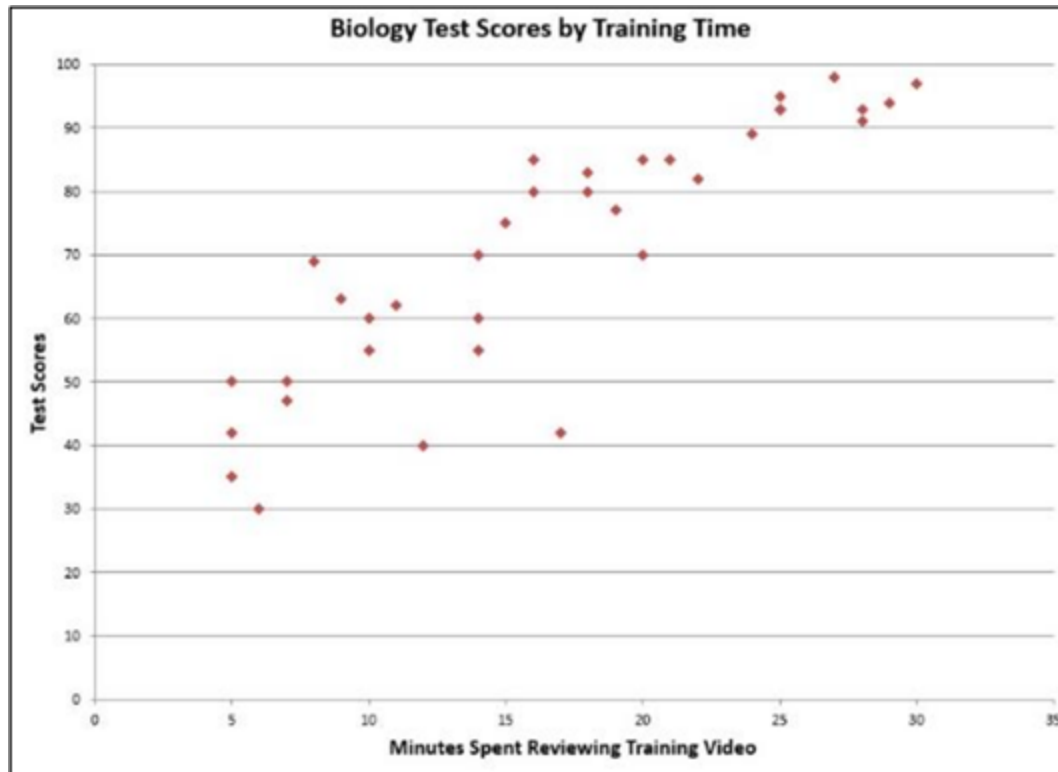
Percentage of New Jobs in 2020 by Job Title



Choose a Chart Type (7 of 9)



Choose a Chart Type (8 of 9)



Choose a Chart Type (9 of 9)

