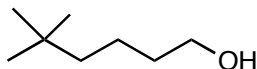


Name the following molecule:



Draw the structure of
5,5-dimethyl-1-hexanol

Which of the following bonds is generally
the most acidic?

C-H N-H O-H

For atoms in the same row of the periodic
table, acidity generally increases with
increasing negativity of the atom
attached to the proton that is to be
removed. Thus,

O-H > N-H > C-H

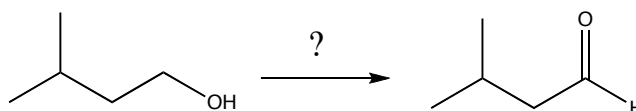
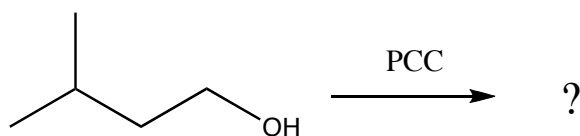
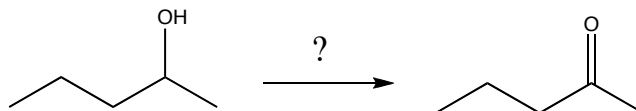
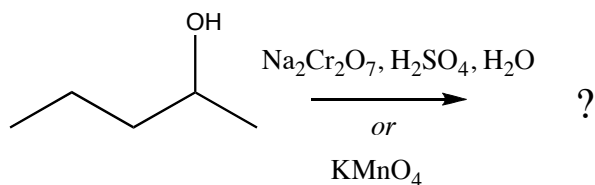
Which of the following bonds is generally
more acidic?

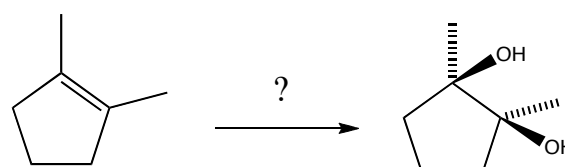
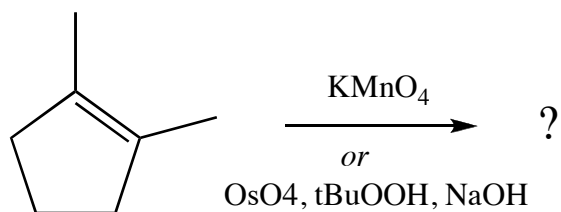
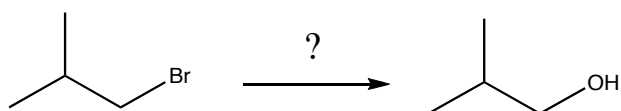
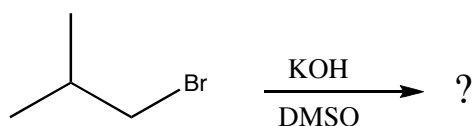
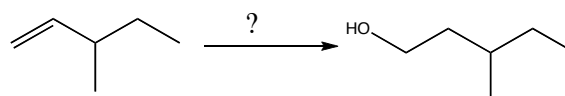
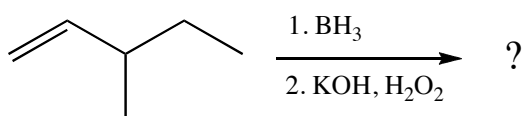
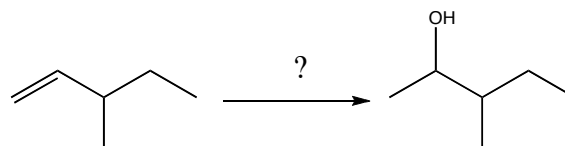
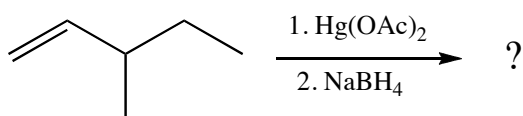
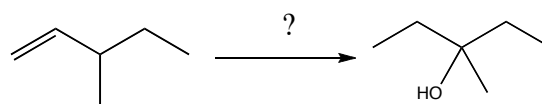
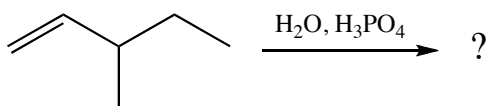
O-H S-H

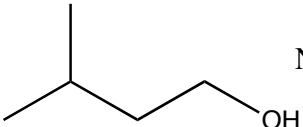
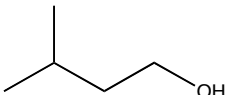
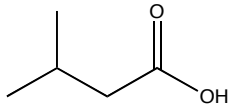
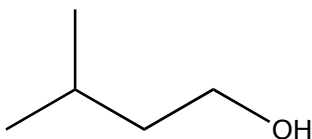
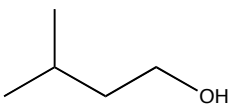
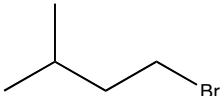
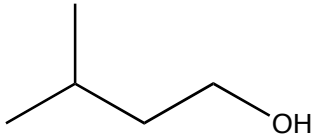
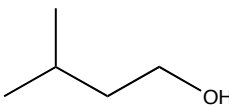
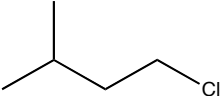
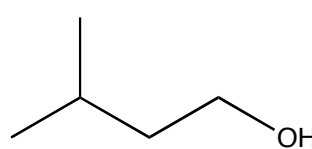
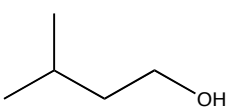
For atoms in the same column of the
periodic table, acidity generally increases
with increasing size of the atom attached
to the proton that is to be removed.

Thus,

S-H > O-H





 $\xrightarrow[\text{KMnO}_4]{\text{Na}_2\text{Cr}_2\text{O}_7, \text{H}_2\text{SO}_4, \text{H}_2\text{O}}$?	 $\xrightarrow{?}$ 
 $\xrightarrow{\text{PBr}_3}$?	 $\xrightarrow{?}$ 
 $\xrightarrow[\text{SOCl}_2]{\text{PCl}_3 \text{ or } \text{SOCl}_2}$?	 $\xrightarrow{?}$ 
 $\xrightarrow{\text{TsCl, pyridine}}$?	 $\xrightarrow{?}$ 