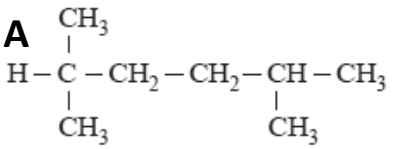
Friday Worksheet **Name: ……..**

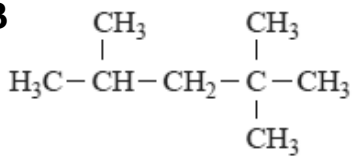
Organic worksheet 3

1) Give the systematic IUPAC name for the molecules shown on the right .

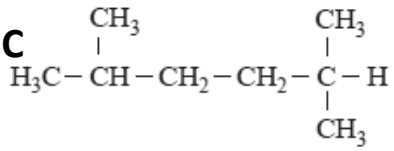
A



B



C



A) _____

B) _____

C) _____

2) Give the structural and semi-structural formulae of the following molecules.

a) 3-ethylhexane

b) 2, 4-dimethylpentane

3) Which one of the following compounds is most soluble in water at room temperature? Explain

a) Propane
b) Propene
c) Butan-2-ol
d) Butanoic acid

4) 3-bromobut-2-ene and HCl react according to the equation below.

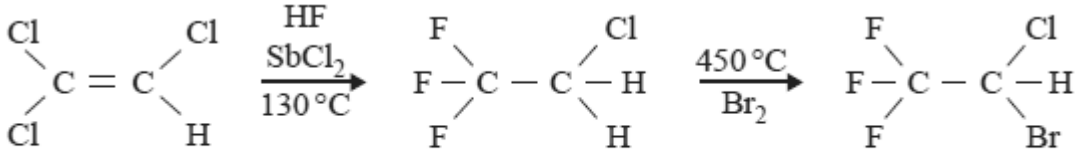
3-bromobut-2-ene + HCl => X

a) Give the possible structural formulae and systematic names of X
b) What type of reaction is this?

5) Which of the following compounds are isomers of 2,2,4-trimethylpentane

a) octane
b) 3-ethylhexane
c) 2, 4-dimethylpentane
d) 2,4-dimethylhexane

6) Below is the diagram of the formation of halothane.



molecule X step 1 step 2

a) Give the IUPAC systematic name for halothane

b) What type of reaction is step 2?