## CS 323, Spring 2017, Summary 2

- 1. Bisection method and rate of convergence. Pages 14-17.
- 2. Newton's method. Page 18-19.
- 3. Linear interpolation. Pages 51-52.
- 4. First-order divided difference. Page 63.
- 5.  $P_1$  expressed in terms of first-order divided difference. Page 67.
- 6. Approximation error of polynomial interpolation. Page 72. For example, what is the error when n=1.
- 7. Natural cubic splines when n = 3 (data points). Pages 77-79.
- 8. General natural cubic splines. Page 81.