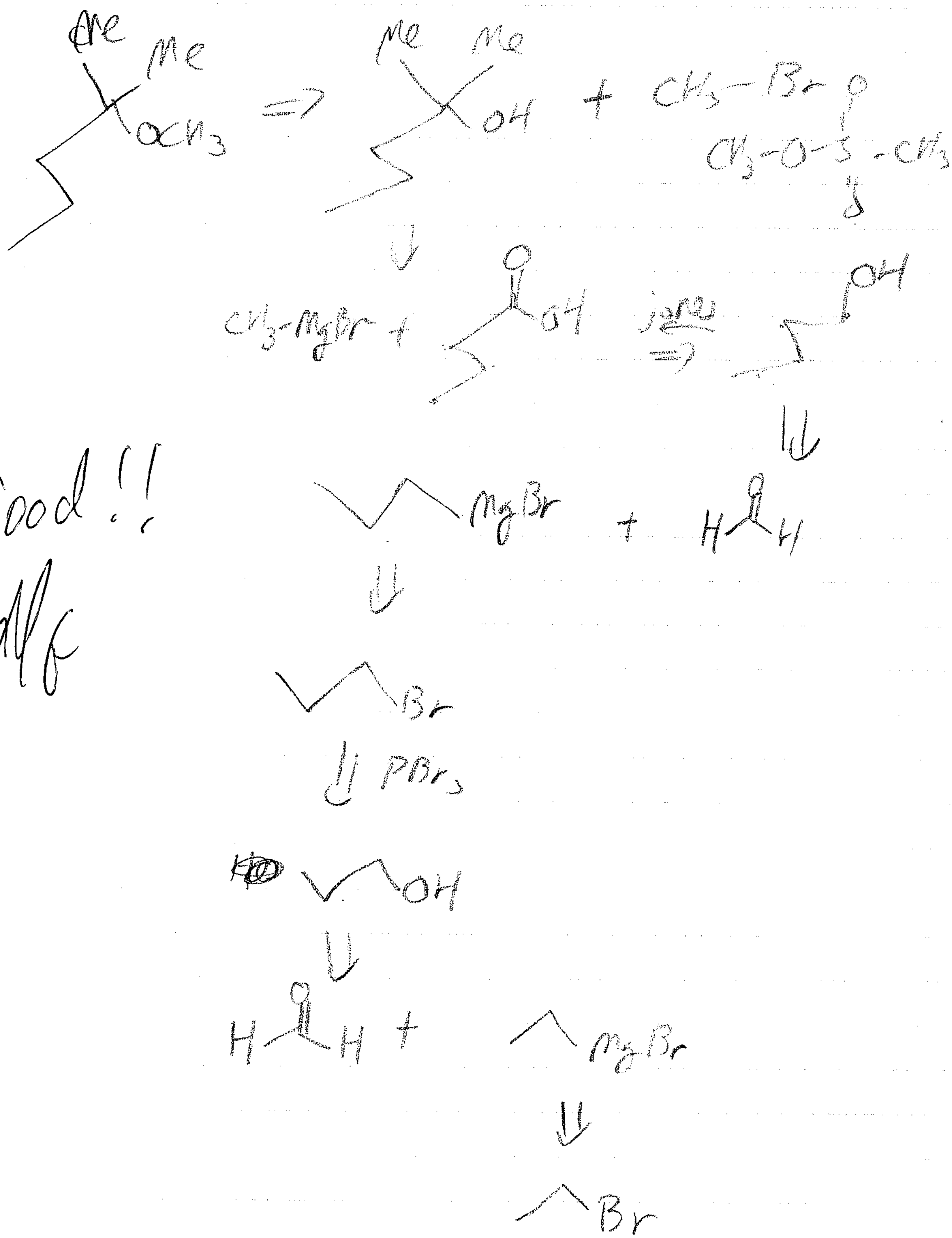
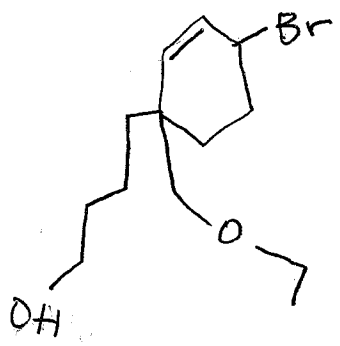
Jul | Park



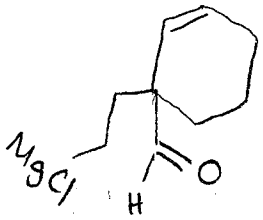
Good!!

Ashley Morgan

Synthesize this molecule:

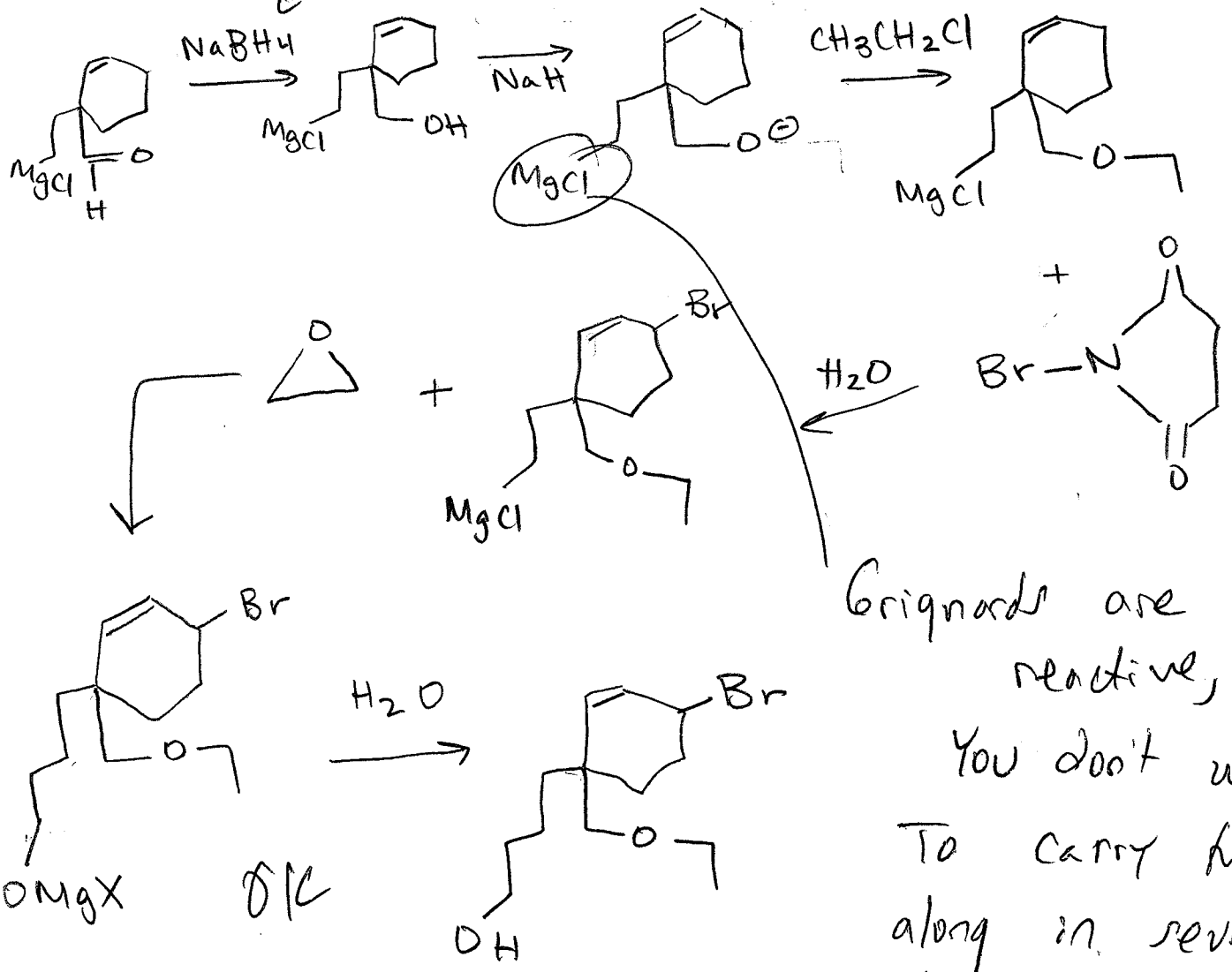


From this starting material:



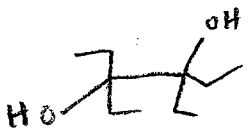
Answer:

