

**CHEM 233: HOMEWORK SHEET**  
**EXAM III (Fall 2004-Dr. Babb)**

- Chapter 7:**
- A. Addition of Halogens to Alkenes (pg. 206-212)  
*Homework: 7.3-7.6*
  - B. Addition of Water to Alkenes (pg.212-219)  
*Homework: 7.7-7.10, 7.41*
  - C. Other Alkene Reactions (pg.219-228)  
*Homework: 7.13-7.16, 7.23-7.25, 7.28, 7.35, 7.40, 7.50*
  - D. Alkene Radical Reactions to Form Polymers (pg. 228-234)
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- Chapter 8:**
- A. Alkynes and Naming (pg. 246-248)  
*Homework: 8.1, 8.2, 8.18-8.20*
  - B. Addition of Halogens and HX (pg. 248-250)
  - C. Addition of Water (pg. 250-254)
  - D. Other Alkyne Reactions (pg. 254-260)  
*Homework: 8.3-8.6; 8.8-8.12, 8.22-8.27, 8.29, 8.31*
  - E. Organic Synthesis (pg.260-266)  
*Homework: 8.13, 8.14, 8.32, 8.34, 8.36, 8.37*
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- Chapter 9:**
- A. Stereochemistry of Reactions (pg. 295-299)  
*Homework: 9.20-9.23, 9.59, 9.60, 9.65*
  - B. Heteroatom Chirality and Prochirality (pg. 299-306)  
*Homework: 9.24-9.26, 9.63, 9.64*
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- Chapter 10:**
- A. Alkyl Halides Naming Review (pg. 316-319)  
*Homework: 10.1, 10.2, 10.17, 10.18*
  - B. Preparation of Alkyl Halides (pg. 319-323; 327-329)  
*Homework: 10.3, 10.8, 10.19, 10.24*
  - C. Allyl Radicals, Radical Stability and Resonance (pg. 323-327)  
*Homework: 10.5-10.7, 10.20, 10.21, 10.28, 10.30-10.32, 10.39, 10.40*
  - D. Grignard Reagents (pg. 329-336)  
*Homework: 10.9, 10.12, 10.13, 10.22, 10.23, 10.35, 10.38*
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- Chapter 11:**
- A. Nucleophilic Substitution: S<sub>N</sub>2 and S<sub>N</sub>1 (pg. 343-367)  
*Homework: 11.1, 11.2, 11.4-6, 11.8, 11.11-11.14, 11.26-11.28, 11.30-11.32, 11.35-11.39, 11.41, 11.55*
  - B. Base-Induced Elimination: E2 and E1 (pg. 367-378)  
*Homework: 11.15-11.17, 11.19, 11.20, 11.34, 11.45, 11.49, 11.50*
  - C. Substitution Reactions in Synthesis (pg. 378-382)

**NOTE: Exam III is Thursday, Nov. 11 (7-8:30 PM)** and will cover most of the topics listed on this sheet. You are responsible for material covered in lecture, reading material in text and material covered in homework problems. To the exam bring a #2 pencil, pen, and a photo ID.