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PowerPoint 2013: Creating Tables and Charts

Take Show the Data: Charts and Chart Tools

Advanced PowerPoint Objectives In this lesson, you will learn how to:

- 1. Insert and modify Charts in PowerPoint.
- 2. Use the **Chart Elements** to format the Chart Title, Axis Title and Data Table.
- 3. Format the Axes and the Gridlines.
- 4. Use the Chart Tools to change the Chart Type, edit the Chart data, and apply Chart Styles.
- 5. Use the **Format** Ribbon to Resize a Chart and edit the Position on the slide.



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Lesson 2 : Charts and Chart Tools

1. Readings

Read Lesson 2 in the Advanced PowerPoint quide, page 41-72.

Project

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A simple presentation that includes Charts and introduces the Chart Tools.

Downloads

Counting Chickens 2013 COMPLETE.pptx Farm1.gif Chicken4.jpg

2. Practice

Complete the Practice Activity on page 73.

3. Assessment

Review the Test questions on page 74

Chart Tools->Design Ribbon

Chart Tools->Format Ribbon

🕭 Shape Fill 🗸 Bring Forward 👻 📜 Align 🗸 Α. 3.63" - Hei Group -A Shape Outline -Send Backward **₩**5" ٠ ÷ Shape Effects -Selection Pane A Rotate ÷ WordArt Styles 5 Size 5 Arrange E. 2 3 1

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Switch Row/

Column

3

2

Select

Data

Data

Menu Maps

From the Chart Elements.

- 1. Chart Elements, page 52
- 2. Chart Elements->Chart Title, page 53
- 3. Chart ElementsLegend, page 55
- 5. Chart Elements->Data Labels, page
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6. Chart Styles->Style, page 59

More Menu Maps

From the Chart Tools->Design Ribbon

- 1. Chart Tools->Design, page 60
- 2. Chart Tools->Design->Data->Select Data, page 61
- 3. Chart Tools->Design->Data->Switch Row/Column, page 62
- 4. Chart Elements->Data Table, page 56 4. Chart Tools->Design->Type->Change Chart Type, page 63

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Refresh

Data

Edit

Data 👻

Change

Chart Type

Type

From the Chart Tools->Format Ribbon

1. Chart Tools-> Format->Shape Styles->Shape Fill, page 64

2. Chart Tools-> Format->Shape Styles->Shape Effects, page

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3. Chart Tools->Format->Size, page 67



Show the Data

Your data is supposed to tell a story but rows of numbers can be difficult to read. The numbers, percents and formulas just get lost and your message isn't heard. Consider presenting your data graphically. People can look at a pie chart and see that one slice of "pie" is bigger than the rest. In the previous lesson, we added (embedded) a Microsoft Excel spreadsheet to a slide. In this lesson, we will use Excel to create charts.

Start PowerPoint 2013. When you start PowerPoint you will be prompted to choose a template. Select a Blank Presentation.





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Before You Begin

This discussion begins by creating a sample presentation with two slides.

This presentation will have a **Theme**. Themes include Effects which can be used to format the Charts.

 Try it: Add Slides to the Presentation PowerPoint is open.
 There is one Title slide.
 Go to Home ->Slides->New Slide.
 Please add 1 new slide for a total of 2.

Keep going...

Home ->Slides->New Slide





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Enter Some Sample Text

Enter the following Text and format the presentation with a Theme.

2. Try it: Enter Text Go to Slide 1. Enter the Title: Charlotte's Website Enter the Subtitle: New Fall Products

Try This, Too: Select a Theme Go to **Design->Themes.** Select a Theme: Organic.

Keep going...

Design ->Themes



Exam 77-422: Microsoft PowerPoint 2013 3.0 Create Slide Content 3.1 Insert and Format Text: Enter Text



Insert a Chart 3. Try it: Insert a Chart Click on Slide 2. Edit the Title: Charlotte's Website.

Select the bottom Text Box. Go to **Insert ->Illustrations->Chart**.

Keep going...

Two

Memo to Self: You can click on the **Chart** button in the Placeholder, too.