~~with~~ I'm not sure it will survive w/ Grignard reagent there



Synthesis Problem 2/9/05 Student ID # 0320502

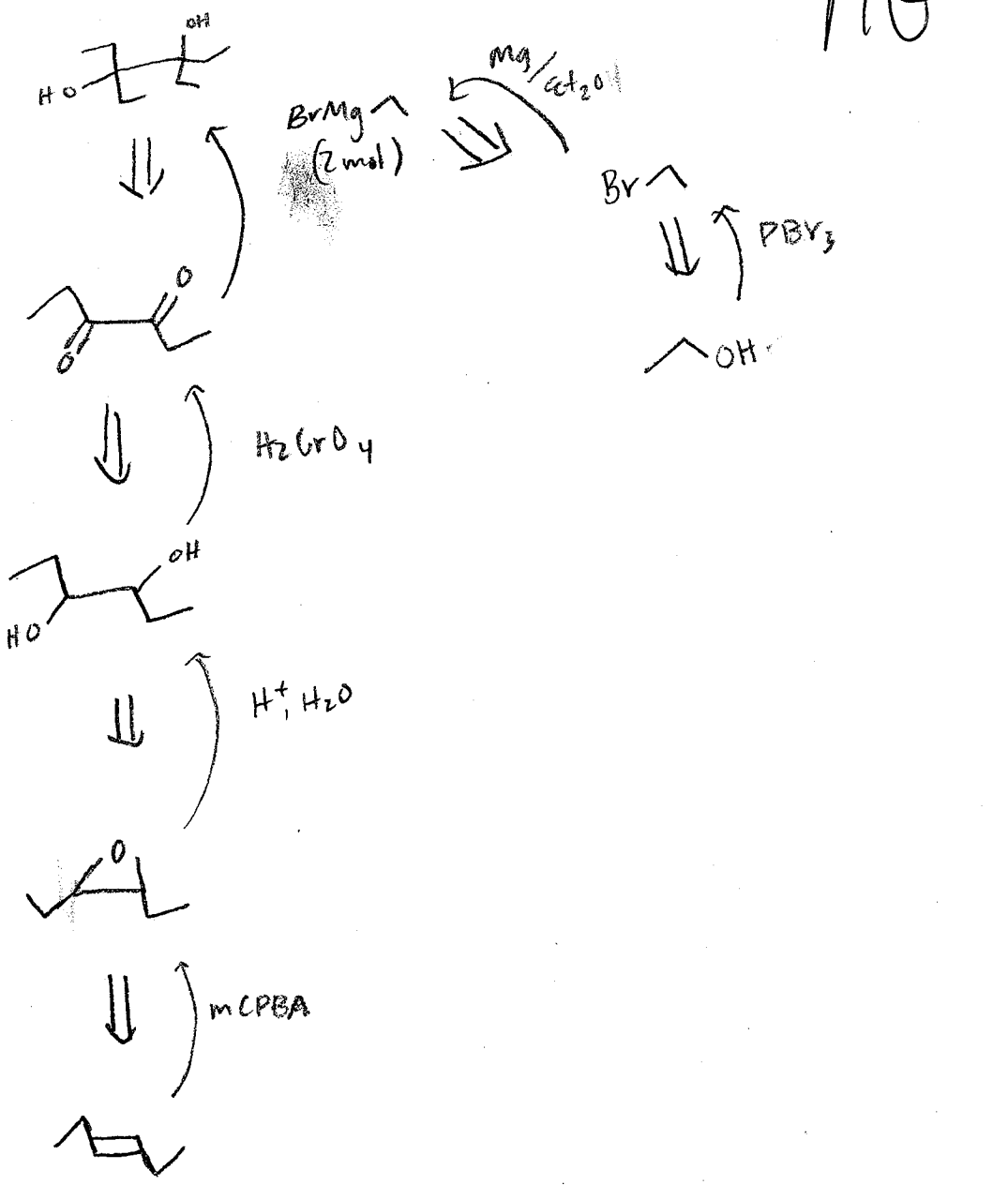
synthesize the following molecule:

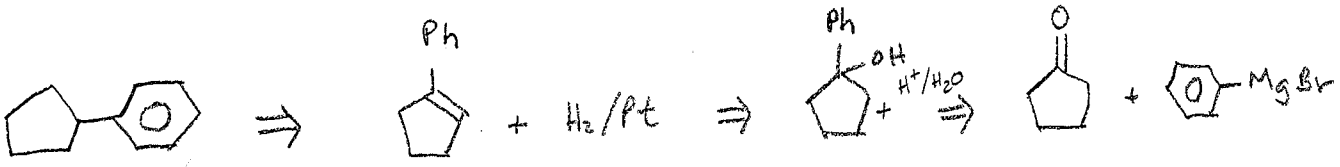


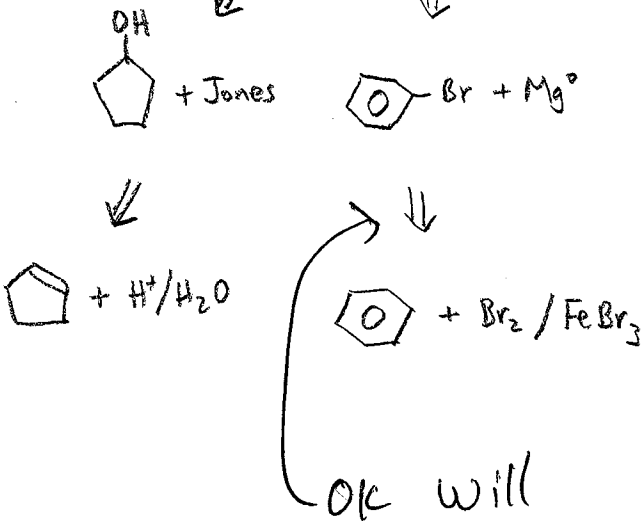
Good !!

MG

Answer







Starting material:

cycloalkene

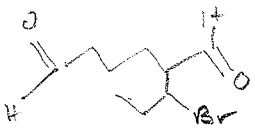
benzene

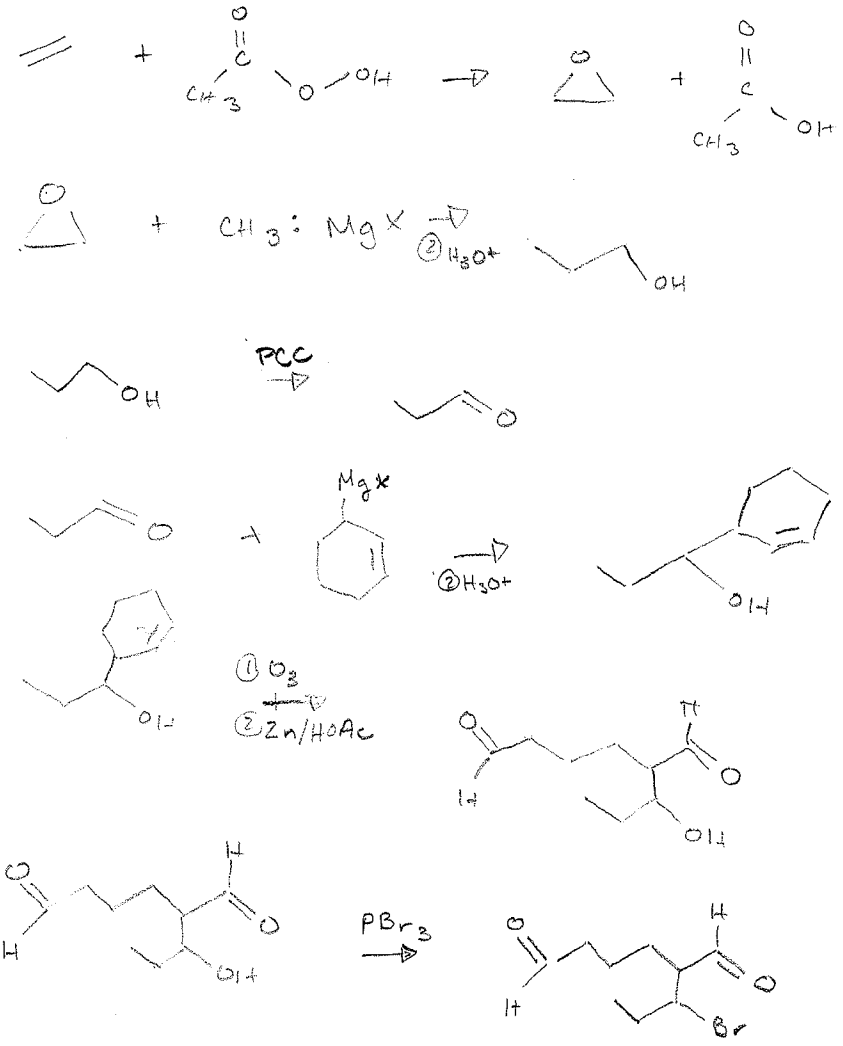
Good!!

