



Objective

The exercises and discussion questions serve two purposes. First, they are intended to prompt you to reflect upon the readings, to develop questions, and to take a position on what the readings say. You may agree with everything in a reading. But, more typically, you may question or disagree with parts of the reading.

Second, the instructor can use your statements to adjust the classroom lectures and exercises to respond to questions and ideas that are shared by many in the class. Thus, the exercises should help you learn the material more thoroughly and help make the classroom discussions more relevant and engaging.

Format

Unless otherwise stated, responses should be sent to dhendry@u.washington.edu as an ordinary e-mail message. Please do *not* include any attachments. Unless otherwise stated, your e-mail must arrive to the inbox by 6AM on the day it is due.

Your responses should consist of around 2 – 4 paragraphs and be less than 300 words.

Finally, please include the following coding in the subject line of the e-mail
INFO-424: xxx

where xxx is the exercise ID (either X1, X2, ... Xn). This coding will help organize your responses and allow me to get feedback to you in a timely fashion.

Grading

Your responses will be graded on a three point scale:

- ✓- Needs improvement
- ✓ Satisfactory
- ✓+ Outstanding

Responses that are late will not be graded.

You can respond to a total of eight exercises and discussion questions. The top six scores will count in the calculation of your grade and are worth 30% of your final grade.

Exercises and Discussion Questions

X1: Four Squares Problem (Due Oct 4 @ 6AM)

This problem was given on the first day of class. If you missed the first day of class please see the problem sheet on the website.

X2: Cancer Survival Rates (Due Oct 11 @ 6AM)

Please read the [Ask E.T. Cancer Survival Rates: Tables, Graphics, PowerPoint](#) (link found on website).

Select two or three charts or tables from this page and comment on the differences of these displays and how they improved or hurt the effectiveness of the displays. Do you agree with Tufte's assertions about PowerPoint? What's your opinion of the charts that Dave Nash proposed? These are but two of many questions you could propose and then answer.

(Please turn over.)

Exercises and Discussion Questions (Updated 12 Oct 2005)

Worth: 30%

X3: Mental Models and Visualization (Due Oct 18 @ 6AM)

Please read: Card, S. K., J.D. Mackinlay & B. Shneiderman (eds.) (1999). *Readings in Information Visualization: Using Vision to Think* (Chapter #1). New York: Morgan Kaufmann.

This chapter proposes a user model called Knowledge Crystallization and technical model for mapping data to a visual form. If you could pose a question to the authors about one of these two models, what would the question be? Pose this question and then answer it for yourself as best you can. (Your discussion question will, of course, be stronger if you pose a hard problem.)

X4: Quantitative Data (Due Oct 25 @ 6AM)

Please read: Spence, Chapter 3 and Chapter 5. Different visualizations provide different information. Select two visualizations from this chapter and discuss how your selected visualizations complement each other. That is, how might they add more information (or not) when used together?

X6: SVG Lab (Due Nov 4 @ 5 PM)

Submit a link to your lab solution website. (Details explained in the lab activities sheet.)

X7: Connectivity (Due Nov 8, during class)

Please read: Spence, Chapter 10. Propose a visualization problem concerned with combining Information Retrieval and Information Visualization techniques. Then, using one or more of the techniques outlined in the chapter, propose a solution. The problem statement and solution sketch should be completed on one or more blank pieces of paper with pencil.

X8: Documents, Information & Social Spaces (Due Nov 15 @ 6AM)

Read the paper by Fernanda & Smith (2004) and pose a question about their work. Then, answer the question as best you can.