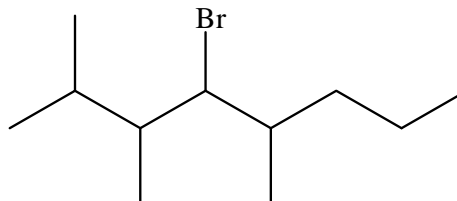


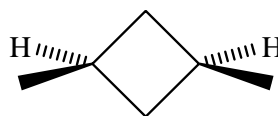
CHEM1102 Answers to Problem Sheet 2

1.

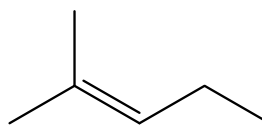
(a) 4-bromo-2,3,5-trimethyloctane



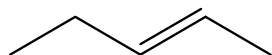
(b) *cis*-1,3-dimethylcyclobutane



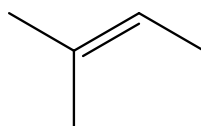
(c) 2-methyl-2-pentene



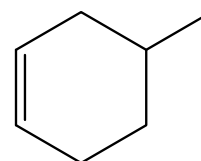
2.



**(E)-pent-2-ene**



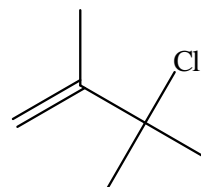
**2-methyl-2-butene**



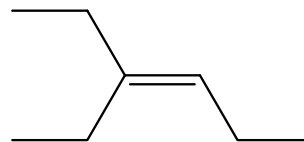
**(Z)-4-methylcyclohex-1-ene**

3.

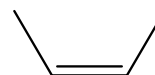
(a) 3-chloro-2,3-dimethyl-1-butene



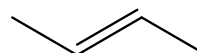
(b) 3-ethyl-3-hexene



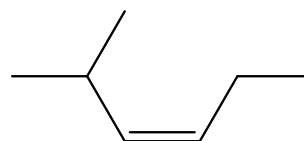
(c) (Z)-2-butene



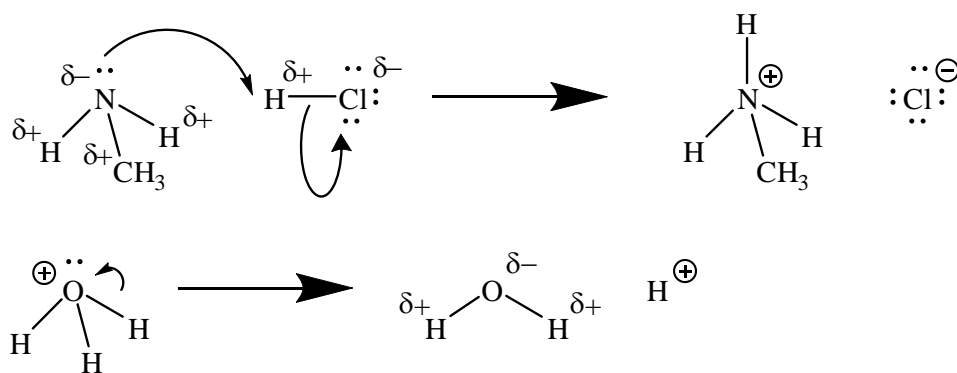
(d) (E)-2-butene



(e) (Z)-2-methyl-3-hexene



4.



5. The reaction involves *nucleophilic* attack on carbon leading to *substitution* of bromine by amine. It is a nucleophilic substitution reaction.

