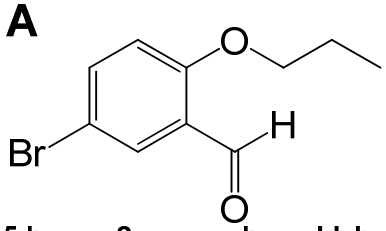
WORKSHEET VI_Keys

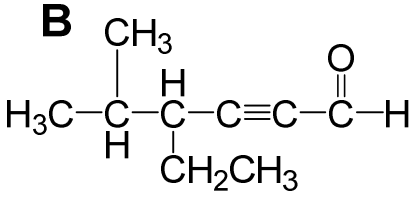
1. Name the following compounds

A



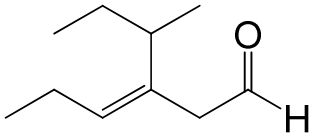
5-bromo-2-propoxybenzaldehyde

B



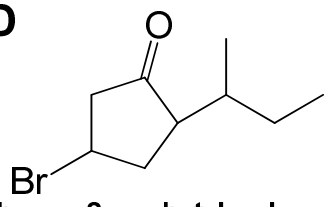
4-ethyl-5-methylhex-2-ynal

C



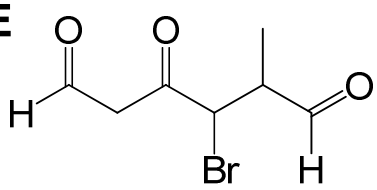
3-*sec*-butylhex-3-enal

D



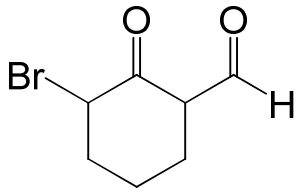
4-bromo-2-*sec*-butylcyclopentanone

E



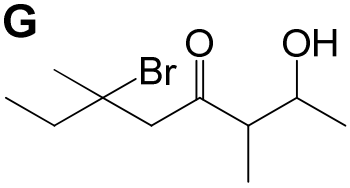
3-bromo-2-methyl-4-oxohexanedial

F



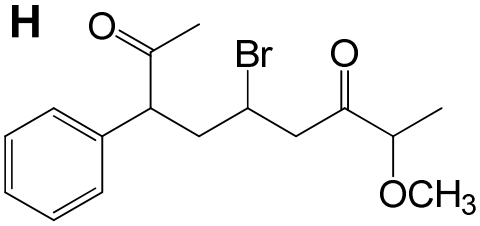
3-bromo-2-oxo cyclohexanecarbaldehyde

G



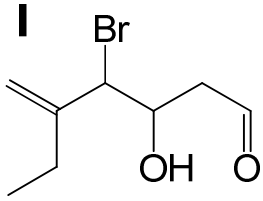
6-bromo-2-hydroxy-3,6-dimethyl octan-4-one

H



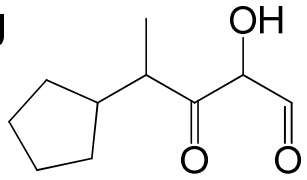
5-bromo-8-methoxy-3-phenyl nonane-2,7-dione

