

Content of the Final Exam
for Math167-5002, Fall 2012.
Exam: Wednesday December 12th, 1-3pm, Held. 111

1. Ch. 1:
 - Know the Graph Vocabulary (see the end of Ch. 1)
 - Euler circuits and paths:
 - Euler theorem; Existence and non-existence of Euler circuits and paths; Finding an Euler circuit or path; Eulerizing graphs.
2. Ch.2. Section 2.5 on critical path analysis
3. Ch. 5.
 - Vocabulary
 - Stemplots and histograms
 - Median, mode, range, quartiles
 - five number summary and boxplot
 - Mean, standard deviation
 - Normal distribution
 - 68-95-99.7% rule
4. Ch. 6.
 - Vocabulary
 - scatterplot
 - notions of correlation and regression line, without computing them.
5. Ch. 7
 - Everything, including confidence intervals and margins of error.
6. Ch. 9.
 - Vocabulary
 - Majority rule, dictatorship, imposed rule, plurality vote, Condorcet (pairwise comparison) vote, Borda count, Hare method, sequential pairwise vote (with an agenda).
 - Voters' independence condition, Candidates' independence condition, CWC, IIA, Patero condition, monotonicity condition
 - May's theorem (without proof)
 - weak and strong Arrow theorems (without proofs).
7. Ch. 16. Modular arithmetic and check digits (including computations, not just notions).

Have a nice end of the semester and final exam session!