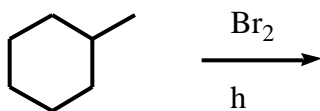
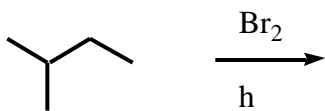
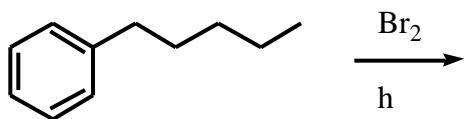






4. (See problems 4.33 and 4.34 in Carey first).

(a) Show the structure of the principal organic product that is formed in the following reactions:



(b) For the products of each of the above reactions, show an alternate way of making them using an alcohol as the starting material instead of an alkane.