I



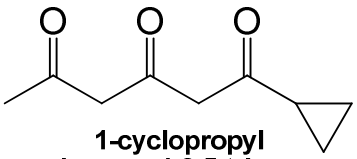
4-bromo-5-ethyl-3-hydroxy hex-5-enal

J



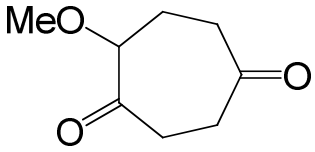
4-cyclopentyl-2-hydroxy-3-oxopentanal

K



1-cyclopropyl hexane-1,3,5-trione

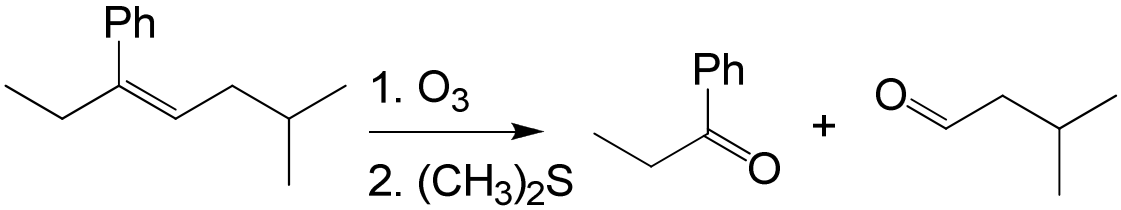
L



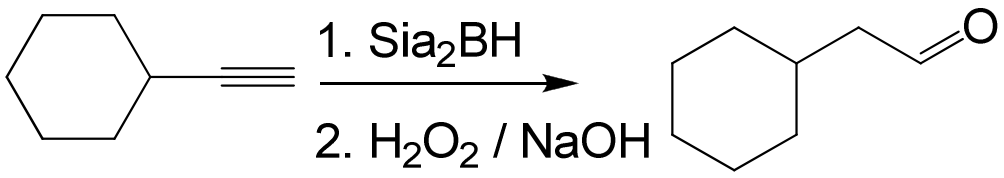
5-methoxycycloheptane-1,4-dione

2. Draw the product(s) of the following reactions

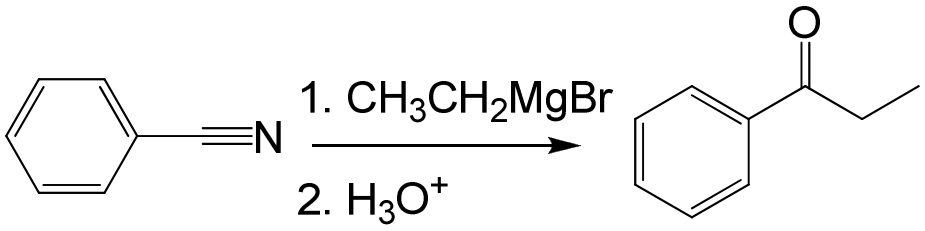
A



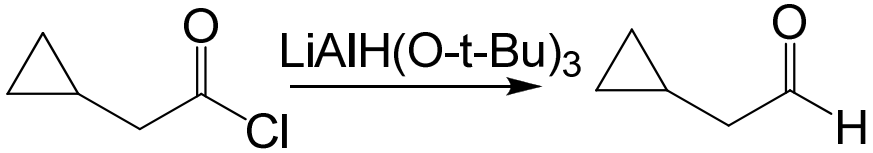
B



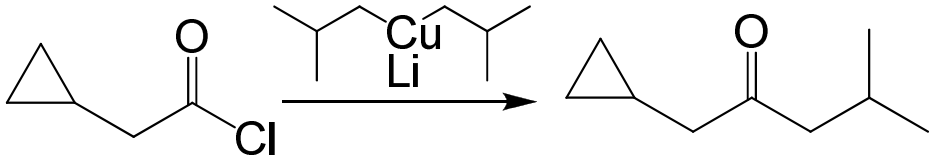
C


1. CH_3CH_2MgBr
2. H_3O^+

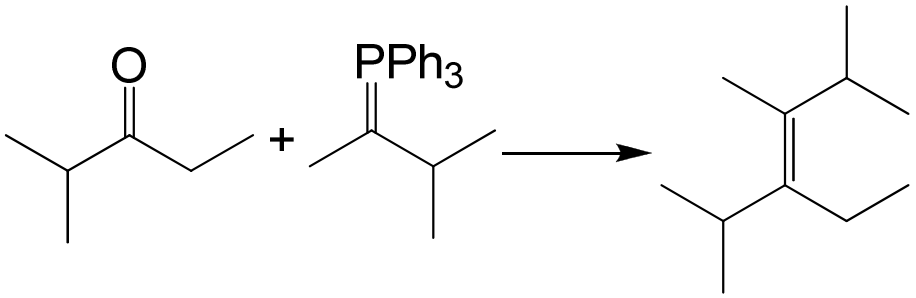
D


$LiAlH(O\text{-}t\text{-}Bu)_3$

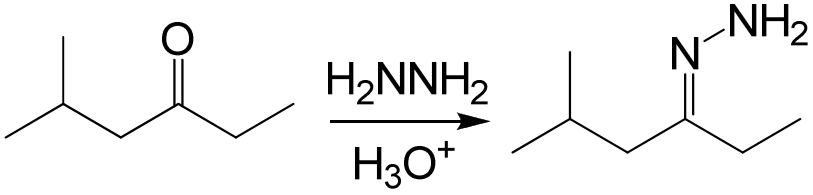
E


Cu
Li

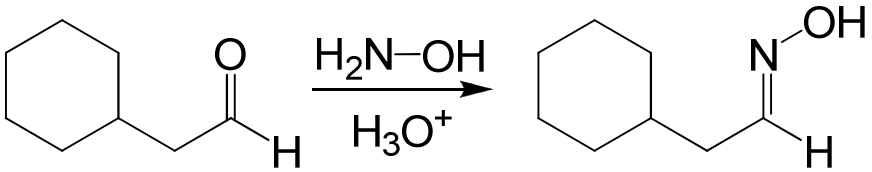
F


PPh_3

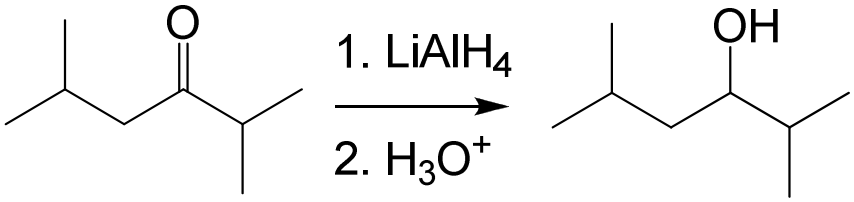
G


H_2NNH_2
H_3O^+
NH_2

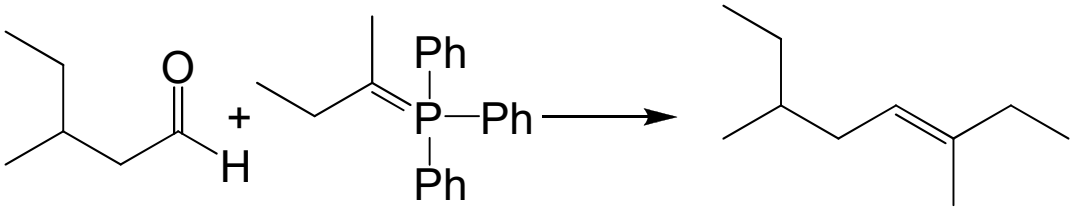
H


$H_2N{-}OH$
H_3O^+
OH

I

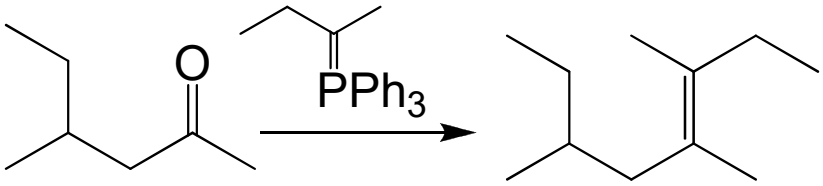

1. $LiAlH_4$
2. H_3O^+
OH

J

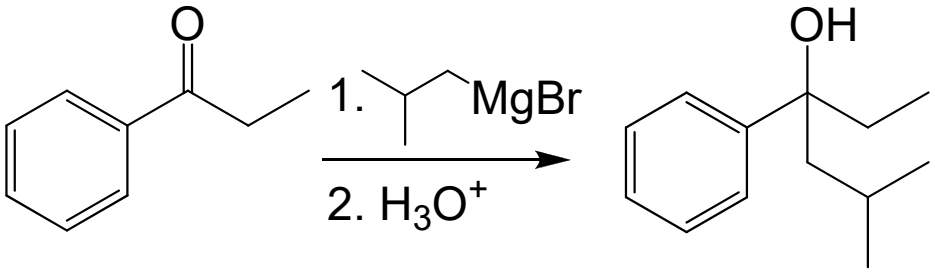


3. How would you achieve the following transformation?