Insert ->Illustrations->Chart



Exam 77-422: Microsoft PowerPoint 2013 3.0 Create Slide Content

3.3 Insert and Format Charts: Insert Charts



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Two

Select a Chart 4. What Do You See? You will be prompted to select a Chart.

The **Chart Templates** include Column, Line, Pie, Bar, Area, XY, Stock, Surface and many others.

Go to **Column**. Select: Clustered Column. Click **OK**.

Keep going...

Set as Default Chart: You can rightclick a chart **template** and make that chart the Default-the one that is always used when you click on Chart in the Illustrations Group.

Insert ->Illustrations->Chart



Exam 77-422: Microsoft PowerPoint 2013

3.0 Create Slide Content

3.3 Insert and Format Charts: Insert Charts



ET!

Hello, Little Chart

5. What Do You See? You should see a new Column Chart on Slide 2.

The **Chart Tools** should be available in PowerPoint. The Chart Tools include: Design Format

What Else Do You See? A new, sample spreadsheet will be open in Excel as well.

There are four buttons at the top of the spreadsheet: Update, Undo, Redo and Edit in Excel.

Keep going, this is getting interesting...

Chart Tools



Exam 77-422: Microsoft PowerPoint 2013

3.0 Create Slide Content

3.3 Insert and Format Charts: Chart Tools



Enter Chart Data 6. Try it: Enter Chart Data Select Cell B1, type: October.

Select Cell C1, type: November. Select Cell C1, type: December.

Keep going...

Two



Chart in Microsoft PowerPoint



Exam 77-422: Microsoft PowerPoint 2013 3.0 Create Slide Content 3.3 Insert and Format Charts: Edit Chart Data



Two

Enter More Data 7. Try it: Add More Labels Select Cell A2, type: Legs. Select Cell A3, type: Eggs. Select Cell A4, type: Pigs.

Try This, Too: Add the Data

Select Cell B2, type: 200. Select Cell C2, type: 220. Select Cell D2, type: 240.

Select Cell B3, type: 100. Select Cell C3, type: 200. Select Cell D3, type: 300.

Select Cell B4, type: 450. Select Cell C4, type: 550. Select Cell D4, type: 600.

Watch the Chart update as the data is entered. That's pretty cool, isn't it?

Keep going...

Chart in Microsoft PowerPoint



- 3.0 Create Slide Content
- 3.3 Insert and Format Charts: Edit Chart Data





Select the Chart Data

The sample Chart data included more information than we need. You can use the **Handle** in the bottom right corner to select the Range that is included in the Chart.

8. Try it: Select the Chart Data Select: A1:D4.

The Chart on Slide 2 will update to match the Range of Cells that you selected.

Try This, Too: Edit the Chart Data

Select Cells A4 through D4 in the last Row. Click **Delete on the keyboard. Close** the spreadsheet.

And Do This: Save the Presentation Go to File->Save.

Browse to your Documents folder. Enter a File Name: Counting Chickens.pptx Click on **Save**.

So far, so good. The spreadsheet has three months data for the new products: Legs, Eggs and Pigs at Charlotte's Website.

File->Save



	Α	В	С	D	E	F
1		October	November	December		
2	Legs	200	220	240		
3	Eggs	100	200	300		
4	Pigs	450	550	600		
5						

Exam 77-422: Microsoft PowerPoint 2013

3.0 Create Slide Content

3.3 Insert and Format Charts: Edit Chart Data



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Chart Elements

The preceding pages worked on the getting data into Excel. Let's return to PowerPoint and look at the Chart on Slide 2. Well, this little Chart is not bad for a start. It needs some work...

People like to figure things out, especially diagrams and charts. Give them a clue by labeling the Chart.

The Titles and Labels can be found in the **Chart Elements** on the right side of the Chart. The Elements include: Axes Axis Titles Chart Title Data Labels Data Table Error Bars Gridlines Legend Trendline

Keep going...

The one-L Lama, a Poem by Ogden Nash

Chart Elements



Exam 77-422: Microsoft PowerPoint 2013 3.0 Create Slide Content 3.3 Insert and Format Charts: Chart Elements



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Go to Slide 2 and select the Chart. The **Chart Tools** should be available.