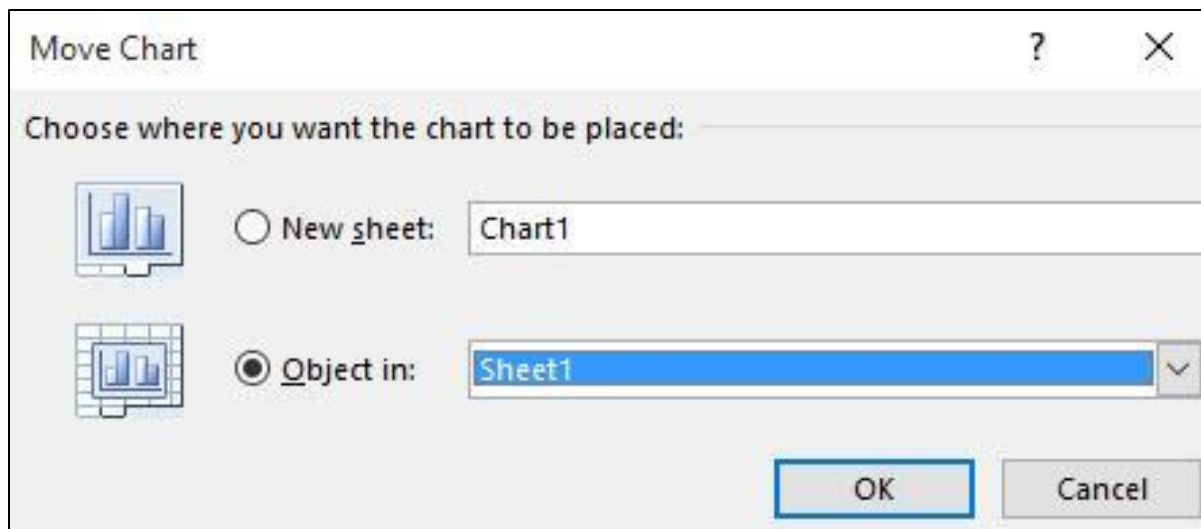


Objective 3: Move, Size, and Print a Chart

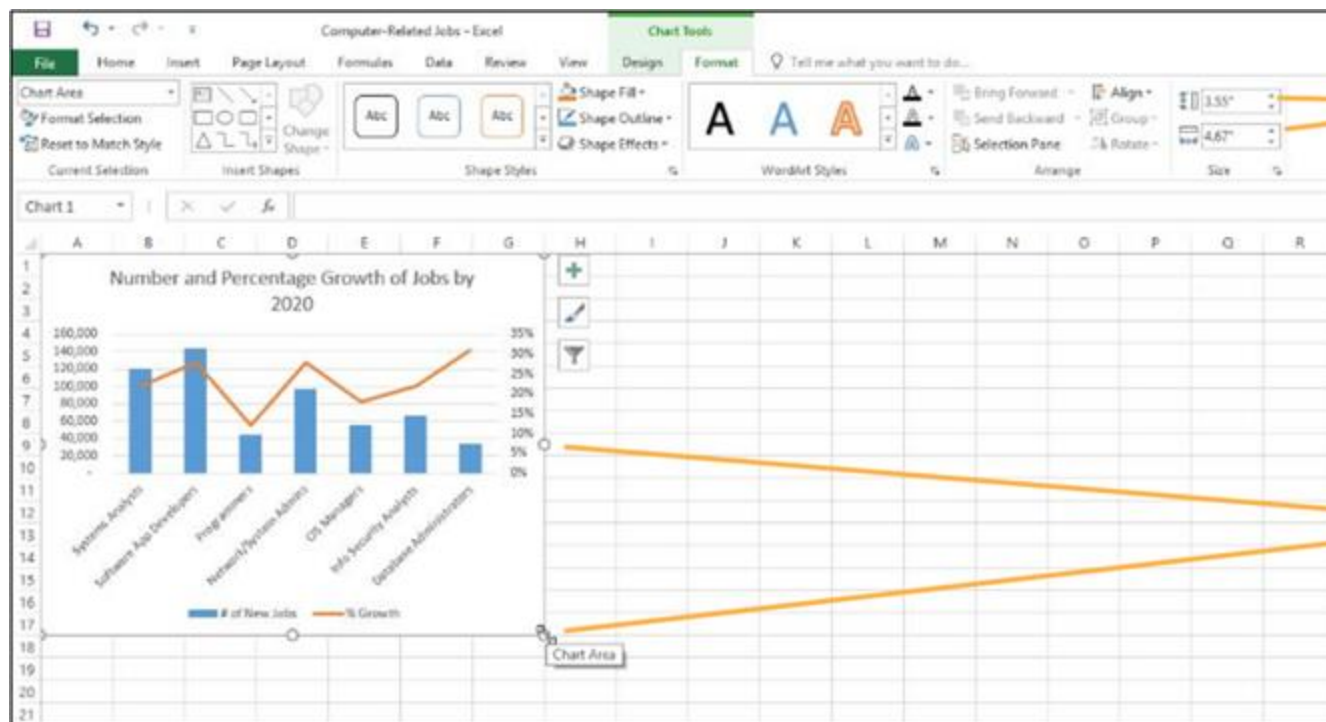
Skills:

- Move a Chart to a New Chart Sheet
- Move a Chart Within a Worksheet
- Size a Chart

Move, Size, and Print a Chart (1 of 2)



Move, Size, and Print a Chart (2 of 2)



