

# Functional Groups

Practice Quiz Solutions

(c) Leah4sci.com

Functional groups quiz + video  
+ Naming series (21 videos)

LEAH4SCI.COM / NAMING

Video Solutions + Step by Step  
explanations in the

Organic Chemistry Study Hall

LEAH4SCI.COM / STUDY

## Part 1 - Warmup

green = answers

alkyl halide

thiol

amine

ketone

alcohol

alcohol

alkane

carboxylic  
acid

amide

ether

aldehyde

alkene

## Part 2

carboxylic acid

ether

nitrile

alkane on  
benzene

amine

aldehyde

ketone

aldehyde

alkyne

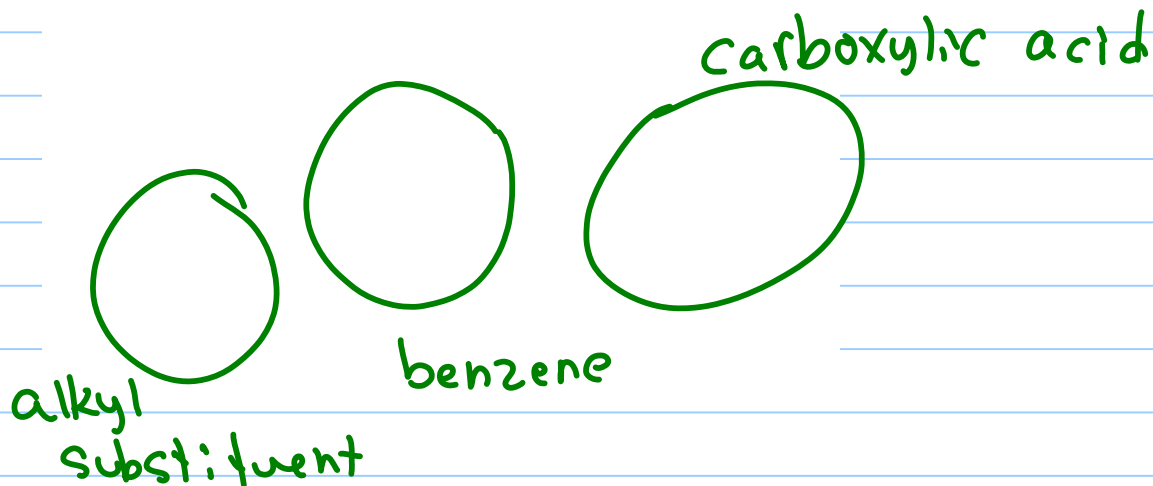
ester

amide

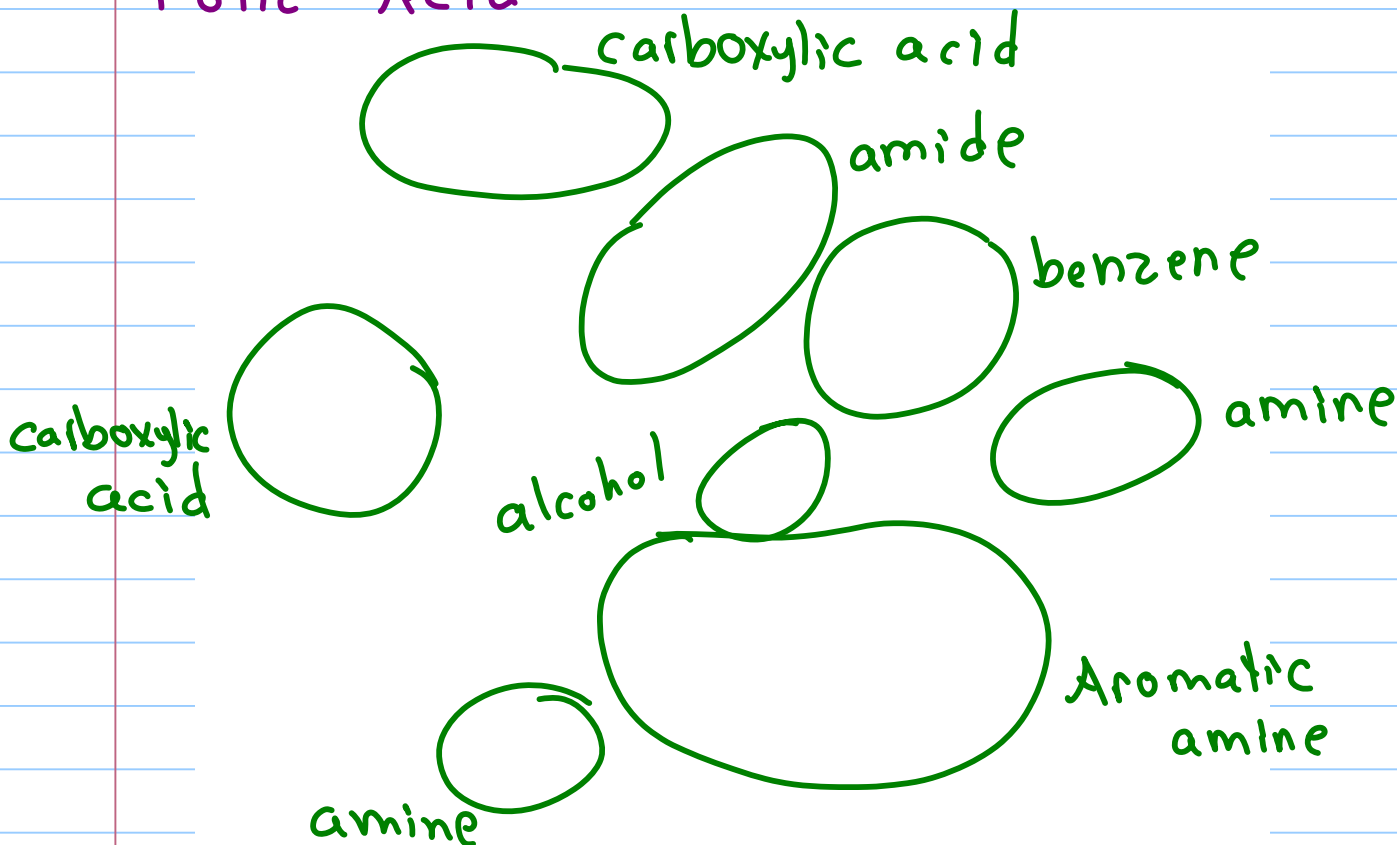
