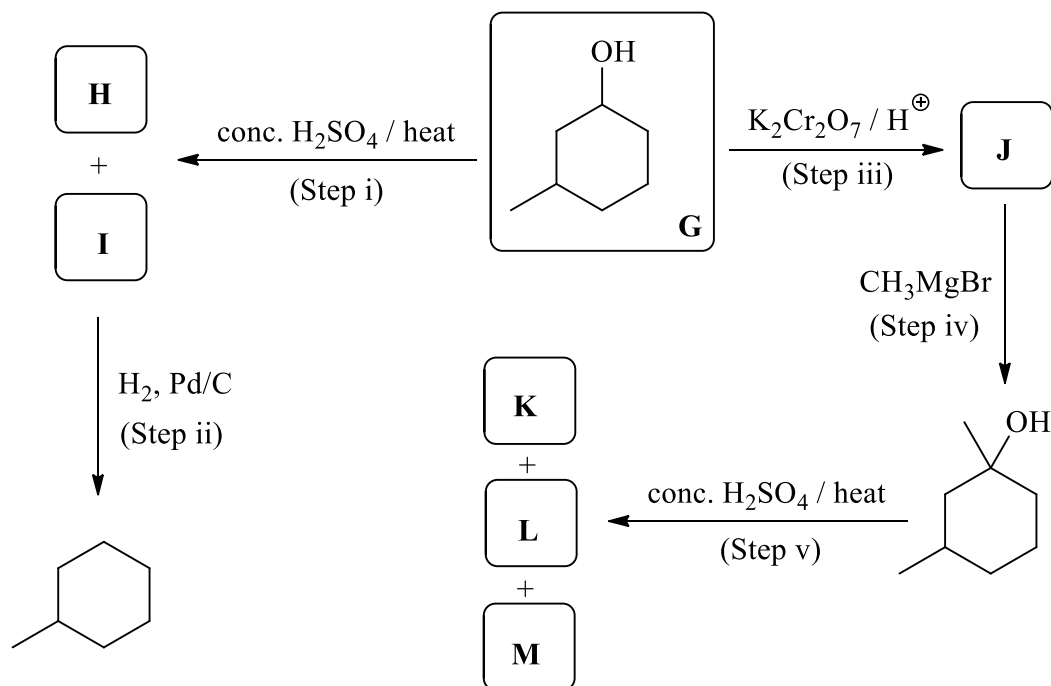


- Consider the following reaction sequences beginning with the secondary alcohol, **G**.



Suggest structures for compounds **H** – **M** in the reaction sequences above.

H	I	J
K	L	M

What approximate ratio **H** : **I** do you expect? Why?

1 : 1. Both products are formed from a common carbocation intermediate. There is no real preference for which H^+ will be lost as both products (H and I) have the same degree of substitution (Saytsev's rule).

What type of reaction is occurring in Step i?

Elimination (E1)

What type of reaction is occurring in Step ii?

Addition

What type of reaction is occurring in Step iii?

Oxidation

What type of reaction is occurring in Step iv?

Nucleophilic addition (A_N)