Due in class: Monday, Mar. 12th, 2007 at 12:05 pm.

In your answers, show arrow pushing and where appropriate identify initiation and propagation steps.

1. Provide a detailed mechanism for the following:

2. Provide a detailed mechanism for the following. Explain the stereochemical outcome including the double bond geometry?

(racemic)

$\Delta$

 diastereomers)
3. Provide a detailed mechanism for the following:



4. Provide a detailed mechanism for the following. Specify the initiation and propagation steps. What is the by-product $X$ ?

(racemic, mixture of diastereomers)
5. Provide a mechanism for the formation of each of the four products. Explain the effect of concentration on the product ratios.
(a)

(b)

6. Provide a detialed mechanism for the following:

