Chem 322L: Exam I Review

Bring two #2 pencils, an eraser, and a calculator to the exam!
You need to know your student ID number and lab section for the exam!

Exam Format
- Multiple Choice
- True/False

Techniques to Review from Mohring:
- Heating and Cooling Methods Technique 6 (pages 49-58)
- Refluxing a Mixture Technique 7 (Section 7.1; page 59)
- Drying Organic Liquids and Recovering Products Technique 12 (pages 132-141)
- Recrystallization Technique 15 (pages 183-197)
- Melting-Point Theory Technique 14 (pages 174-182)
- Thin-Layer Chromatography Technique 17 (pages 221-235)
- Liquid Chromatography Technique 18 (Sections 18.1-18.8; pages 235-253)

Calculations to Review
- Percent Yield (page 24-25)
- Theoretical Yield
- Limiting Reactant
- Calculation of Rf (page 230)

Experimental Sections
1. Grignard Reaction
2. Epoxidation of Cholesterol
3. Diels-Alder Reaction: Hexaphenylenbenzene, Dimethyl tetraphenyl phthalate, 1,2,3,4-
   Tetraphenylnaphthalene
4. Diels-Alder Reaction: Triptycene
5. Acylation of Ferrocene
- Review background from lab and textbook
- Review experimental sections
- Be able to predict reactants, products, and byproducts, as well as any reagents needed for the
  workup of the sample such as solvents, catalysts, drying agents, etc

NOT on this Exam:
- IR
- NMR
- Lab 6. Alkylation of Biphenyl and Para-Dimethoxybenzene