alcohol

# Part 3

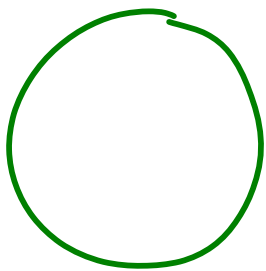
## Ibuprofen



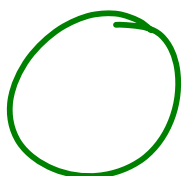
## Folic Acid



## Amphetamine

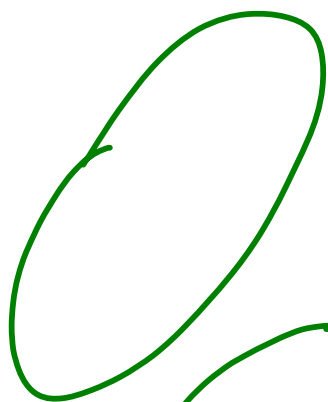


benzene

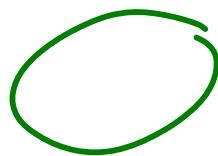


amine

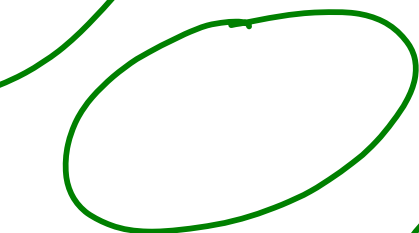
## Penicillin



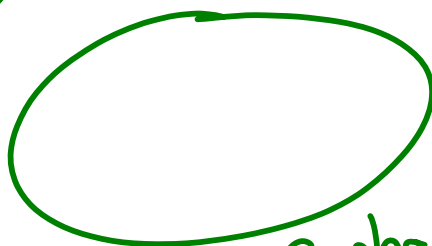
amide



thioether

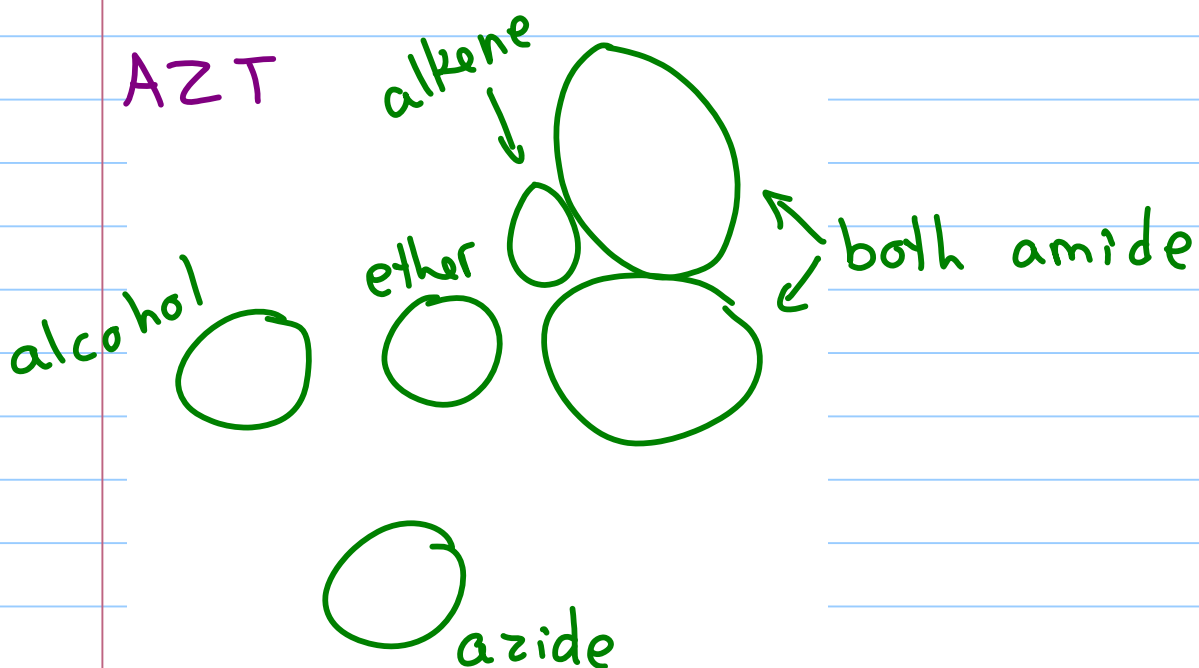


cyclic  
amide



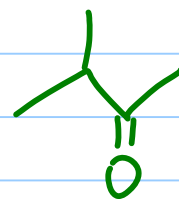
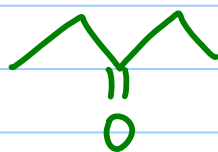
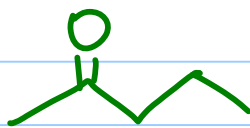
carboxylic acid