MB

David Zhu
chem 336 AB
2/8/05

ok will cover this in next chapters

Start with = to make  . Reagents may be more than 3 carbons.

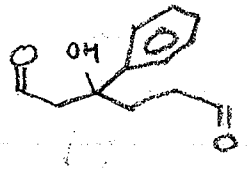


Good!!!

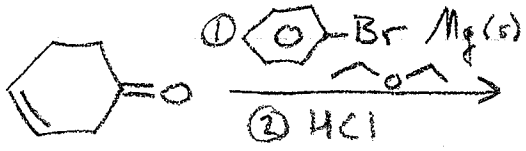
MF

Minh-An Nguyen
chem 336
21905

Shane Kinard
2/8/05
CHEM 336
Synthesis

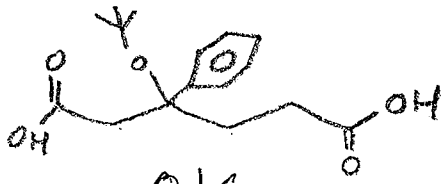
Synthesize  as a racemate from 

and any other necessary reagents.

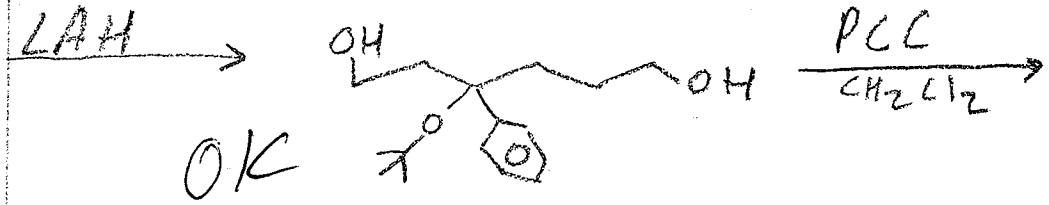


+ enant OK

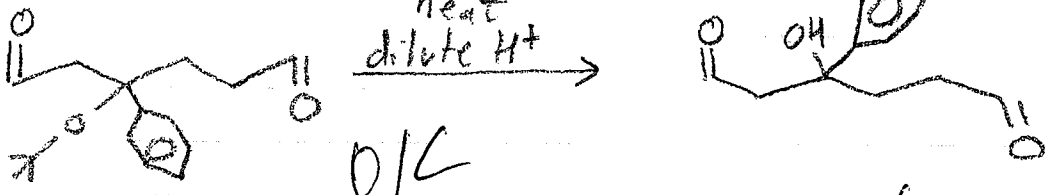
OK



OK



OK



OK

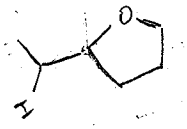
Good !!

MB

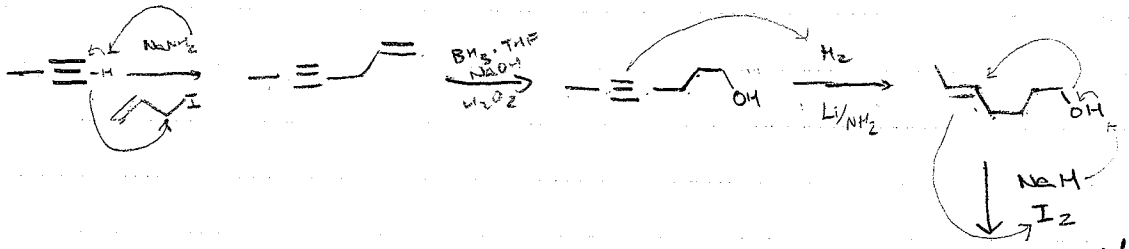
Tim Mc

CHEM 336

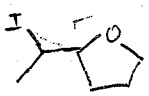
MECHANISM HOMEWORK



less than 4 carbons (1, 2, 3)

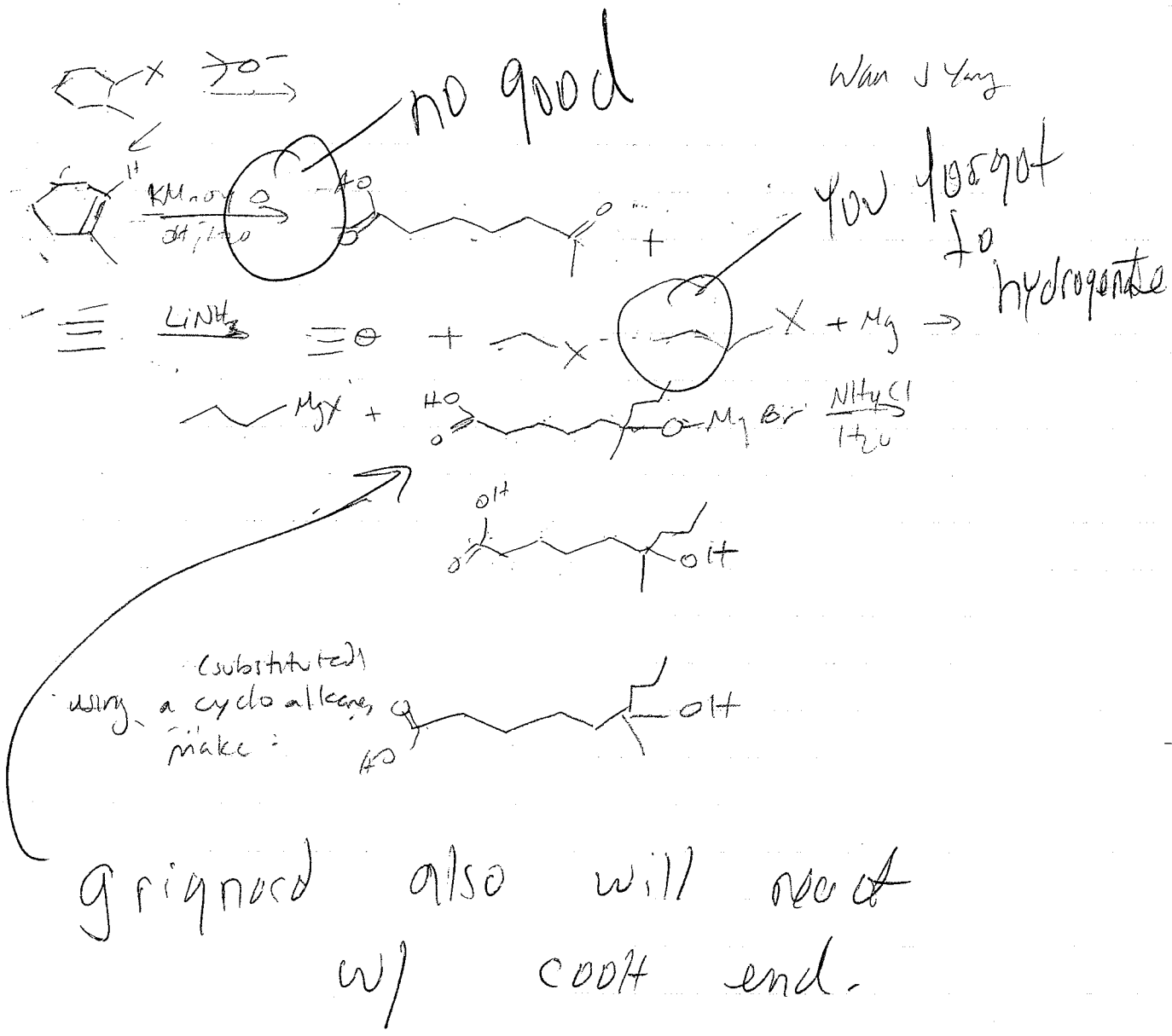


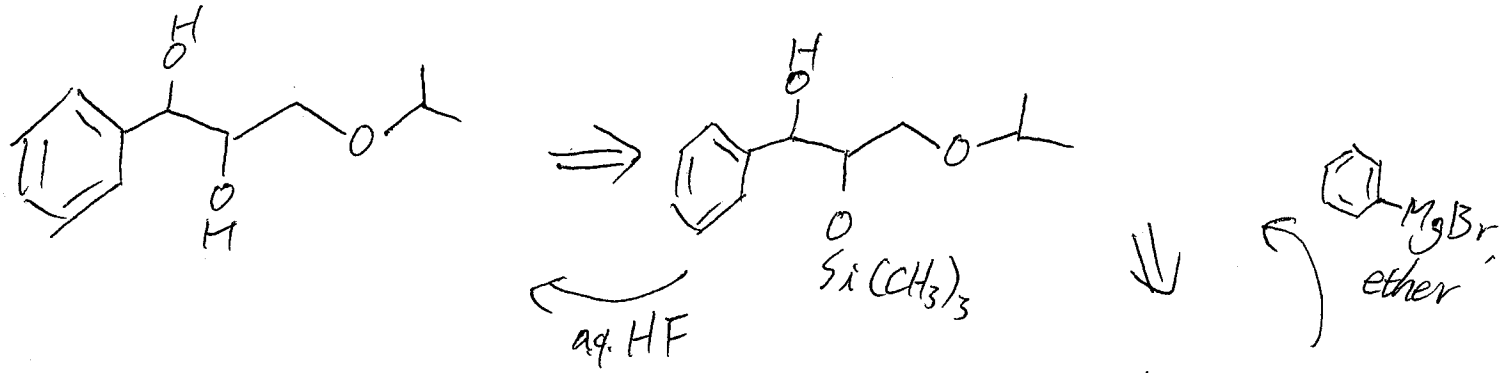
MAYBE



where did you see this rxn?

