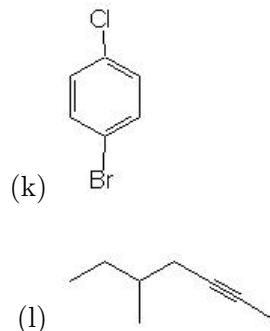
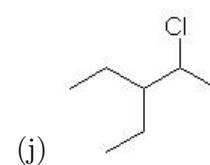
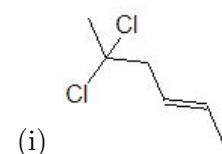
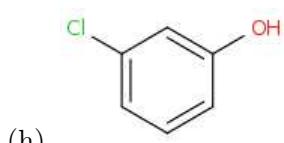
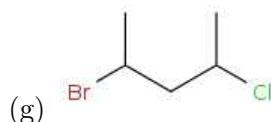
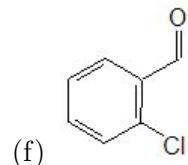
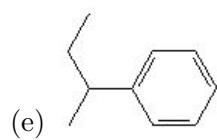
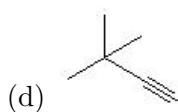
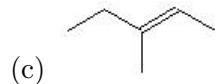
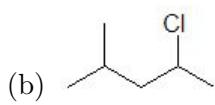
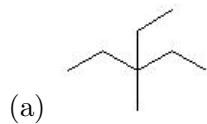


Name: \_\_\_\_\_

Class: \_\_\_\_\_

Date: \_\_\_\_\_

[24 pt] 1. Give the IUPAC name of the following molecules



(a) 3-ethyl-3-methylpentane

(g) 2-bromo-4-chloropentane

(b) 2-chloro-4-methylpentane

(h) m-chlorophenol

(c) 3-methyl-2-pentene

(i) 5,5-dichloro-2-hexene

(d) 3,3-dimethyl-1-butyne

(j) 2-chloro-3-ethylpentane

(e) 2-phenylbutane

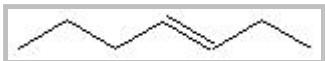
(k) p-bromochlorobenzene

(f) o-chlorobenzaldehyde

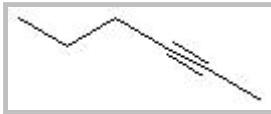
(l) 5-methyl-2-heptyne

[20 pt] 2. Draw the following organic molecules:

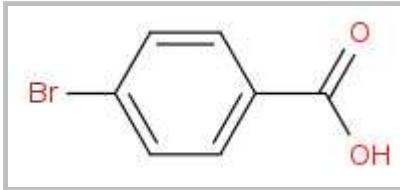
(a) 3-heptene



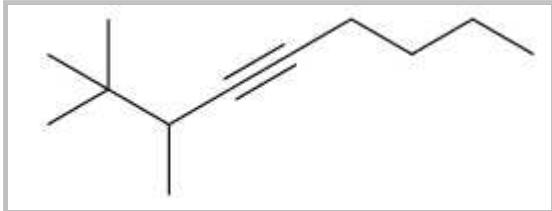
(b) 2-hexyne



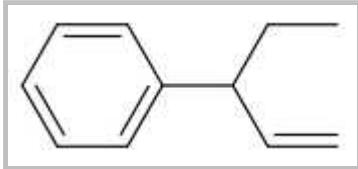
(c) p-bromobenzoic acid



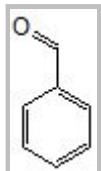
(d) 2,2,3-trimethyl-4-nonyne



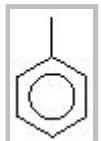
(e) 3-phenyl-1-pentene



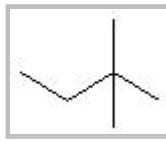
(f) benzaldehyde



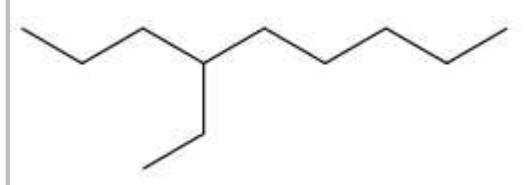
(g) toluene



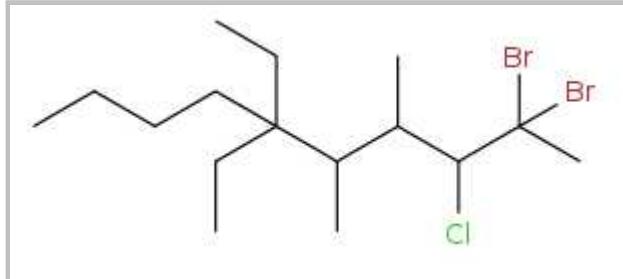
(h) 2,2-dimethylbutane



(i) 4-propyloctane



(j) 2,2-dibromo-3-chloro-6,6-diethyl-4,5-dimethyldecane



- [30 pt] 3. Complete the following reactions in the format given. Assume all substitution reactions are monosubstitutions only. Circle the favored product in a reaction. Include states where appropriate. Be sure to balance any combustion reactions. If no reaction occurs put NR for the products.