AZT

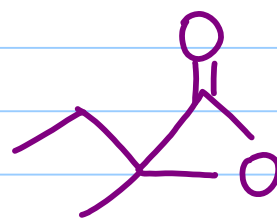
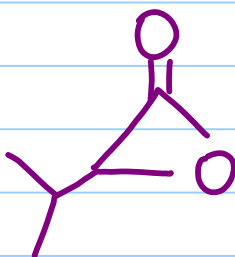
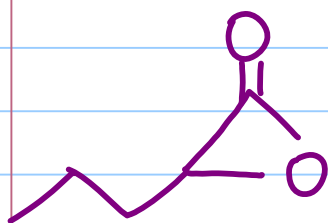
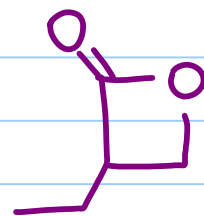
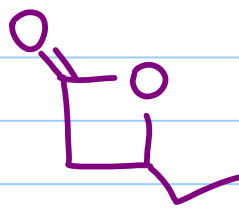
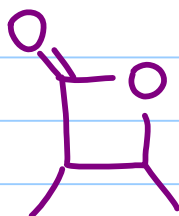
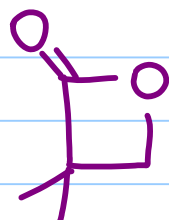
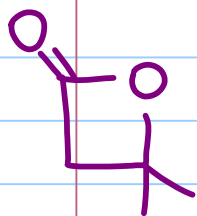
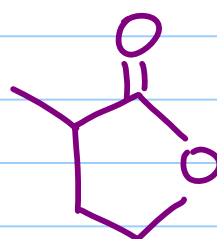
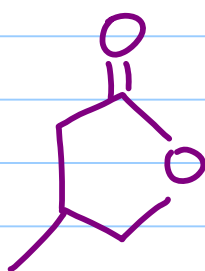
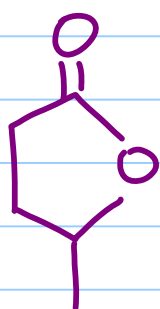
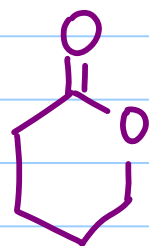
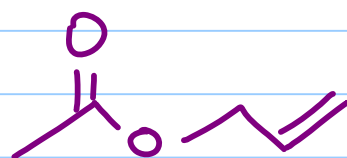
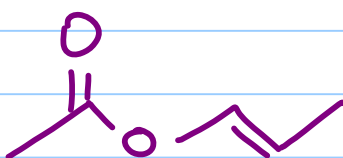
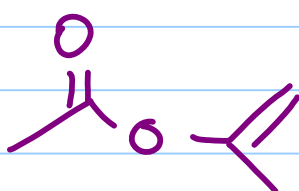
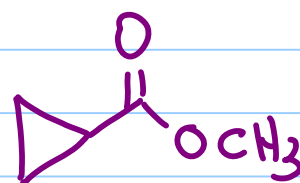
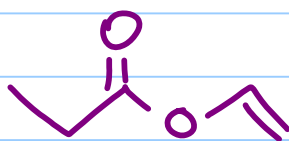
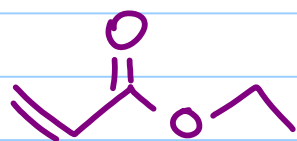
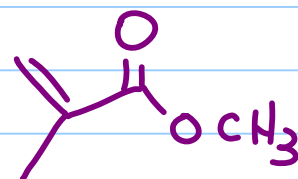
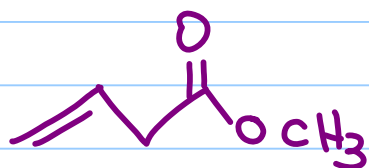
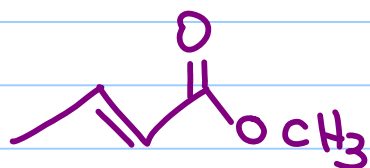