Go to **Chart Elements->Chart Title**. Click the arrow on the right. Go to **Chart Title->Above Chart**.

The **Chart Title** will be placed above the Chart. The Chart has been resized to fit.

Edit the Title: Our New Fall Products

Keep going...

Chart Elements ->Chart Title->Above Chart



- 3.0 Create Slide Content
- 3.3 Insert and Format Charts: Chart Elements (Chart Title)



Elements: Label the Axis 2. Try it: Edit the Axis Titles

The Chart on Slide 2 is selected. The **Chart Elements** should be available.

Go to **Chart Elements->Axis Titles.** Click the arrow on the right. Select **Primary Vertical.** Unselect **Primary Horizontal**.

You should see a new **Axis Title** on the left side of the Chart.

Edit the Title: Monthly Sales

Keep going...

Chart Elements ->Axis Titles



The one-L Lama, He's a priest...

Exam 77-422: Microsoft PowerPoint 2013

3.0 Create Slide Content

3.3 Insert and Format Charts: Chart Elements (Axis Titles)



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Elements: Legend

A **Legend** explains the colors or symbols used in a chart or map. In this Chart, the legend gives each Month (Oct., Nov., Dec.) a different color.

3. Try it: Show the Legend

The Chart on Slide 2 is still selected. Go to **Chart Elements->Legend**. Select an option: **Top**.

The Legend can be placed Right, Top, Left and Bottom. There are More Options as well.

Keep going ...

Chart Elements ->Legend



The two-L Llama, He's a beast...

> Exam 77-422: Microsoft PowerPoint 2013 3.0 Create Slide Content

3.3 Insert and Format Charts: Add Legends to Charts





Elements: The Data Table

A Data Table shows the numbers at the bottom of the Chart. It is another useful way to convey information.

4. Try it: Show the Data Table The Chart on Slide 2 is selected. The Chart Elements should be available.

Go to Chart Elements->Data Table. Select an option: With Legend Keys.

What Do You See? You should see a new Data Table on the bottom of the Chart. The Legend Keys (Oct., Nov., Dec.) are on the left of the Chart.

Too much information? (TMI?) Please turn off (uncheck) the Data Table.

Keep going...

And I would bet a silk pajama...

Chart Elements ->Data Table->With Legend Keys



- 3.0 Create Slide Content
- 3.3 Insert and Format Charts: Chart Elements (Data Table)





Elements: Data Labels

Data labels display the same numbers that you see in a Data Table, however the data is shown within the Chart instead of in a Table.

5. Try it: Format the Gridlines

The Chart on Slide 2 is still selected. Go to **Chart Elements->Data Labels**.

The Data labels can be placed Center, Inside End, Inside Base, Outside End, and Data Callout. There are More Options as well.

Please select: Outside End.

Keep going...

There isn't any Three-L Lllama...

Chart Elements ->Data Labels



Exam 77-422: Microsoft PowerPoint 2013

3.0 Create Slide Content

3.3 Insert and Format Charts: Chart Elements (Data Labels)



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Chart Elements

6. Where Are We At? The Chart has a Chart Title, Axis Title, Data and Data Labels now.

So far, this discussion has focused on the **Chart Elements**. Let's look at the **Chart Styles**.

Do This, Now: Save, Save, Save Go to File->Save.

Chart Tools ->Design







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Apply Chart Styles

The **Chart Styles** can be found next to the Chart Elements on the right side of the Chart. The icon looks like a paint brush. Chart Styles format the Style and Color.

7. Try it: Apply a Chart Style The Chart on Slide 2 is still selected. Go to Chart Styles->Style. Select a Style: Style 13

What Do You See? The Chart has been formatted with a Style that includes overlapping Columns. The Columns are filled with a semitransparent color.

These little tools on the right side of the Chart are a good start. There are a LOT more useful options in the Chart Tools Ribbons.

Come with me...

