1. **Review** - Competing Reactions: for the following reactants, predict all organic products formed. Label the major product

   a. 
   ![Reaction a](image)

   b. 
   ![Reaction b](image)

2. **Review** - Characteristics of the E2 Reaction

   a) What is the preferred stereochemical arrangement of an E2 reaction?

   b) E2 reaction can outcompete SN2 in the presence of bulky and hindered bases. What are some examples of these?

   c) The E2 reaction has what generic rate law? Why is this the correct rate law?

3. **Review** - The following E2 reaction will result in only one product. Put the following alkyl halide into the Newman projection, with the correct rotations. Then draw the correct alkene product.
4. **Review** - For the following statements regarding the reactions, determine which reaction or reactions are most like the statements that are described.

   a) This reaction is favored when bulky bases are used with any type of alkyl halide, except for primary, unbranched alkyl halides.

   b) A racemization is the result of the stereochemistry of this reaction’s products.

   c) Anti-periplanar conformation is necessary for this reaction.

   d) These reactions occur slower in polar protic solvents.

   e) These reactions occur slower in polar aprotic solvents.

   f) A secondary alkyl halide (nothing special about it) can undergo these reactions.

   g) A primary alkyl halide that is unbranched and is resonance stabilized by a methoxy-group can undergo these reactions with an unhindered base/nucleophile.