MG

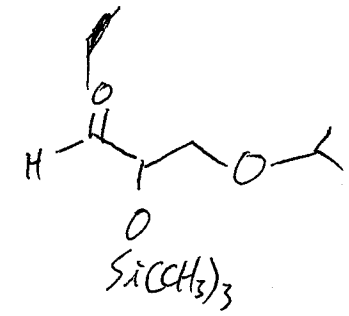

no good
Wan J Yang
You forgot to hydrogenate
LiNH2
NH4Cl
H2O
(substituted)
using a cyclo alkene, make:
grignard also will react w/ COOH end.

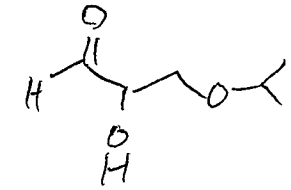


Starting material.

3 carbons or less.

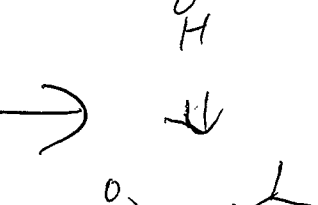
(or propene).

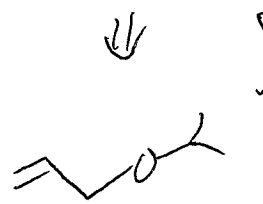


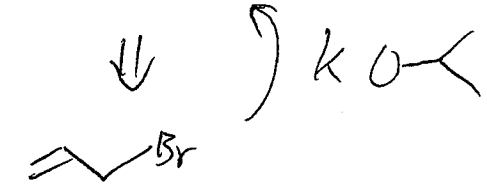


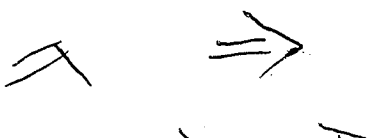
PCC will also oxidize II ROH to ketone

need some OH^- or H^+ w/ the H_2O



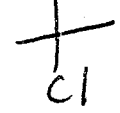






Hsin-yi Lin

but would also get



A!

(1) Start w/ $CH_3CH(CH_3)CH(CH_3)CH_3$

(2) $CH_3CH(CH_3)CH(CH_3)_2 + Cl_2 \xrightarrow{light} CH_3CH(CH_3)CH(CH_3)CH_2Cl$

(3) $CH_3CH(CH_3)CH(CH_3)CH_2Cl + OH^- \longrightarrow CH_3CH(CH_3)CH(CH_3)CH_2OH$

(4) $CH_3C(CH_3)(CH_3)CH(CH_3)CH_2OH + H_2SO_4 \longrightarrow CH_3C(CH_3)=CHCH_2$

(5) $CH_3C(CH_3)=CH_2 + KMnO_4 \longrightarrow CH_3-C(=O)-CH_3 + O=C=O + H_2O$

---

(6) $CH_3CH_2CH_3 + Br_2 \xrightarrow{light} CH_3CH_2CH_2Br$

(7) $CH_3CH_2CH_2Br + Mg \xrightarrow{ether} CH_3CH_2CH_2MgBr$

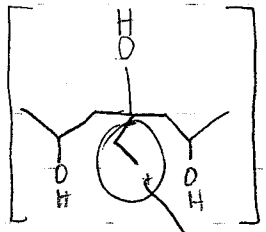
(8) $CH_3-C(=O)-CH_3 + CH_3CH_2CH_2MgBr \longrightarrow CH_3-C(OH)(CH_3)-CH_2CH_2CH_3$

OK

good MB

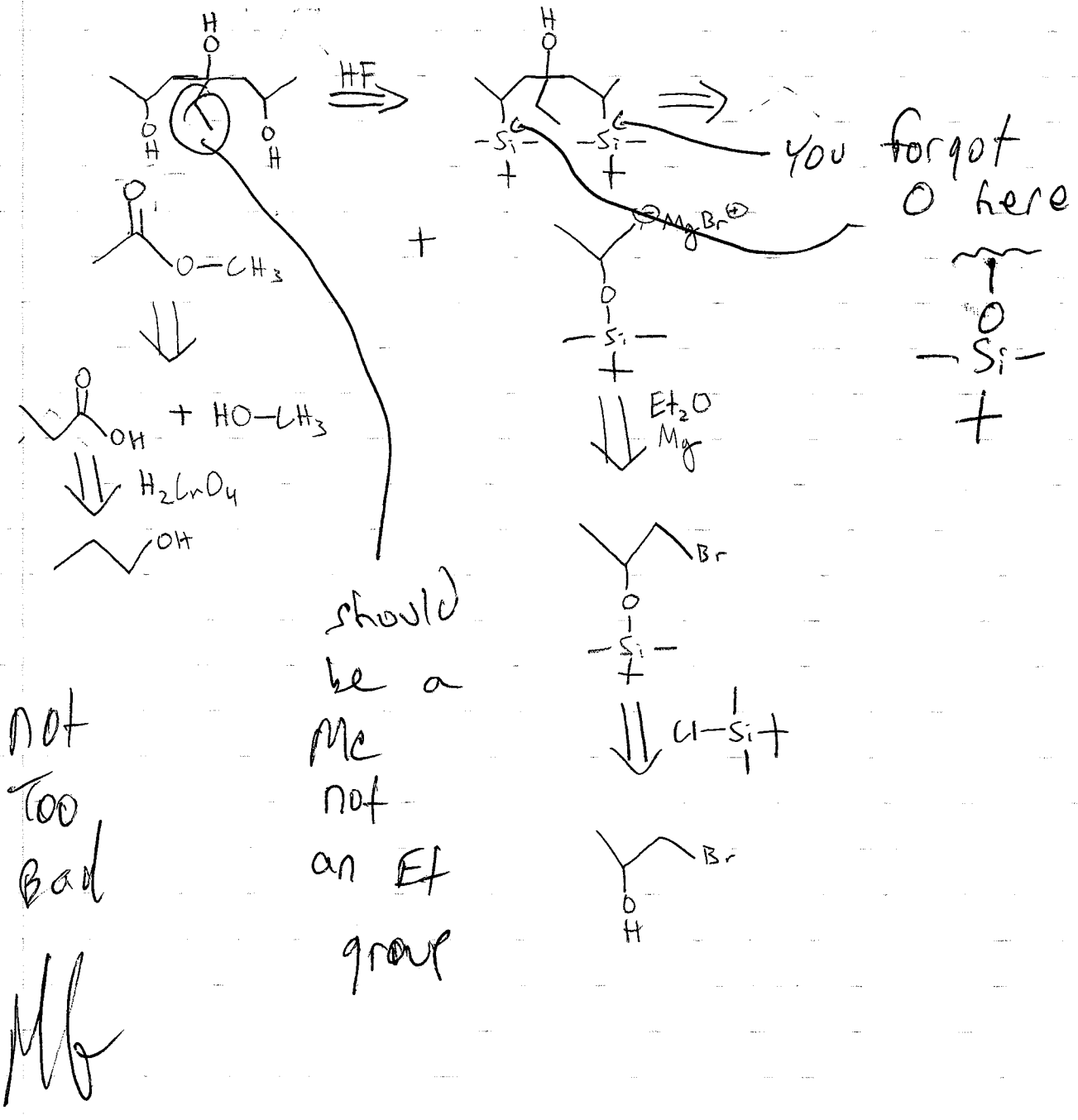
Question: Synthesize $CH_3-C(OH)(CH_3)-CH_2CH_2CH_3$ from compounds w/ 3 carbons or less.

