This homework assignment has two parts. In the first part, you will create charts from exercises in "Visualize This" and in the second part you will download a dataset and make plots that answer the questions below.

**Part 1**

Match the examples in the book as completely as possible, including matching the plot aspect (the dates won't quite match in one of the plots, in which case, include all the dates.)

* Bar chart- Fig 4-11
* Stacked bar chart- Fig 4-22
* Scatterplot- Fig 4-28
* Time series- Fig 4-34
* Step chart- Fig 4-43

Tips

* Create script in document window and then use console window to open/run. This will enable you to reuse code and troubleshoot if there are problems.
* Resize the chart output window **BEFORE** you save as PDF in order to achieve proper proportions.
* Note that the plot width and height should be proportionally the same as in the book. This will be part of the grade.
* You will lose points if the plot is not a pdf. Make sure you can open the file in Adobe Acrobat before turning it in.

**Part 2: Simple Distributions**

Download the **art.csv** file from the **Data and images** section. Using R, answer the following questions to make 4 plots. This work will be similar to what we did for lab 2.

Use the par() function to put all 4 plots in the same plot space. Also, give the plots titles, x and y labels, use colors that you like, and if you are using a plot with points, use a symbol you like (pch). In other words, customize these plots to show me that you know how to modify different elements of the plots.

1. What is the distribution of total sales for the whole dataset? Provide two different plots that show two different ways of showing distributions*.*
2. Next we want to compare two different distributions. Use a different distribution plot type than the ones above, but use the same type for both of these for easy comparison:

a. What is the distribution of the totals sales for drawing paper?

b. What is the distribution of the totals sales for watercolor paper?

Submit

* Complete the 5 chart exercises in VT Chapter 4; **R PORTIONS ONLY**. Do not complete Illustrator exercises yet.
* Upload the VT Chapter 4 plots **as a single pdf** file. This means you will have multiple plots in one pdf file. Name the file: HW1-VT-*netid*.pdf
* Upload the plots from the art.csv dataset **as a single pdf** with the file name HW1-ART-*netid*.pdf
* **Upload your R script from Part 2.**