Shape Width and Height boxes

Sizing handles

Objective 4: Add, Edit, and Format Chart Elements (1 of 2)

Skills:

- Edit and Format Chart Titles
- Add and Format Axes Titles
- Format Axes
- Add, Position, and Format Data Labels
- Format and Position the Legend
- Apply a Quick Layout
- Format the Chart Area

Objective 4: Add, Edit, and Format Chart Elements (2 of 2)

- Format the Plot Area
- Format a Data Series
- Format the Gridlines
- Format a Data Point

Add, Edit, and Format Chart Elements (1 of 4)

- Chart elements:
 - Axis title—describes category or value axes
 - Chart title—describes entire chart
 - Data label—shows exact value or name of data point
 - Data table—grid that contains data source values and labels

Add, Edit, and Format Chart Elements (2 of 4)

- Chart elements:
 - Error bars—visuals indicating statistics for data point or marker
 - Gridlines—horizontal or vertical lines
 - Legend—identifies attributes assigned data series
 - Trendline—line that depicts trends

Add, Edit, and Format Chart Elements (3 of 4)

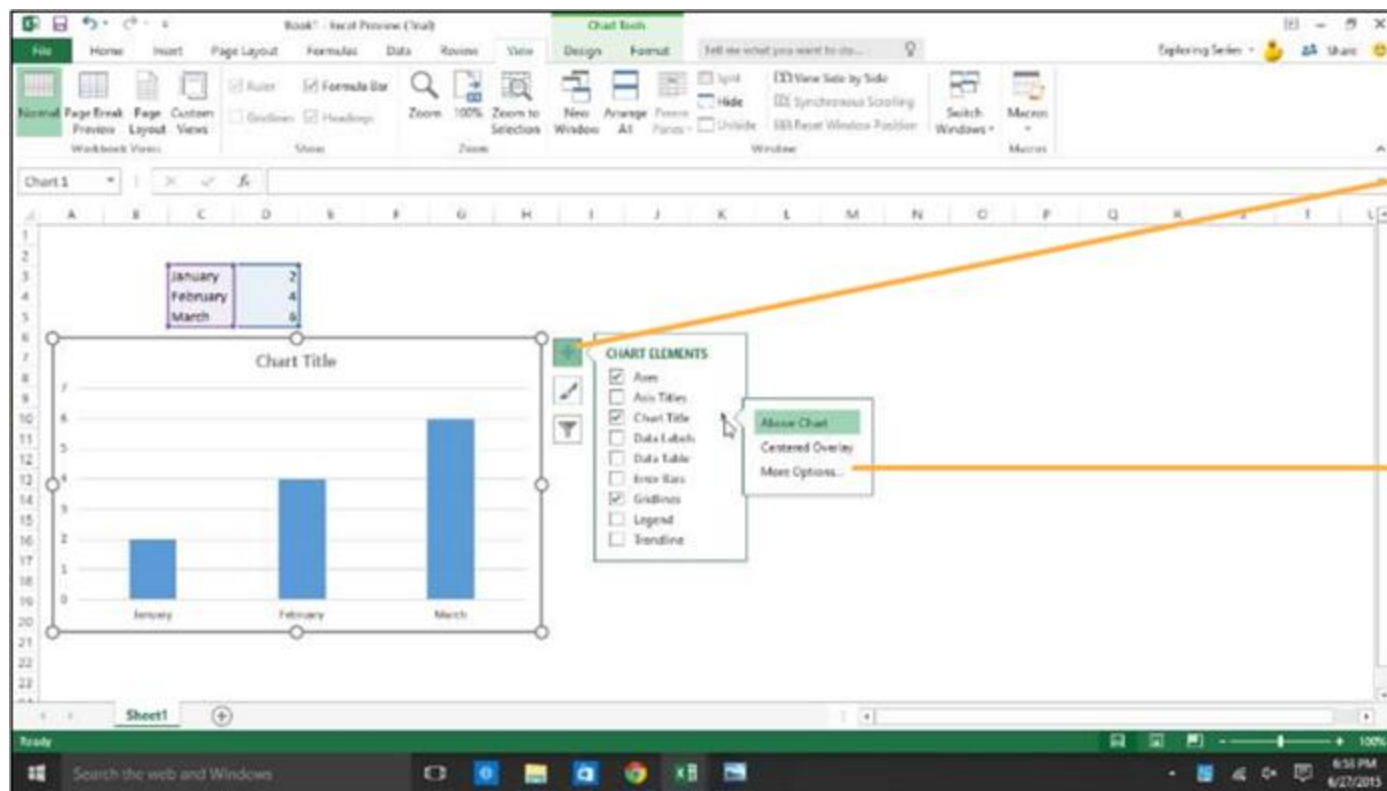
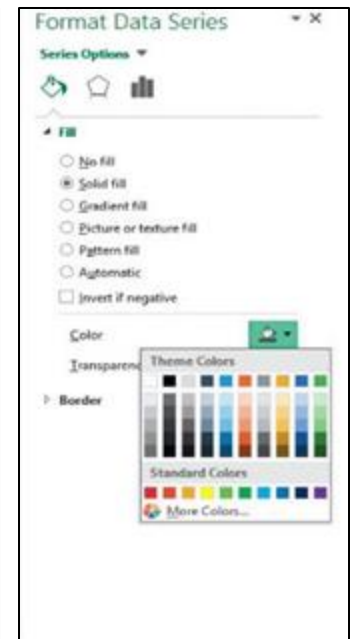
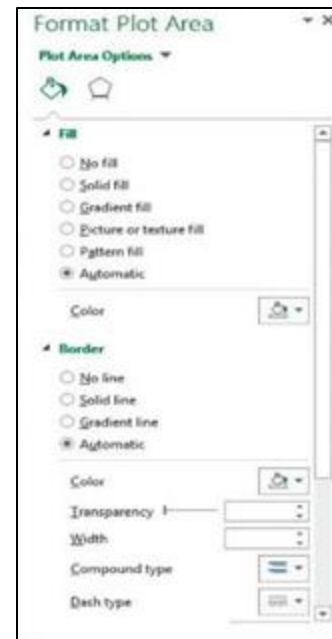
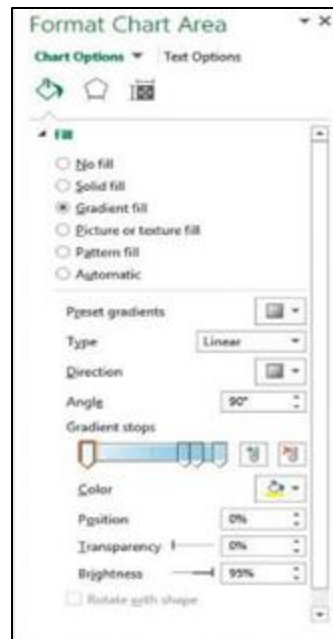


