# Quick Concepts Check Answer Key Exploring Microsoft Excel 2016, Chapter 3

1. **Why should you not include aggregates, such as totals or averages, along with individual data points in a chart?**   
   Including aggregates diminishes the effectiveness of comparing individual data points. Including aggregate data is an invalid data point. Totals should not be included with non-aggregate data points.
2. **Describe the purpose of each of these chart types: (a) column, (b) bar, (c) line, (d) pie, and (e) combo.**   
   (a) A column chart displays values in vertical columns where the height represents the value. Categories display along the horizontal (category) axis.  
   (b) A bar chart displays values in horizontal bars where the length represents the value. Categories display along the vertical (category) axis, which helps when the category labels are too long.  
   (c) A line chart shows trends over time, such as months, years, or decades.  
   (d) A pie chart shows the proportion of individual data point to the whole.

(e) A combo chart combines two chart types, such as column and line, to represent different data types (such as individual values and percentages).

1. **How can you use Quick Analysis to create a chart?**   
   After you select a range, the Quick Analysis button appears so that you can click the button for quick available options. Click Charts to display recommended chart types based on the data you selected in the Quick Analysis gallery.
2. **How do you decide whether to move a chart within the worksheet where you created it or move it to a chart sheet?**   
   You might want to keep it on the sheet with the data source so that you can print the data and chart on one sheet of paper. However, if you are creating several charts, you can organize them by moving them to individual chart sheets.
3. **List at least four types of appropriate labels that describe chart elements. What types of things can you do to customize these labels?**   
   Chart title, horizontal axis title, vertical axis label, data label, legend, etc. You can change the font, font size, font color, etc.
4. **What is the purpose of exploding a slice on a pie chart?**   
   Exploding a slice moves that slice slightly away from the rest of the pie chart so that the exploded slice is emphasized.
5. **What are some of the fill options you can apply to a chart area or a plot area?**   
   Solid, gradient, picture, and texture
6. **What are two ways to change the color scheme of a chart?**   
   Click the Chart Style icon, click COLOR, and then change the color scheme.  
   Click Change Colors in the Chart Styles group on the Chart Tools Design tab.
7. **How can you change a chart so that the data in the legend are on the X-axis and the data on the X-axis are in the legend?**  
   Click Switch Row/Column in the Data group on the Design tab.
8. **What is a sparkline, and why would you insert one?**   
   A sparkline is a miniature chart that is embedded within a cell. You use it to create a quick visual within worksheet cells when you don’t need to chart an entire data set.