## Part 4 - Isomers

4.1) Ketone  $C_5H_{10}O$   $IHD = 1$



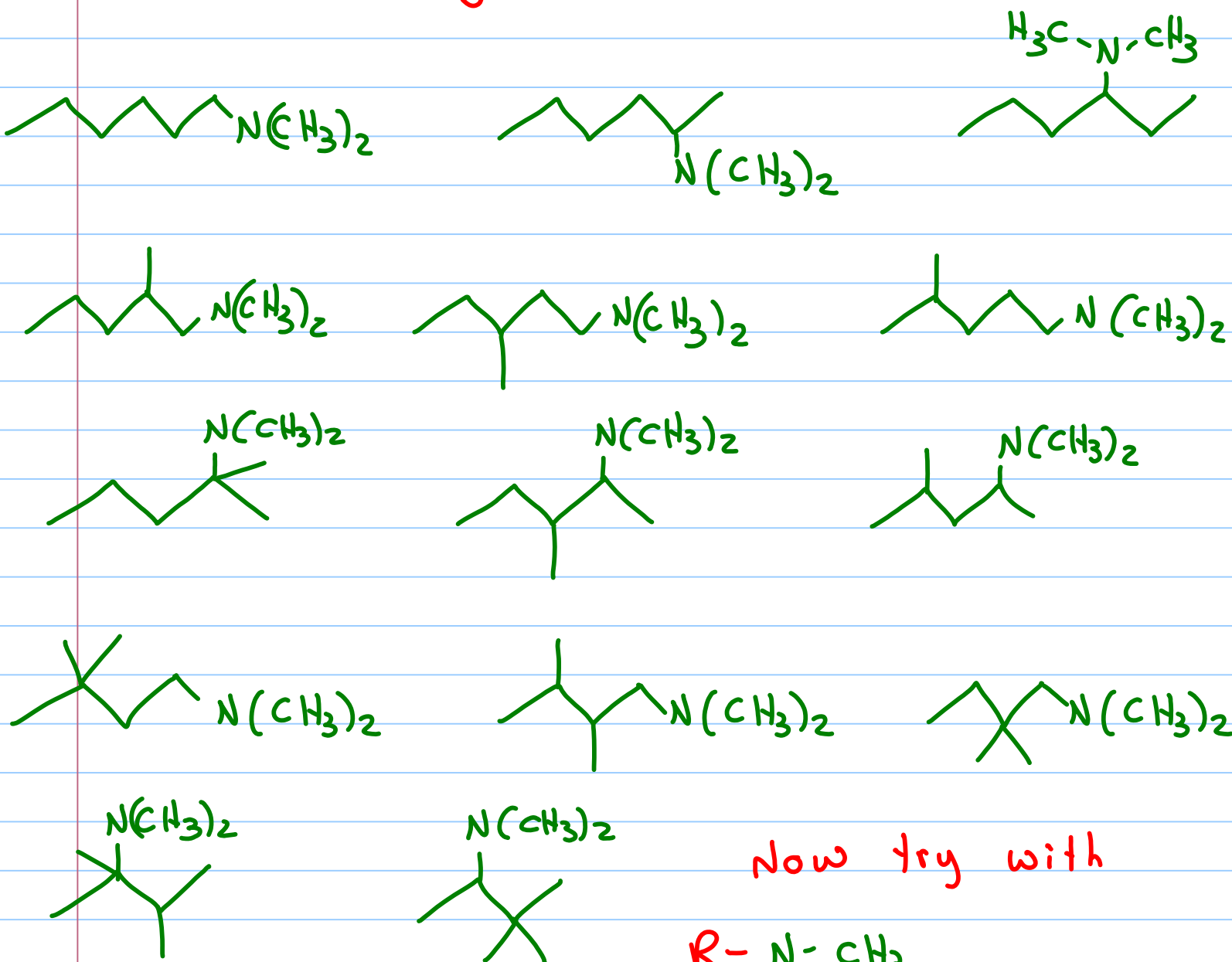
4.2) Ester  $C_5H_8O_2$  IHD = 2



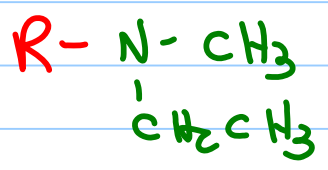
Email me if you find one that I missed!

askleah@leah4sci.com

4.3) There are DOZENS - here are \_  
 to start you off.. C-8 3° amine



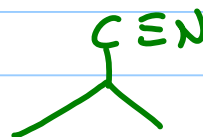
Now try with



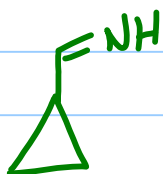
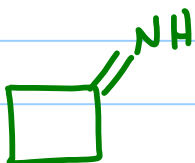
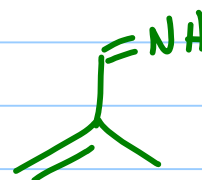
There are dozens more  