Aaron Black

Make  using 3 carbon or less alcohols and alkyl halides. using any reagents.

should be Me not Et

Answer: (Retrosynthesis)

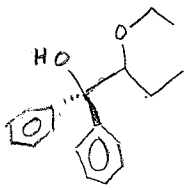


Tri Le

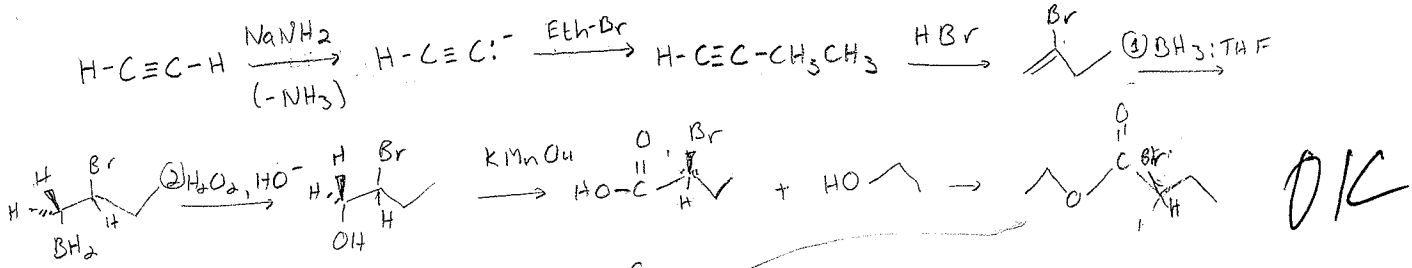
Chem 336 AA

Synthesis problem

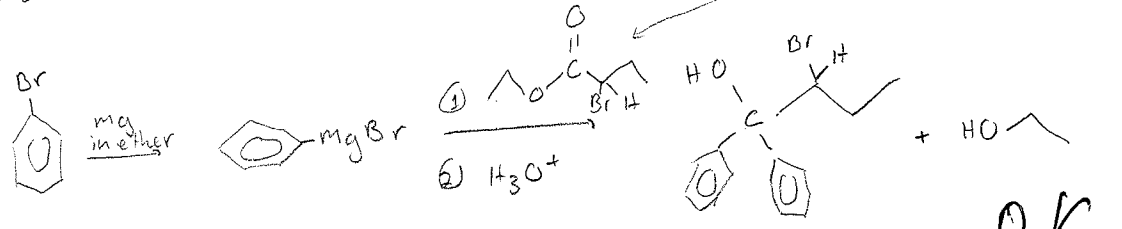
start w/ a carbon and benzene.



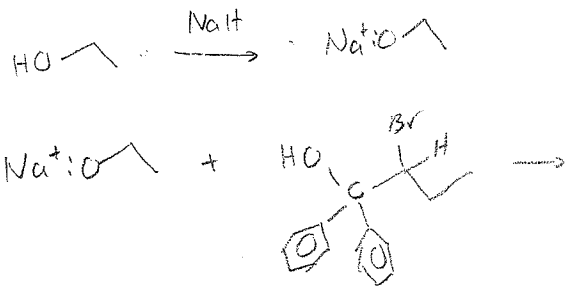
is this OK?



OK



OK



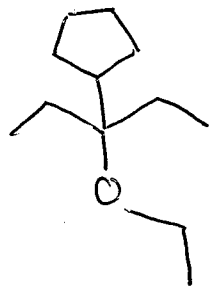
OK

look good

except perhaps 1 questionable step.

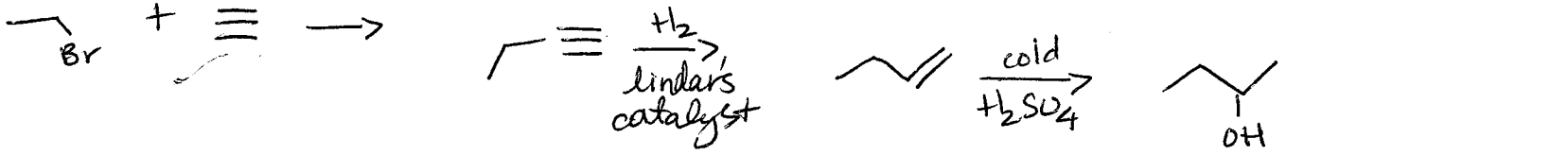
Blythe McLoughlin

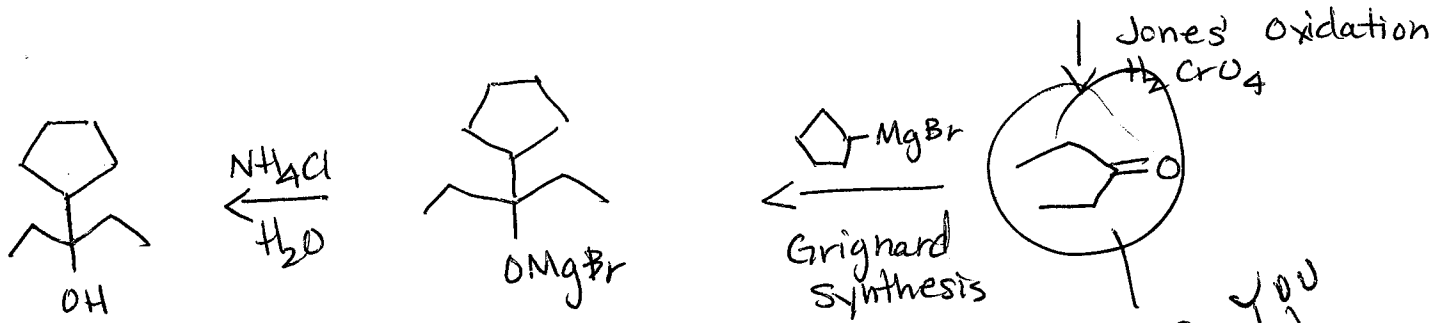
- I like to call this my "one-leg-pirate" C
Make it out of 2 carbons (or less).
*I don't know how to give him a peg.



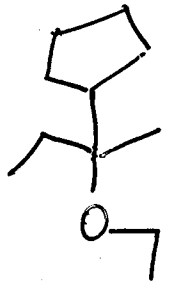
Yes!
MB

Answer:





so you actually made

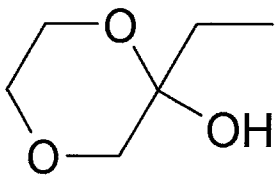


which is a one-leg, one-arm pirate!!!

no, you would get

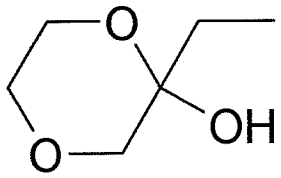
Name:_____

. (points) Propose a synthesis of the following compound from starting materials containing 2 carbons or less and no oxygen atoms and any other needed reagents. For each of the necessary reactions, indicate the reagents needed. Note, there is no restriction on the number of carbons and oxygen in the reagents. Be sure to circle your final synthesis sequence so that the TA can grade it.