Chart Styles->Style



Exam 77-422: Microsoft PowerPoint 2013

3.0 Create Slide Content

3.3 Insert and Format Charts: Create and Modify Chart Styles





Chart Tools ->Design->Chart Layouts



There are two Chart Tool Ribbons: Design and Format. The **Design** Ribbon has: Chart Layouts Chart Styles Data (Select, Edit, Refresh) Type (Change Chart Type)

1. Try it: Review the Chart Layouts The Chart on Slide 2 is selected. The Chart Tools are available. Go to Chart Tools->Design->Chart Layouts.

What Do You See? The Chart Layouts has the same options as the ones we just tried with the Chart Elements.

Add Chart Element includes Axes, Axis Titles, Chart Titles, Data Labels, Data Table, Error Bars, Gridlines, Legend and Timeline.

Chart Styles includes Styles and Color.

Keep going, please...



- 3.0 Create Slide Content
- 3.3 Insert and Format Charts: Create and Modify Chart Styles



Two



The **Data** for this Chart was entered into an embedded Excel spreadsheet. There are four tools for working with the numbers: Switch Row/Column Select Data Edit Data Refresh Data

Switch Row/ Select Edit Refresh Column Data Data Data Data

2. Try it: Edit the Data The Chart on Slide 2 is selected. The Chart Tools are available. Go to Chart Tools->Design->Data. Click on Select Data.

What Do You See? The spreadsheet, Chart in Microsoft PowerPoint, will open again. The data from A1:D4 is selected.

Keep going, please...

Chart Tools ->Design->Data->Select Data



- 3.0 Create Slide Content
- 3.3 Insert and Format Charts: Modify Chart Parameters (Select the Data)



Take Two

Switch Rows and Columns

3. Try it: Switch the Rows and Columns Go to Chart Tools->Design->Data. Click on Switch Row/Column.

What Do You See? The Columns are grouped by Month, now, not Product.

700

600

500

400

300

200

100

MONTHLY SALES

OK, Close the spreadsheet.

Keep going, please...



November

Legs Eggs Pigs

December



- Exam 77-422: Microsoft PowerPoint 2013
- 3.0 Create Slide Content

October

200

3.3 Insert and Format Charts: Modify Chart Parameters (Switch Rows/Columns)

Chart Tools ->Design->Data->Switch Row/Column



Two

Design: Change the Type

You can change the **Chart Type** if you wish. Question: Will the Chart keep the formatting we added with the **Chart Elements** and the **Chart Styles**?

4. Try it: Change the Chart Type The Chart on Slide 2 is still selected. The **Chart Tools** are available.

Go to Chart Tools->Design->Type. Click on Change Chart Type.

You need to select a **Chart Type**. Choose a Category: **Column** Choose a Type: **Stacked Column**

What Do You See? The Stacked Columns combine all of the Products. The Labels and Background are still there.

Keep going...

Chart Tools ->Design->Type->Change Chart Type



Exam 77-422: Microsoft PowerPoint 2013 3.0 Create Slide Content 3.3 Insert and Format Charts: Change Chart Type



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Format Chart Shapes

There are two **Chart Tools: Design** and **Format**. Shape Styles can be found on the Format Ribbon.

1. Try it: Format the Shape Fill The Chart on Slide 2 is selected. Go to Chart Tools->Format. Go to Shape Styles->Shape Fill. Click on Picture... Browse to your Documents folder. Select a picture: farm.gif Click Open.

Keep going...

Where Have We Seen This Before? Shapes and Shapes Styles were discussed in the Beginning Guide to Microsoft PowerPoint, page 99.

Chart Tools ->Format->Shape Styles



Exam 77-422: Microsoft PowerPoint 2013 3.0 Create Slide Content 3.3 Insert and Format Charts: Create and Modify Chart Styles (Fill with Picture)



Edit Shape Styles

The picture is a good way to promote a company image or brand. However, the goal of this Chart is to convey information. It would be easier to read the data if the picture was not so "loud." Please format Chart Area and make the picture more transparent.