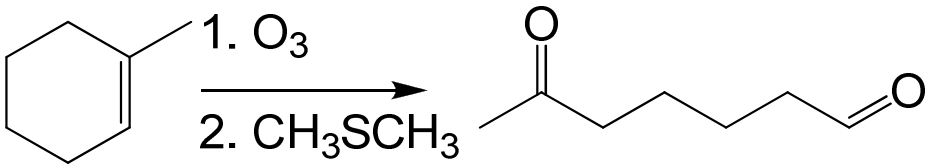
A



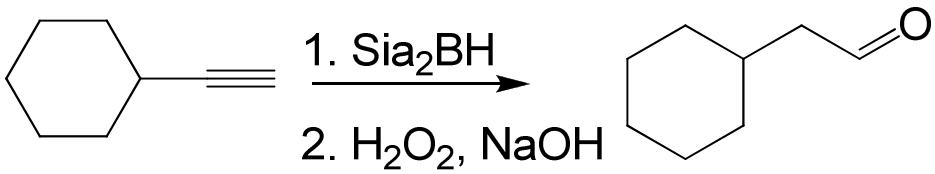
B



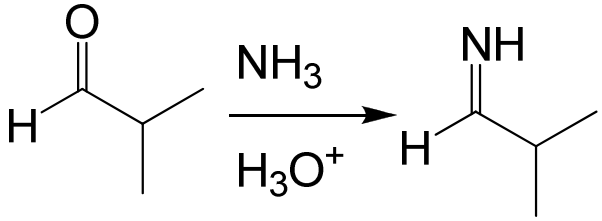
C



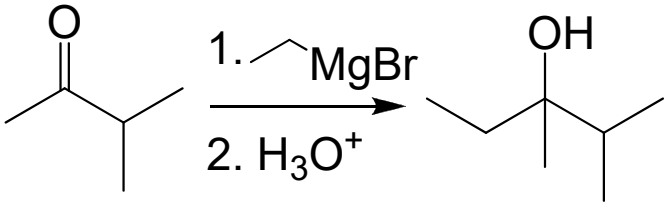
D



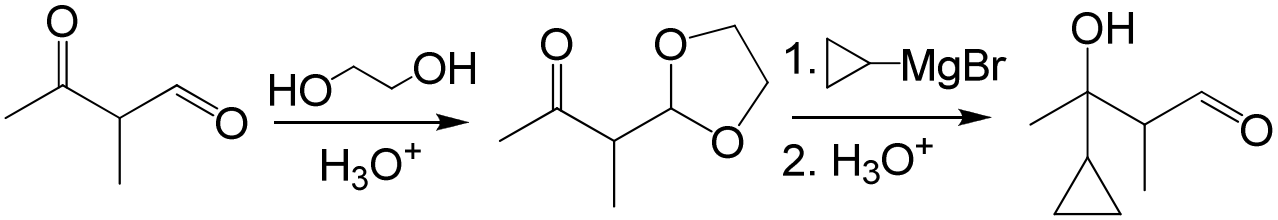
E



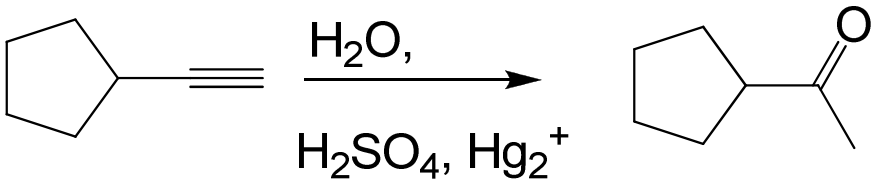
F


O
1.
MgBr
2. H_3O^+
OH

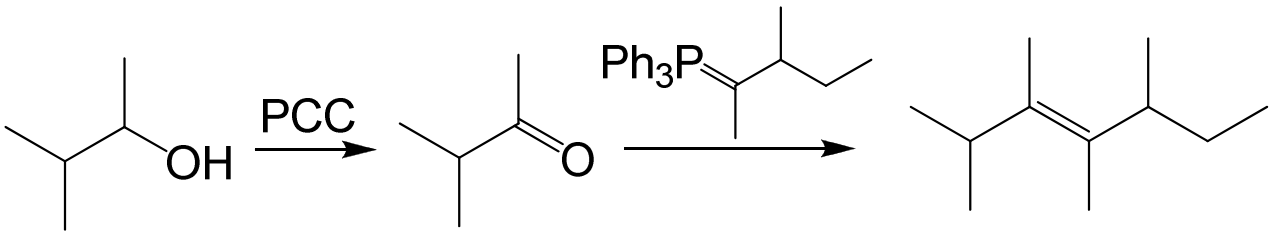
G


O
O
HO
OH
H_3O^+
O
O
O
1.
MgBr
2. H_3O^+
OH
O

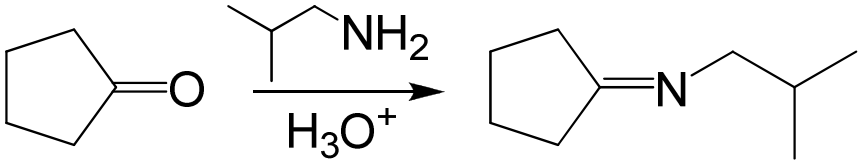
H


H_2O,
H_2SO_4, Hg_2^+
O

I


OH
PCC
O
Ph_3P

J


O
NH_2
H_3O^+
N