Name:_____

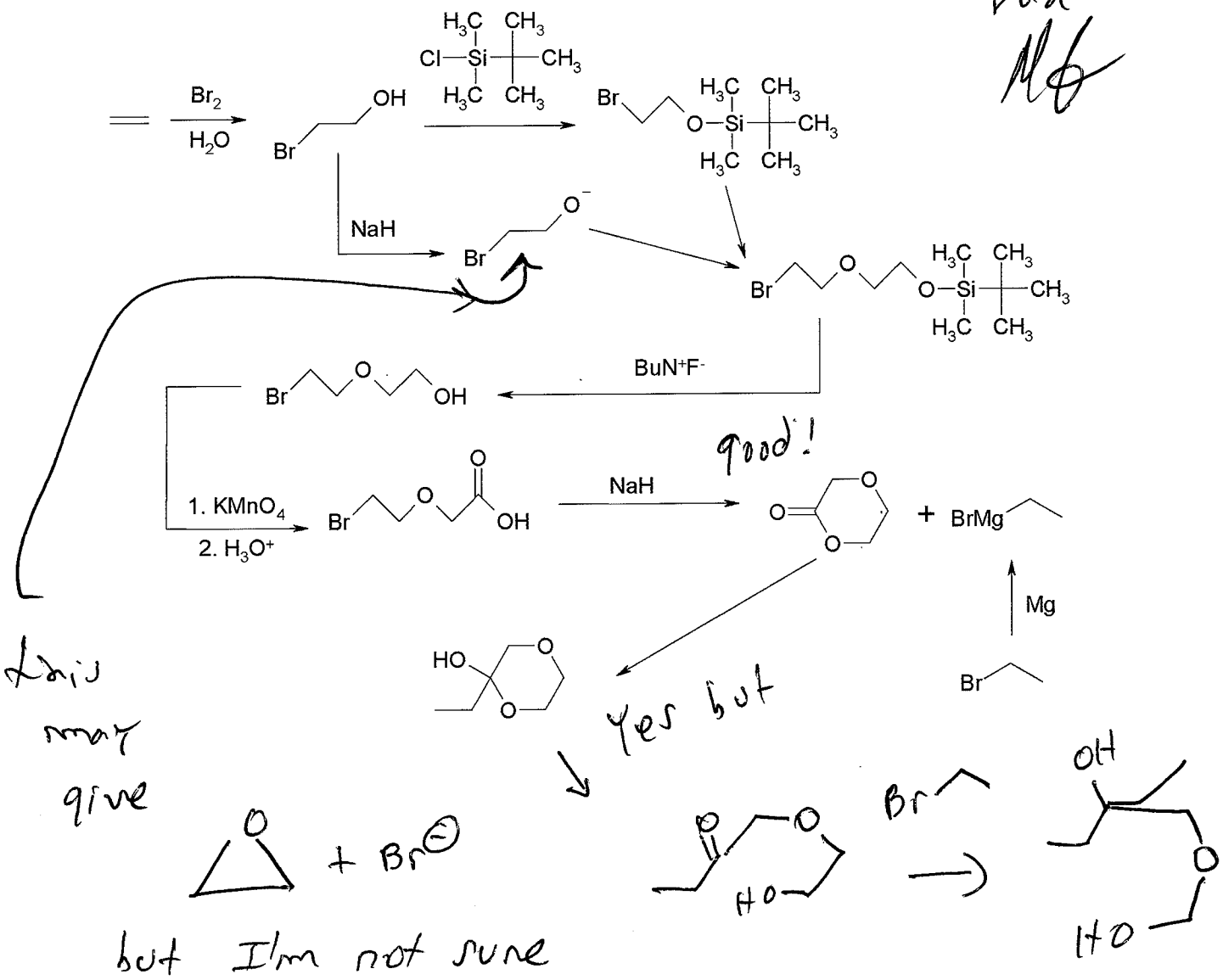
. (points) Propose a synthesis of the following compound from starting materials containing 2 carbons or less and no oxygen atoms and any other needed reagents. For each of the necessary reactions, indicate the reagents needed. Note, there is no restriction on the number of carbons and oxygen in the reagents. Be sure to circle your final synthesis sequence so that the TA can grade it.



Wow Typed Yah!

Answer

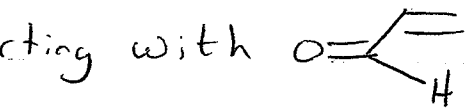
not Too Bad MG

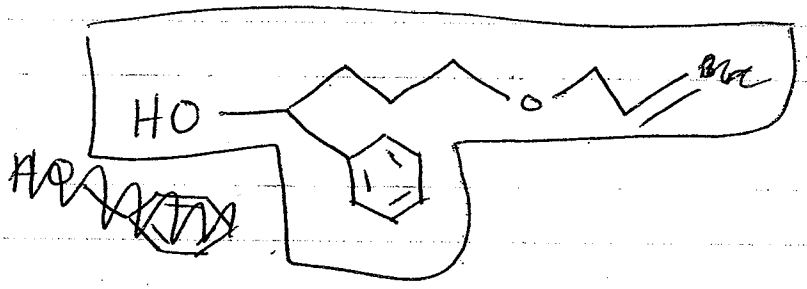


This may give

Synthesis HW

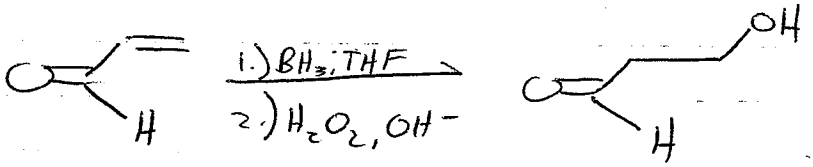
Joshua Bogucki
Chem 346
2/9/05

Starting with  and using any reagents necessary, synthesize the following compound:

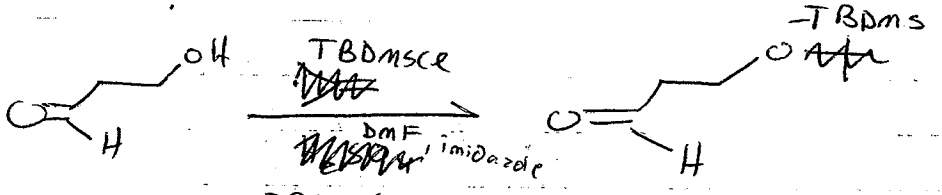


Answer)

(1)

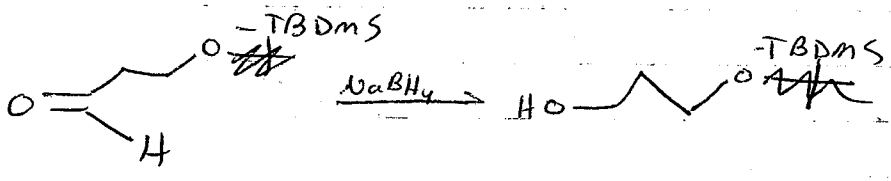


(2)

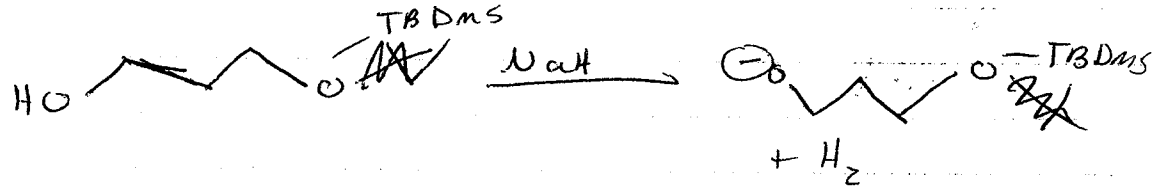


(over)

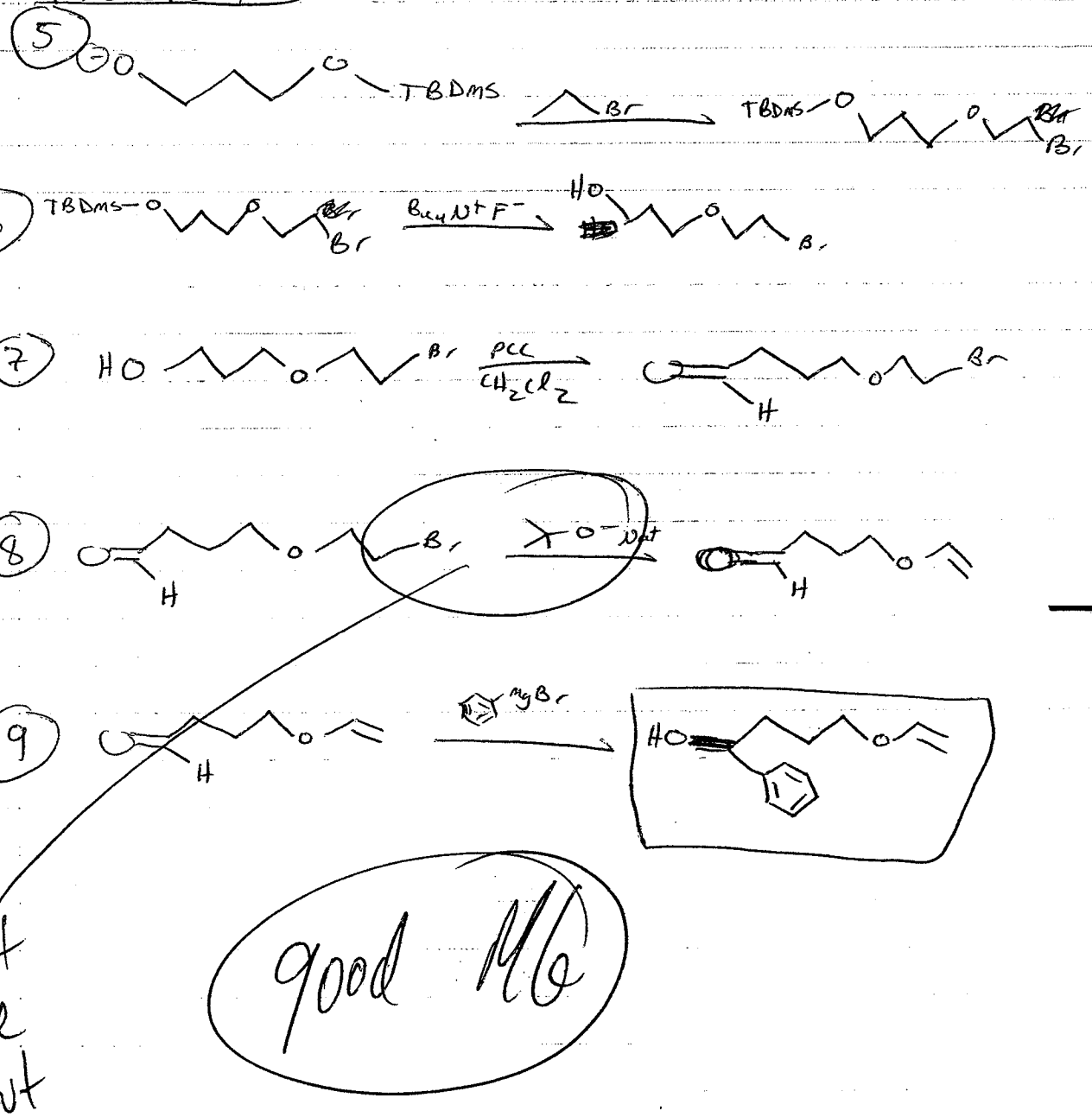
(3)