 on the solutions video

4.4) Non-amine  $C_4H_7N$  IHD = 2

nitrile



Imine

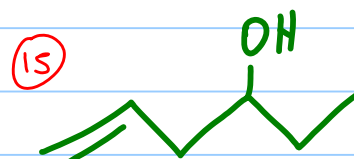
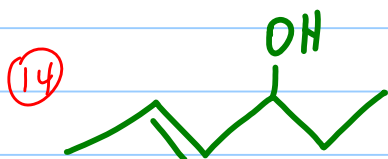
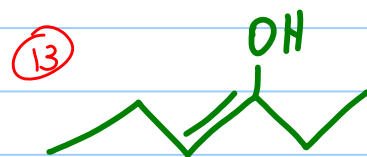
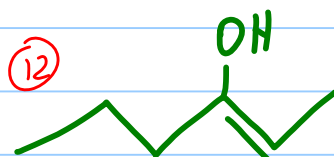
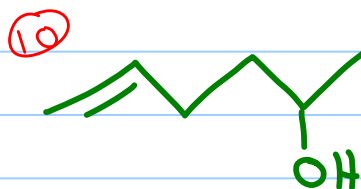
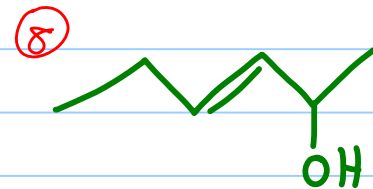
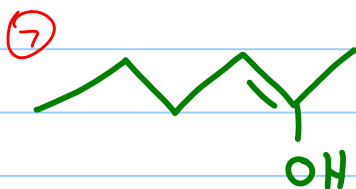
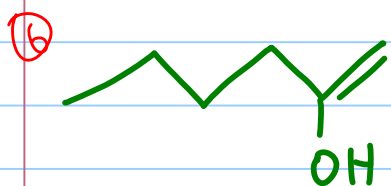
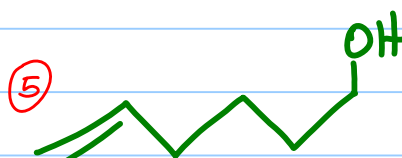
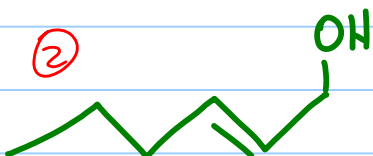
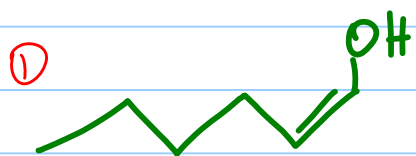