2. Try it: Format the Shape Styles The Chart on Slide 2 is still selected. The Plot Area is filled with a picture.

Go to **Chart Tools->Format->Shape Styles**. Click on **More** the small arrow in the bottom right corner of the Shape Styles Group.

The Task panel, **Format Chart Area**, should be open the right side of PowerPoint.

Try This, Too: Edit the Transparency Transparency: 45%.

Keep going...

Chart Tools ->Format->Shape Styles->Shape Effects->More



Exam 77-422: Microsoft PowerPoint 2013

3.0 Create Slide Content

3.3 Insert and Format Charts: Create and Modify Chart Styles (Format Chart Area)



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Format Chart Effects

Each element in a Chart can be selected and formatted separately. This example will format the data series in the Columns.

3. Try it: Format Chart Effects Go to Slide 2 and click on any **Data Series**, say the bottom Shape in the Stack, Pigs. The entire Pigs series will be selected. The **Chart Tools** should be on.

Go to **Chart Tools->Format->Shape Styles**. Go to **Shape Effects->Preset**. Choose a Style: Preset 2

Try This, Too: Format the Other Series Select the other two Data Series and format the Shape Style to match.

Keep going...

Chart Tools ->Format->Shape Styles->Shape Effects->Preset



- 3.0 Create Slide Content
- 3.3 Insert and Format Charts: Create and Modify Chart Styles (Format the Border)



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Resize a Chart

New Charts fill the width of the Text Box on the slide. You can **Resize** a Chart the same way you resize a Picture or Shape.

4. Try it: Resize a Chart The Chart on Slide 2 is still selected. Go to **Chart Tools ->Format->Size.** Enter the **Width**: 5

:	3.63"	*
€ • →	5"	* *
	Size	E.

What Do You See? The Width and the Height can be edited independently.

The Chart is tall, now, not wide. The Columns and Background resized to fit.

Keep going...

Chart Tools ->Format->Size



Exam 77-422: Microsoft PowerPoint 2013 3.0 Create Slide Content 3.3 Insert and Format Charts: Create and Modify Chart Styles (Resize a Chart)





Specify the Position

Say you wanted the Chart to be 2" from the edges of the slide. You can use the advanced options to format the Position.

5. Try it: Edit the Chart Position The Chart on Slide 2 is still selected. The Task pane, Format Chart Area, is open. Go to Chart Options ->Size and Properties. Click on Position.

Edit the Horizontal position: 2" From: Top Left Corner. Edit the Vertical position: 2.2" From: Top Left Corner.

Click Close. The Chart will be positioned precisely as you indicated.

Ok, that's pretty good. Save, Save, Save.

Chart Tools ->Format->Size->More



Exam 77-422: Microsoft PowerPoint 2013

2.0 Insert and Format Shapes and Slides

2.3 Order and Group Shapes and Slides: Align and Group Shapes (Position)



Just for Fun, Really 1. Try it: Insert a Picture

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Slide 2 is selected.
Go to Insert ->Images-> Picture.
Browse to your Documents folder for a picture. The one on this page is called Chicken4.jpg

Try This, Too: Format the Picture The new picture is selected and the Picture Tools should be available.

Go to **Picture Tools->Format.** Go to the **Picture Styles.** Click on **Drop Shadow Rectangle**.

Then what ..?

Insert ->Images-> Picture



Exam 77-422: Microsoft PowerPoint 2013

3.0 Create Slide Content

3.5 Insert and Format Images: Apply Effects



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2. Try it: Arrange the Chart Elements Select the Chart on Slide 2. Go to Chart Tools ->Format->Arrange. Click on Send Backward.

What Do You See? The Chart should be behind the picture, however the Chart Border may "shine through" the picture.

What Else Do You See?

The Chart Elements, Chart Styles and Filters are still available. They appear in front of the picture, not behind it.

That works.

Chart Tools ->Format->Arrange->Send Backward



Exam 77-422: Microsoft PowerPoint 2013

- 2.0 Insert and Format Shapes and Slides
- 2.3 Order and Group Shapes and Slides: Align and Group Shapes (Arrange)



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Working with Charts

There is one more Chart Tool that can be used to present the data: **Chart Filters**. You can filter the Chart to show some or all of the data.

3. Try it: Find the Chart Filters Select the Chart on Slide 2. Go to **Chart Filters->Values**.

The Chart can be Filtered by the **Series** or the **Categories**.

And Try This: Filter the Chart Data Select the Series: Eggs and Pigs. Click Apply.

What Do You See? The Chart will update and show only data for the Series that were selected.

OK, that works. We have come back where we started: Chart Elements, Chart Styles and Chart Filters.

Chart Filters ->Values->Series



- 3.0 Create Slide Content
- 3.3 Insert and Format Charts: Modify Chart Parameters (Filter the Data)



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Two

Charts and Chart Tools

This lesson demonstrated how to add a Chart to your presentation. The Chart was created from data entered into an Excel spreadsheet.

We looked at Chart Elements and Chart Tools: Design and Format.

Allez, Allez in free. You done good. Go get two cookies, OK?





Practice Activities

Lesson 2: Working with Charts

Start Microsoft PowerPoint. Do the following steps

- 1. Open a new, blank presentation.
- 2. Add the title: Year End Report
- 3. Apply the theme Pushpin, or a theme of your choice.
- 4. Insert a Chart. Select Clustered Column.
- 5. Add the following data to the spreadsheet:

	Last Year	This Year
Shirts	100	325
Hats	75	125
Balloons	120	400
Coffee Mugs	55	170

6. Format the labels Bold and 14 point

7. Delete any extra columns and make the handles fit the data

8. Change the Chart Title: Highest Increases

9. Format the Background of the Chart with a Gradient fill of your choice.

10. Format the Gridlines to show Major and Minor Gridlines

11. Select each of the columns and format them with different colors and shape effects of your choice.

12. Change the chart type to Clustered Bar.

13. Insert a picture of money. Arrange the picture so it is overlapped behind the chart a little.

14. Insert a new blank slide.

15. Insert a new chart. Pick a pie chart.

16. Add the following data to the spreadsheet:

Shirts	325
Hats	125
Balloons	400
Coffee Mugs	170

17. Format the Data Labels to be Outside End. Apply Chart Layout 6.

18. Apply Chart Quick Style 12.

19. Change the Theme Colors to Flow.

20. Apply a shape border to the largest piece of pie.

21. Resize the Pie Chart to 2" by 2".

22. Add a chart title: Asleep at Mouse Gear

23. Add a picture of a mouse. Apply a picture style of your choice.

24. Save the file as Advanced PowerPoint Practice 2.



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Test Yourself

 A spreadsheet can be added to a PowerPoint presentation.
 a. True
 b. False
 Tip: Advanced PowerPoint, page 48

2. What Tools are available at the top of the spreadsheet?
(Select all correct answers.)
a. Update
b. Undo
c. Redo
d. Edit in Excel
Tip: Advanced PowerPoint, page 48

3. A Chart can only be added to PowerPoint from a pre-existing spreadsheet.a. Trueb. FalseTip: Advanced PowerPoint, page 48

4. Which commands can be found in the Chart Elements?
(Select all correct answers.)
a. Chart Titles
b. Axis Titles
c. Legend
d. Data Labels
Tip: Advanced PowerPoint, page 52-58 5. Which groups can be found on the Design Ribbon? (Select all correct answers)
a. Chart Layouts
b. Chart Styles
c. Data
d. Type
Tip: Advanced PowerPoint, page 60

6. Changing the Chart Type removes all settings like Background and Labels.a. Trueb. FalseTip Advanced PowerPoint page 63

7. Which command offers several templates for formatting Charts?a. Stylesb. Chart Layoutsc. DesignTip: Advanced PowerPoint, page 63

8. You can switch the Rows and Columns in a Chart.a. Trueb. FalseTip: Advanced PowerPoint, page 62 9. A Chart can be resized in the same way as a picture or a shape.a. Trueb. FalseTip: Advanced PowerPoint, page 67

10. Charts cannot be formatted with Effects.a. Trueb. FalseTip: Advanced PowerPoint, page 66

