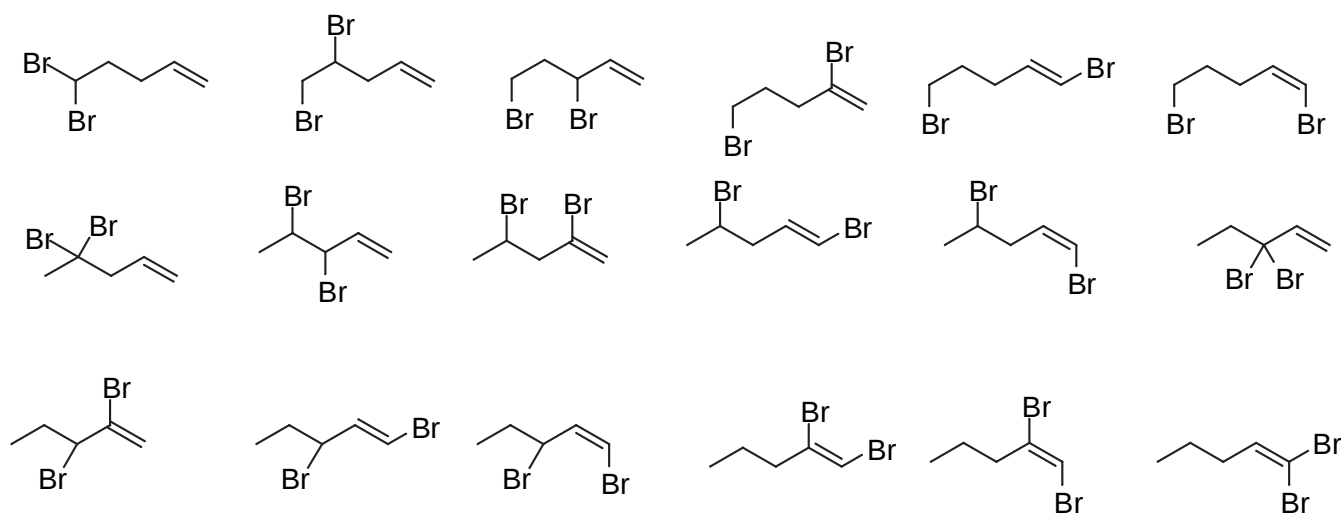


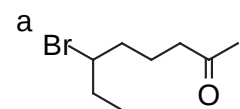
for more practice, see 1991-1999 PS#2's at:
<http://valhalla.chem.udel.edu/C331.html>

1. Draw all of the dibromo derivatives of 1-pentene .

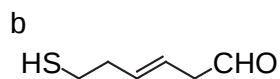
Note: R/S stereochemistry has not yet been considered



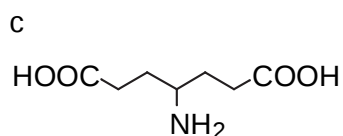
2. Give IUPAC names for the following



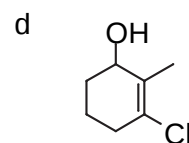
6-bromo-2-octanone



(E)-6-mercapto-3-hexenal



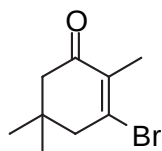
4-aminoheptanedioic acid



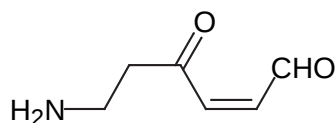
3-chloro-2-methyl-2-cyclohexenol

3. Draw the structures of the following

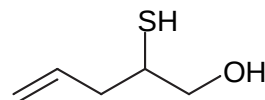
a. 3-bromo-2,5,5-trimethyl-2-cyclohexenone



b. (Z)-6-amino-4-oxo-2-hexenal

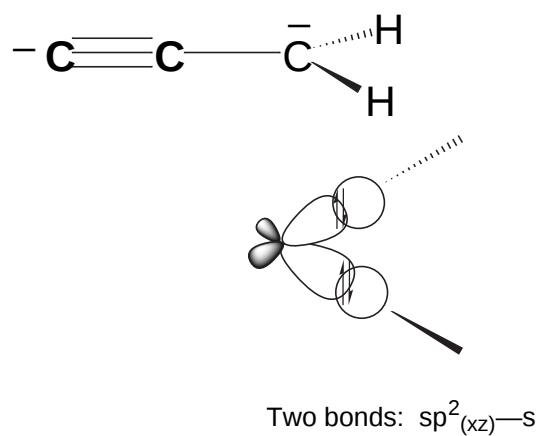
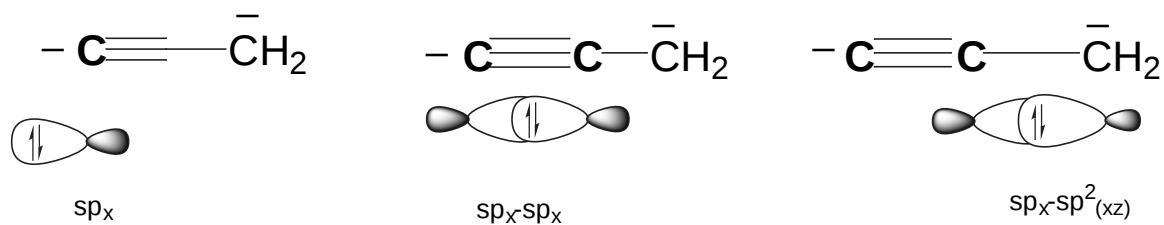


c. 2-mercapto-4-penten-1-ol



4. To draw the bonds clearly, we will consider each bond separately

σ -system (only bonding MO's are shown)



π -system

For the p_y orbitals, we need to consider the complete MO picture