Chart
Elements

More
Options

Add, Edit, and Format Chart Elements (4 of 4)



Objective 5: Apply a Chart Style and Colors

Skills:

- Apply a Chart Style
- Change Colors

Apply a Chart Style and Colors

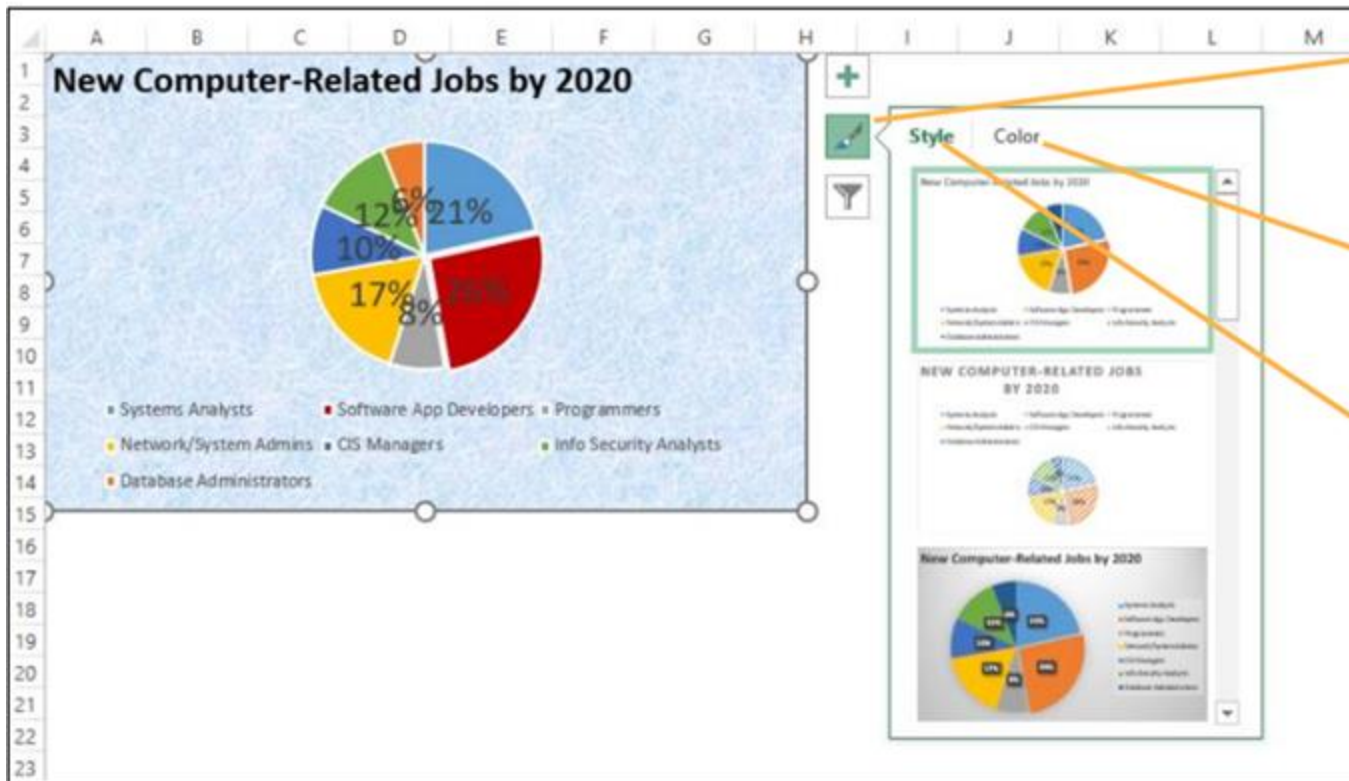


Chart
Styles

Color
tab

Style
tab

Objective 6: Modify the Data Source

Skills:

- Apply Chart Filters
- Switch Row and Column Data

Modify the Data Source (1 of 3)