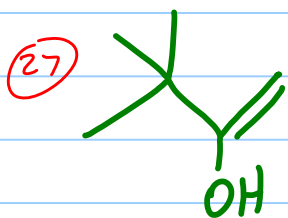
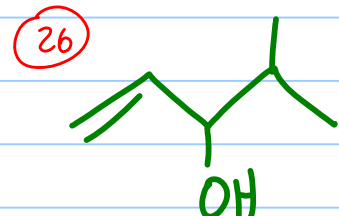
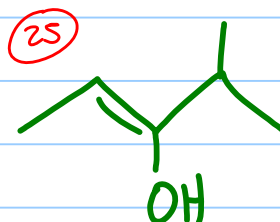
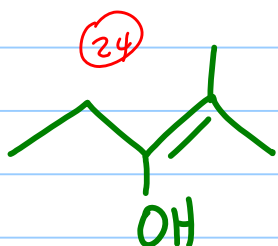
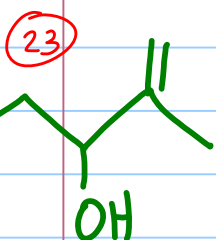
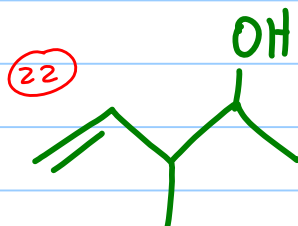
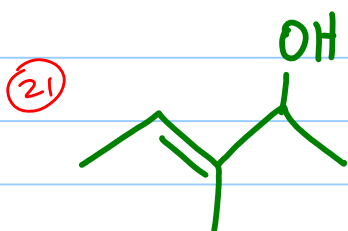
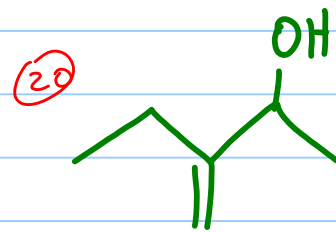
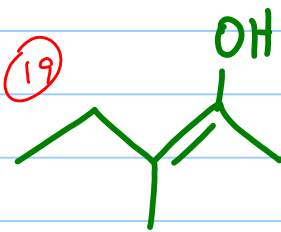
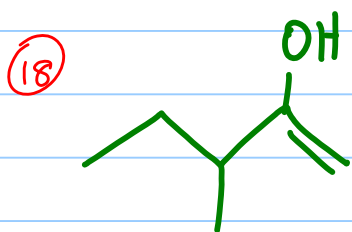
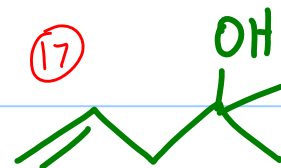
email me if you find any more



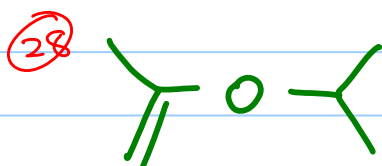
# Bonus Question

At least 30 structures:  $C_6H_{12}O$  IHD = 1

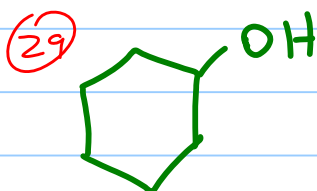




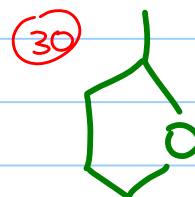
dozens more on video  
for following:



ethers



cyclic  
alcohols



cyclic  
ethers  
& epoxides