CHM 2210 Exam 3 Review Sheet (8e)

Understand the following reactions

preparation methods for alkynes (pp 316)

hydration reactions and mechanisms for alkynes: oxymercuration (pp 319-321) and hydroboration (pp 321-2)

halogenation, reduction, and oxidative cleavage of alkynes (pp 316-8 and 322-5)

acetylide anion formation and alkylation (pp 325-8)

free-radical alkyl and allylic halogenations and their mechanisms. (pp 347-8, 351-3)

preparation of halogenated alkanes from alkenes and alcohols. (pp 350, 354-5)

reactions involving Grignard and Gilman reagents. (pp 355-8)

Know how to do the following

solve organic synthesis problems which use alkynes (pp 329-332)

determine if a reaction will be SN2, SN1, E2, or E1. (pp 384, 394, 400, 405, 407-8)

predict the products, including stereochemistry, of SN2, SN1, E2, and E1 reactions. (pp 375-7, 386, 399, 402-3, and 406)

name alkynes and halogenated molecules, and draw their structures. (pp 87-90, 314-5, 344-6)