Summary of Alkene Reactions, Ch. 8.

Memorize Reaction, Orientation where Appropriate, Stereochemistry where Appropriate, and Mechanism where Appropriate.

-all are drawn using 1-methylcyclohexene as a prototype alkene, because both orientation and stereochemistry effects are readily apparent.

H-bearing alkene carbon ends as carboxylic acid

8	$\begin{array}{c} & & & \\ & & \\ \hline \\ & & \\$	Orientation None	Stereo Trans	Mechanism Be able to draw completely
9	$\begin{array}{c c} & Br_2, H_2O \\ \hline & (or Cl_2) \end{array}$	Markovnikov	<u>Trans</u>	Be able to draw completely
10	PhCO ₃ H CH ₃	None	<u>Cis</u>	Not responsible
11	CH ₃ CO ₃ H CH ₃ OH OH	None	<u>Trans</u>	Be able to draw acid-catalyzed epoxide hydrolysis
12	OsO ₄ , H ₂ O ₂ OH OH	None	<u>Cis</u>	Not responsible
13	H 2. Me ₂ S Note: H-bearing alkene carbon ends up as aldehyde.	None	None	Not responsible
14	KMnO4 OH O	None	None	Not responsible