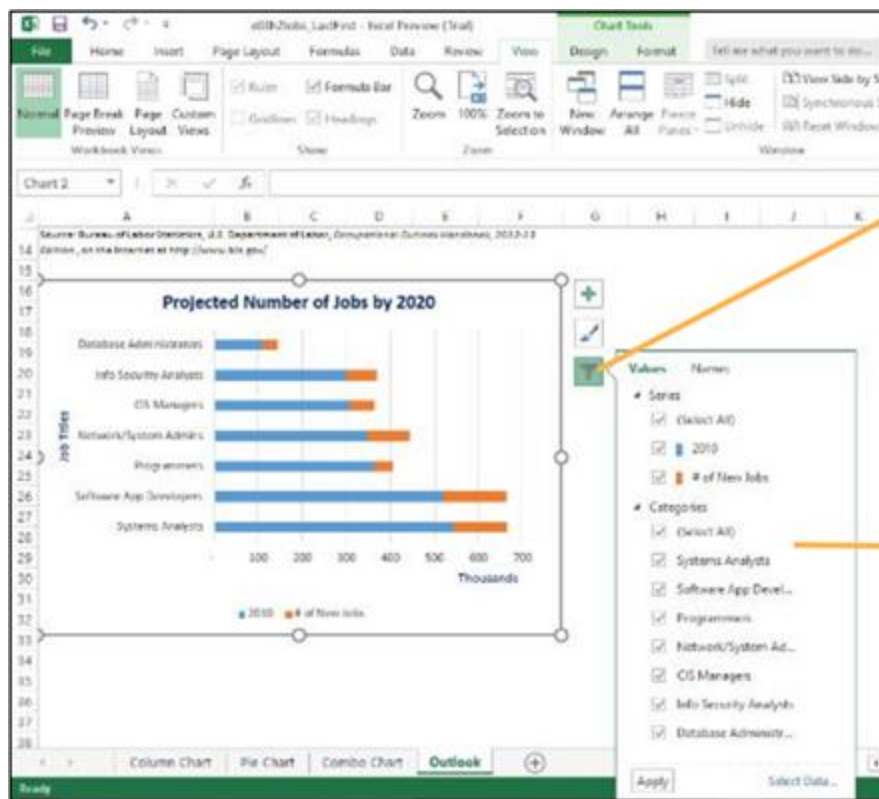


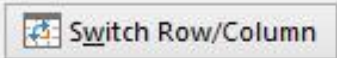
Chart
Filters

Select or
deselect
objects

Modify the Data Source (2 of 3)

Select Data Source

Chart data range:

 Switch Row/Column

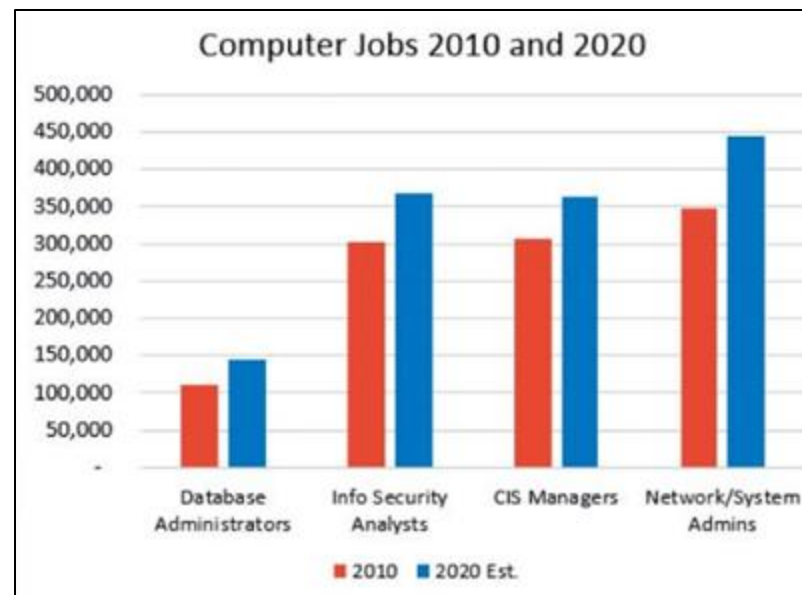
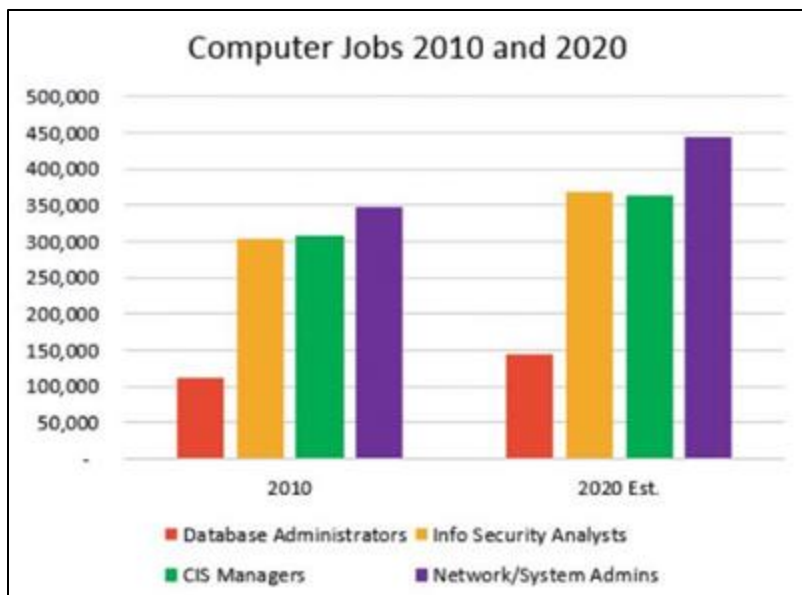
Legend Entries (Series)

- ☒ Systems Analysts
- ☒ Software App Developers
- ☒ Programmers
- ☒ Network/System Admins

Horizontal (Category) Axis Labels

- ☒ 2010
- ☒ 2020 Est.

Modify the Data Source (3 of 3)



Objective 7: Create and Customize Sparklines

Skills:

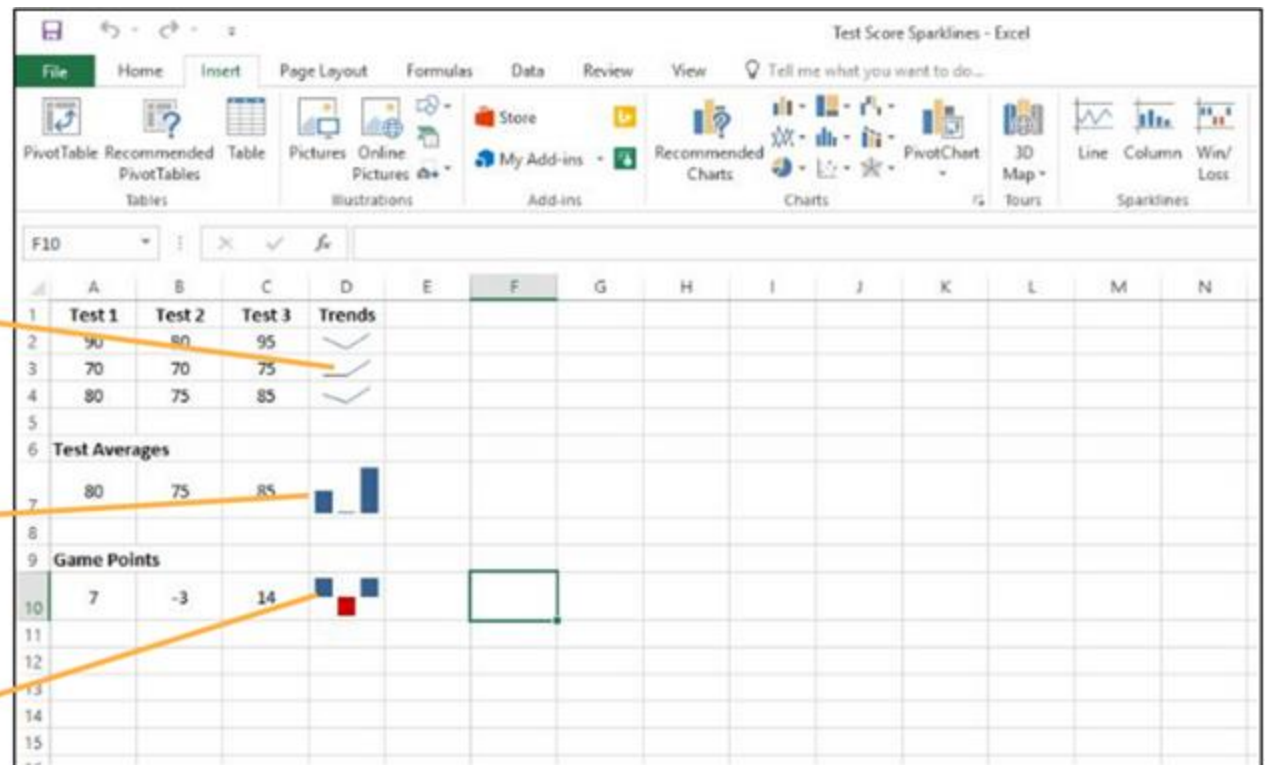
- Insert a Sparkline
- Customize Sparklines

Create and Customize Sparklines (1 of 3)

Line
sparkline

Column
sparkline

Win/Loss
sparkline



Create and Customize Sparklines (2 of 3)

The image shows an Excel spreadsheet with the following data:

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	Test 1	Test 2	Test 3	Trends											
2	90	80	95												
3	70	70	75												
4	80	75	85												
5															
6	Test Averages														
7	80	75	85												
8															
9	Game Points														
10	7	-3	14												
11															
12															
13															
14															
15															
16															
17															

The 'Create Sparklines' dialog box is open, showing the following settings:

- Choose the data that you want: Data Range: A2:C2
- Choose where you want the sparklines to be placed: Location Range: D2

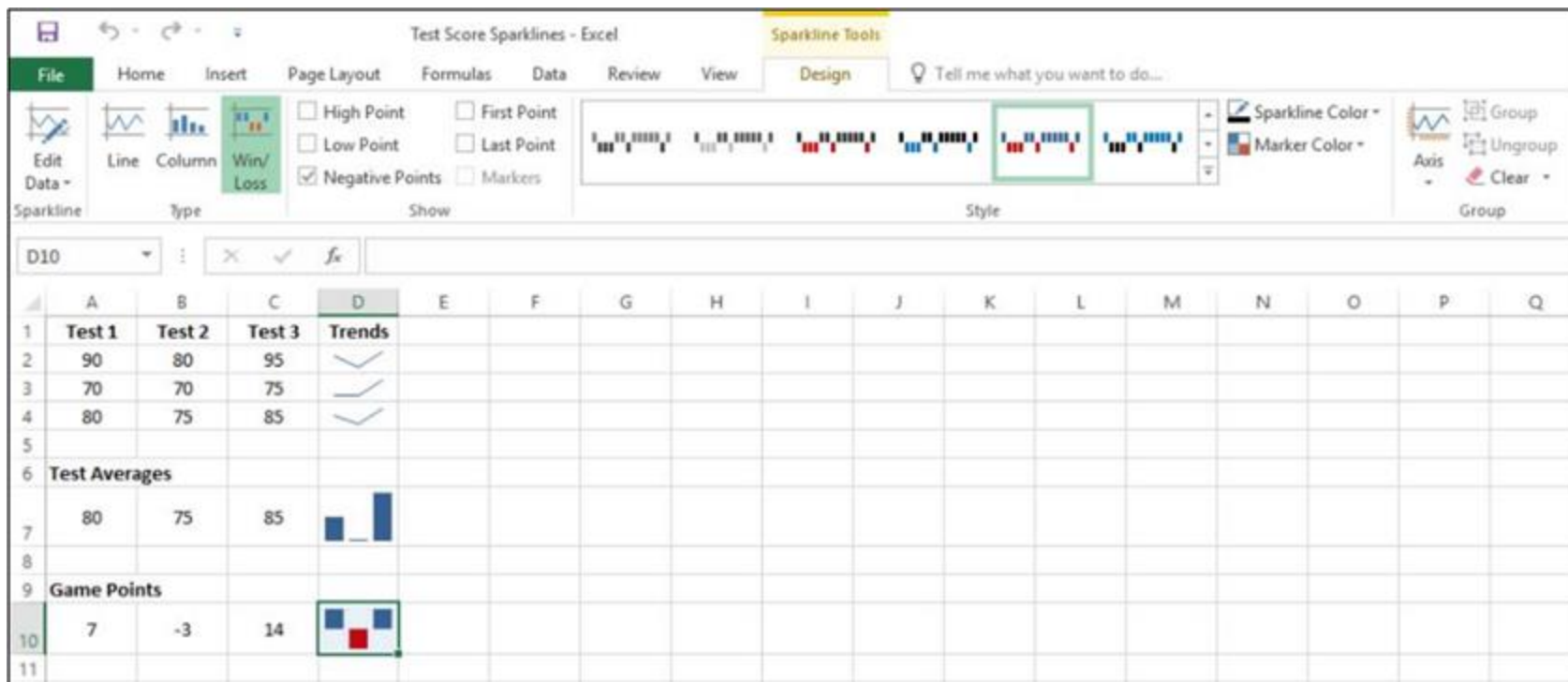
Annotations:

- Orange lines point from the 'Data Range' and 'Location Range' fields to the text boxes on the right.
- A green box highlights the data range A2:C2 in the spreadsheet.

Data range already selected

Locate beginning in cell D2

Create and Customize Sparklines (3 of 3)



Summary

- Charts and sparklines visually represent data
- Excel provides numerous chart types and several sparkline types
- Charts and sparklines, and their elements, can be edited and formatted
- Filters can be applied to a chart to focus on specific data elements

Questions



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