

### **Homework 1a: *Visual Displays – Graphical Excellence***

1. What is Anscombe's quartet? How do these data highlight the importance of the observing graphical displays of data?
2. Study the graphic, "Pioneer Maps of Health and Disease in England" on p. 24.
  - a. Explain what problem this graphic helped to solve.
  - b. Suggest an alternative solution approach involving no graphic.
3. Consider the graphic on the cover of the textbook.
  - a. What type of graphic display is this?
  - b. What variables are represented on the horizontal axis? The vertical axis?
  - c. What do the slopes of the line segments represent?
4. Study the graphic by C. J. Minard on the bottom of p. 41. Write a short paragraph to summarize this graphic, including how it satisfies (or not) Tufte's five principles of graphical excellence.
5. Study the graphic by J. H. Lambert on the top of p. 46.
  - a. What do the two time series curves ABC and DEF describe.
  - b. How do curves ABC and DEF appear to be related?
6. Comment on how "graphical excellence" may enhance your Polaris Project.