

This list is what you can expect to see on test 2.
Practice, review, and understand everything on this list.

- Drawing chiral molecules in 3D, and determining R, S
- Drawing prochiral molecules and determining Re and Si
- Understanding the meaning of chiral, prochiral, enantiomers, diastereomers, meso, and symmetry planes
- Reactions steps for free-radical halogenation, including all of the free-radical structures and the curved arrows
- Polar addition mechanisms, including the curved arrows, as well as the nucleophiles and electrophiles
- Drawing energy diagrams, including activation energies, transition states, and intermediates
- Using alkene nomenclature rules to determine the names and structures of molecules, including cis/trans and E/Z
- Calculating the degrees of unsaturation (using equations)
- Drawing the reaction steps for alkene bromination, oxymercuration, and hydroboration
- Drawing the products for alkene cleavage and dehydrohalogenation reactions

Practice Problems from 9e:

5.13, 5.16, 5.23

6.4, 6.8, 6.13

7.1, 7.4, 7.13, 7.60

8.1, 8.3, 8.7, 8.9, 8.15