



Notes:

NOTE: delete this text in your final layout and replace it with a brief description of what you did and why.

You must show at least one scatterplot, one line graph and one bar chart (three charts on one page minimum). Use more pages if desired for a maximum of 9 graphs and 3 pages.

The arrangement of the three graphs on the page is up to you; also which quadrant to use for the graphs and which to use for a brief description of what you did, which will replace this text in your final page and could be in a different quadrant depending on your layout. The three graphs should relate to each other and the formatting should be consistent as much as possible:

The steps below are not a complete list, and of course every rule could have its exception, but they apply generally and you should follow them for this assignment.

- 1.Omit legends or keys whenever possible, for example in the line graph, simply label the line itself at the end or place the label where it can fit directly on the graph and next to the line.
- 2.If the graph looks too "light" and bare, a very light gray background (10–15%) may be added, with white thin grid lines on top of the gray fill but under any shapes such as data lines, bars, or circles. See an exception to this rule, Rule #10 in this list, shown in bar chart example, where thin lines are placed on top of the bars.
- 3.If the vertical axes in two separate graphs show similar data ranges, then the axes should be "synchronized", as in the line and bar chart examples shown in the video , so that each step in the axis aligns with the same step in the graph next to it.
- 4.Set the Illustrator document color mode as CMYK, not RGB.
- 5.Use only 100% black (K) for your type (labels, titles, etc). Do not add CMY values to make "rich black".
- 6.Use only only one sans-serif font for all the graphs. For this assignment, use only Helvetica (–5 points if other fonts are used). I happen to like Helvetica, but other sans-serif fonts would be OK too. It's just that I wanna be able to open the files in Illustrator without having to go through a lot of font-missing hoops. Helvetica light is best for labels in this assignment. Include the Helvetica fonts you used when you upload the other files.
- 7.Simplify graphs as much as possible: no borders either for the graphs as a whole or for individual items like single bars. Remove any existing border that is not data and whose omission does not alter the integrity of the data and the graph.
- 8.No gradients, drop shadows, 3D effects, perspective views or other decorative

- treatments.
- 9.De-saturate and lighten colors which are too strong, too dark, etc. like for example the default red and blue in Excel which are way too loud and dark. In some cases, like in clustered bars, you might do one set of bars darker (or lighter) than the other.
 - 10.Use thin white horizontal grid lines on top of bars whenever possible, instead of dark gray or black lines behind them, removing some steps if the design starts turning into a checker-board pattern. The net (good) effect if the background is white, is that the bars will be nicely divided into equal segment without giving away that long lines are actually running across and on top of them. Another option for grid lines is to use a line made up of little dots which are actually typed periods, gnerously spaced, black only. The net effect is a "gray" light line, even though each dot is 100% black. Such lines can be safely placed on top of the shapes.
 - 11.Always sort you bar charts if the bars show categories instead of chronological (calendar) steps.
 - 12.Y-axis (vertical axis) main label (variable shown) should not be sideways but right side reading (move to top of axis and break into multiple lines if necessary)
 - 13.X-axis (horizontal axis) tickmark or name labels should also not be vertical. If they don't fit, turn them at 45 degrees, flush right, with reading direction from bottom left to top right.
 - 14.In scatterplots, you may also add a light gray background with thin white grid lines on top (but behind dots and names).
 - 15.Labels for each data point in scatterplot should be included unless too unwieldy.
 - 16.See related videos and tutorial for additional design guidance.
 - 17.Use the six-inch control bar at the top to check the legibility of your text or other graphic elements by setting the view in your computer program to "Actual size", then see if the bar length on the screen matches six inches on a physical ruler placed in front of the screen. If it does, then you can (roughly) evaluate the legibility of your final printed piece. For example, in my Illustrator, actual size does in fact match my metal ruler, but in my Acrobat, actual size view is actually smaller, about 5 inches, so to match it, I have to set the view at about 125%. Another example: as I type in Illustrator I can clearly see these words on the screen, but when I set the view to actual size it's obvious that I am pushing the limit, since I have this text set at 6.5 point size which is really too small for print. If text is too small to read without squinting, it's too small -- please make bigger.
 18. Save one copy as Illustrator and one copy as Illustrator PDF, making sure that all elements are vectors: view --> Outline (Command – Y on Mac), as in the screenshot shown above. Name files as per the format already established.