Required for next week: April 2, 1996

- "Lani 'Quota Queen' Guinier: Voting, power and mathematics". A short article from the book *A mathematician reads the newspaper*, J.A. Paulos, HarperCollins, 1995. The jacket for this book says "Even if you hated math in high school, you'll love the numerical vignettes in this book."

- "A paradox in the ranking of figure skaters", J. Bring and K. Carling (1994), *Chance* **7**(4), 34–37.

Essay: due April 9

The range of topics for essays is very broad, so it is hard to give specific guidelines. But some basics may be helpful. Your spelling and your grammar should be carefully checked. When you are making explicit reference to source material in the text of your essay, you should include a reference in the text: for example "Jones and Kenward (1990) conducted a study of college students and concluded ...", or "it is argued by Smith (1995) ...". The source articles that you directly refer to should all be included in the bibliography. The bibliography should be prepared in a standard format (there are several conventional ones) and each entry should include the title of the article or book, the authors, year of publication, journal name, volume and page numbers for a journal article, publisher for a book. When you are quoting or paraphrasing from a book or article, indicate that in the text either using quotation marks (for short quotes) or indented paragraphs (for long quotes).

Your essay should have an introductory section, explaining the background for your topic and introducing the material that follows, and a concluding section, summarizing the main points of your research, and/or drawing conclusions, and most likely two or more sections in between. The appropriate goal for many topics is to synthesize and summarize the current state of knowledge in an area, with reference to a few key sources. You don't need to be an expert on the topic, but you should play the role of an educated layperson. Some essay topics are more specifically directed to a particular thesis, and for these the writer is serving as an expert, trying to persuade the reader of the validity of the thesis. Most essays will I think be more effective if they are addressed to a potential readership of, for example, 199Y students (as opposed to be addressed directly to me).

In the Globe and Mail this week

- "Breast cancer risk linked to Hodgkin's treatment", Mar. 21,A6 (Reuters). "Women who had childhood Hodgkin's disease and were treated with radiation have a much higher risk of developing breast cancer and some other types of solid tumours, according to a new study published in today's New England Journal of Medicine. The research, which shows a breast cancer rate 75 times higher than in the general population." An important question touched on in the article but not discussed in detail is whether the radiation treatment causes breast cancer, or whether the two diseases are related in some other way.

- "Alzheimer's memory testing effective", Mar. 22,A9 (D. Lipovenko). "Memory testing predicts more accurately which elderly people will get Alzheimer's within two years than does a blood test for a gene linked to the disease, a new study shows." The blood test is for the apo E4 gene associated with late onset Alzheimer's. This gene was discovered by University of Toronto researcher Peter St. George-Hyslop.

- "Suicides plague French police forces", Mar. 22, A16 (B. James, International Herald Tribune). According to this article a record 60 police officers killed themselves last year – 50 per cent more than the average for each year since 1988. Although interior minister Michel Debre said that the number of police officers is not proportionately greater than in the population as a whole, the ministry has plans to increase the number of psychologists and social workers working on the force.

- "Reorgainzed Peruvian rebels returning to deadly old ways", Mar. 22, A16 (D. Koop). An article on the Shining Path guerilla movement, which should win a prize for the most ghoulish graphic: a time series of number of people killed per day by Shinig Path between 1980 and 1996.

- "European partners ban U.K. beef", Mar. 22, A1&A10 (D. Wallen). This story is making huge waves in Europe, especially Britain. It is not clear whether a new strain of Creutzfeldt-Jakob brain disease is linked to 'mad cow disease' (bovine spongiform encephaly). Much of the evidence is statistical: in particular there seems to be an elevated rate of C-J disease among farm workers handling cattle feed. Half of Britain's schools have already introduced a ban on beef in children's meals. Another article on Mar. 25 (A16) reports that the British government acknowledged for the first time a possible link between C-J disease and BSE. The most recent 10 cases of C-J disease are believed to have been acquired from beef that was infected before the government introduced safety measures on the handling of meat in 1989. Because the disease has a latent period of 15 months to 30 years, the potential size of the problem is completely unknown. Canada banned beef imports from Britain in 1990.

- "Book stirs debate on synthetic chemicals", Mar. 20, A1&A8 (New York Times). A new book called *Our Stolen Future* provides warnings that synthetic chemicals pose new a serious health threats. The book has been criticized by many scientists, and this article is a balanced of the two points of view.
- "Quebeckers 'worried about future"', Mar. 23, A1 (R. Mackie). Léger and Léger still going strong.