

Date Assigned: 27 August 2004.

Date Due: 1 September 2004 in class.

Suggested Reading: First 6 sections (pages 1-12) of Shannon's 1948 paper (available on the course webpage) and sections 2.1-2.3 of the text book.

1. Exercise 2.1, 2.2 and 2.3 of the text book.
2. Exercise 2.4 of the text; this makes precise the argument outlined in the lecture. *Hint:* you might find Appendix 2 in Shannon's 1948 paper (pages 28-29) useful.
3. Exercise 2.5 and 2.6 of the text book.