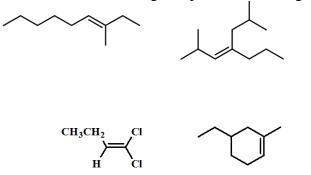
Alkene Nomenclature and Alkene Structure

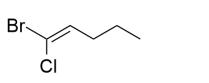
1.

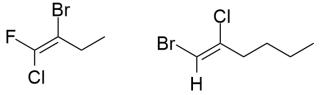
Name each of the following compounds according to IUPAC rules.



- 2. Draw the skeletal structure corresponding to the following names. Make sure to clearly indicate stereochemistry.
 a. (Z)-4-methyl-1,4-octadiene
 b. (E)-5-methyl-1,4-heptadiene
- 3.

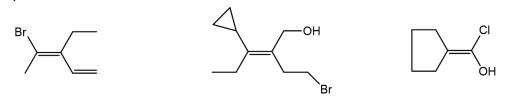
Name each of the following compounds according to IUPAC rules.





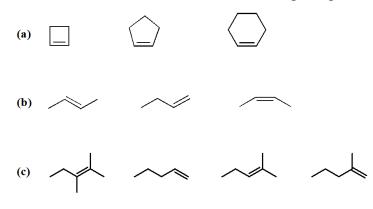
4.

Tell whether each molecule is the $E \mbox{ or } Z$ isomer.



5.

For each group of alkenes shown below rank them in increasing order of stability (most stable = 1). For each series, what is the main principle determining this stability?



6.

Rank the following cycloalkenes in order of increasing stability