(4)

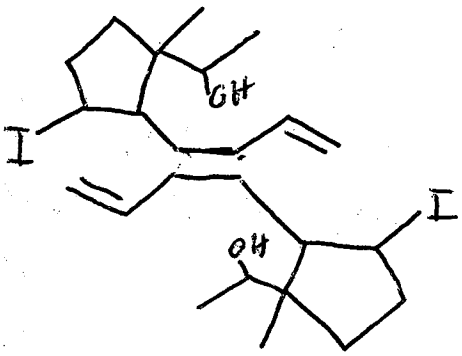


Answers [cont'd]



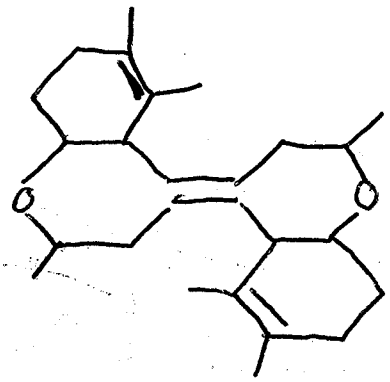
Patrick Reed
Chem 336
Synthesis HW

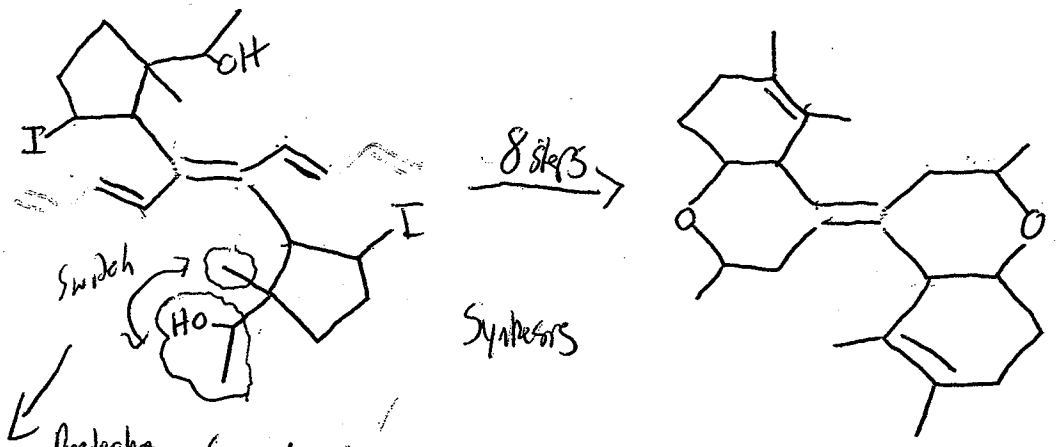
Synthesis



8 steps ⟹

Final product

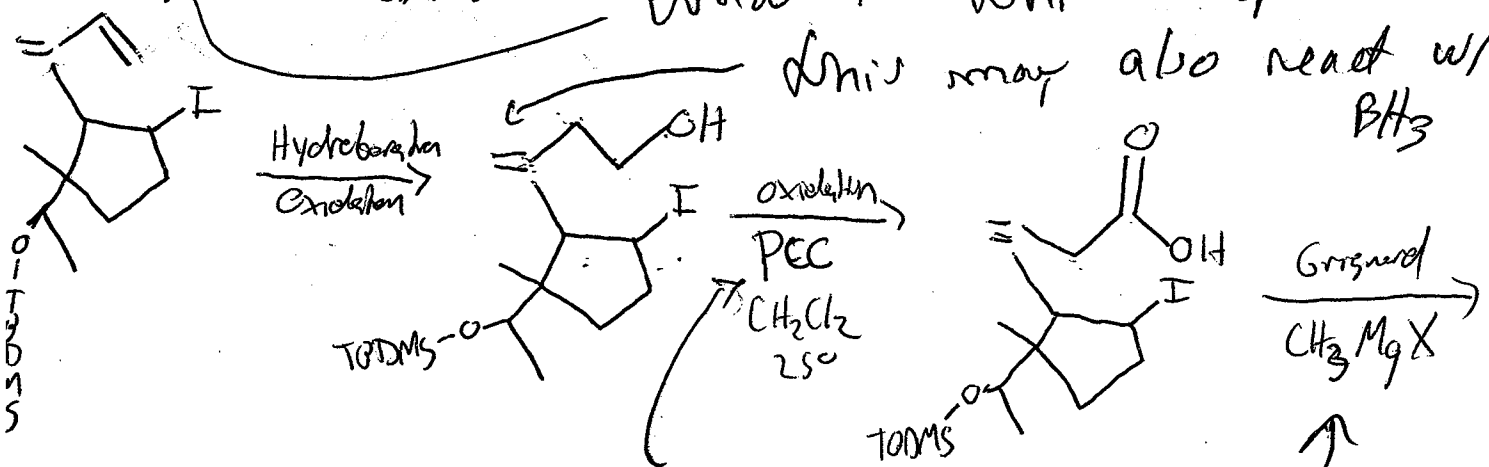




Protecting group (Imidazole DMF)

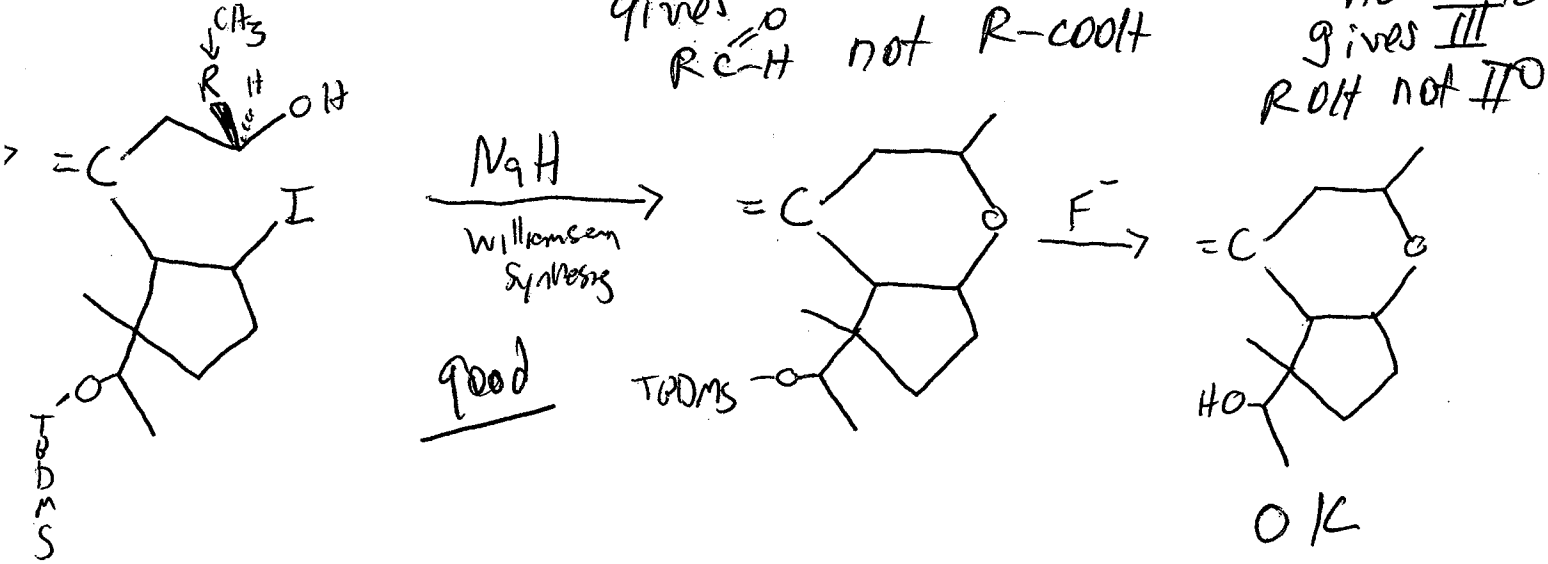
what is this step?

this may also react w/ BH_3

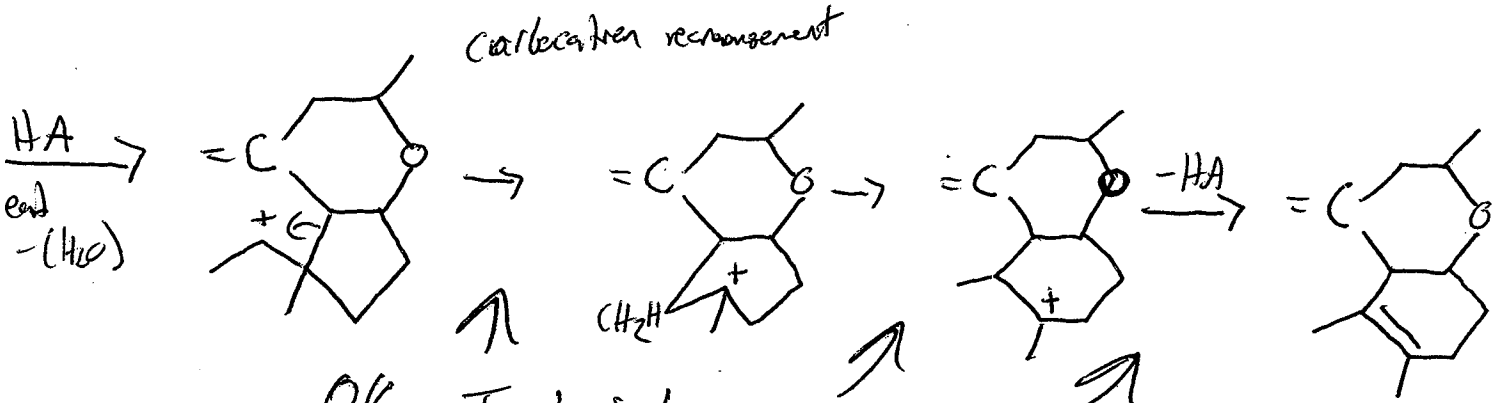


gives $R-\overset{O}{\overset{\|}{C}}-H$ not R-COOH

NO gives $\overset{O}{\overset{\|}{C}}$ ROH not $\overset{O}{\overset{\|}{C}}$

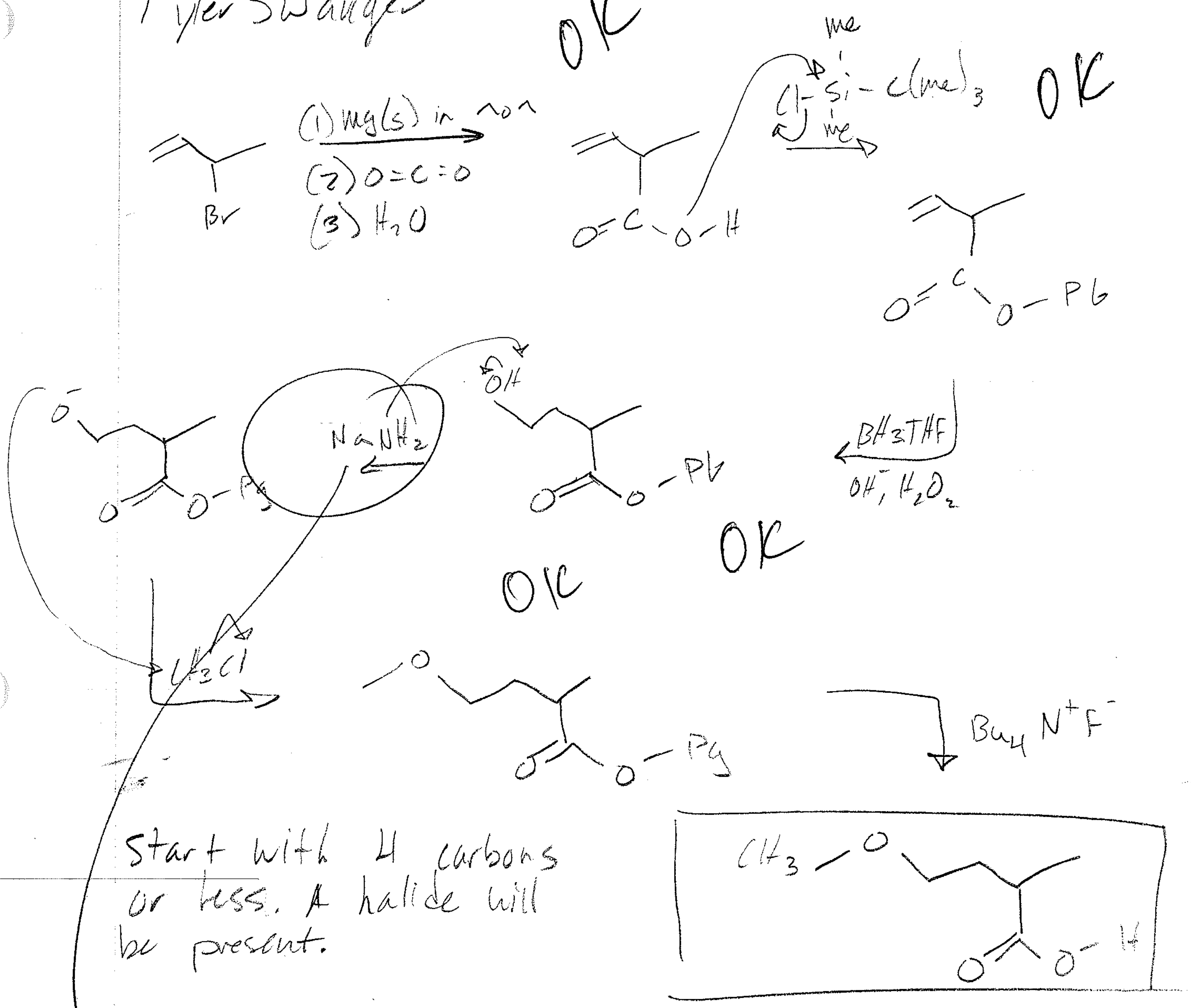


carbocation rearrangement



OK I think

Tyler Swauger

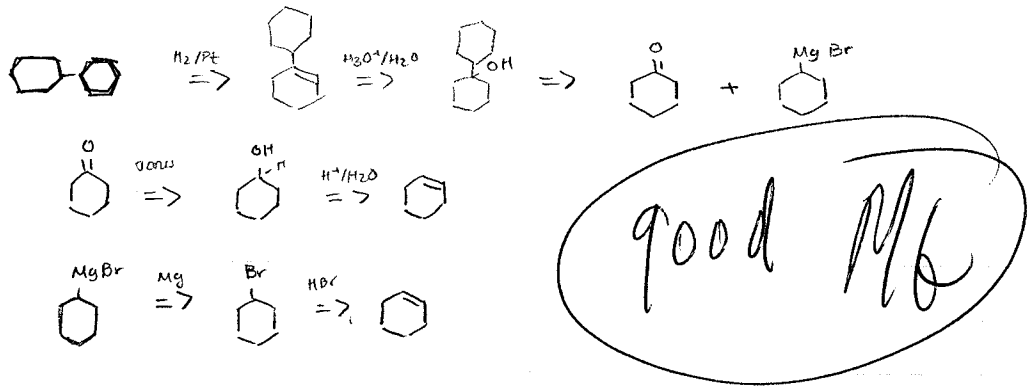


Start with 4 carbons or less. A halide will be present.

OK

great!
MG

Laura Walsh
Chem 340 A
Hmwk problem
2-9-05

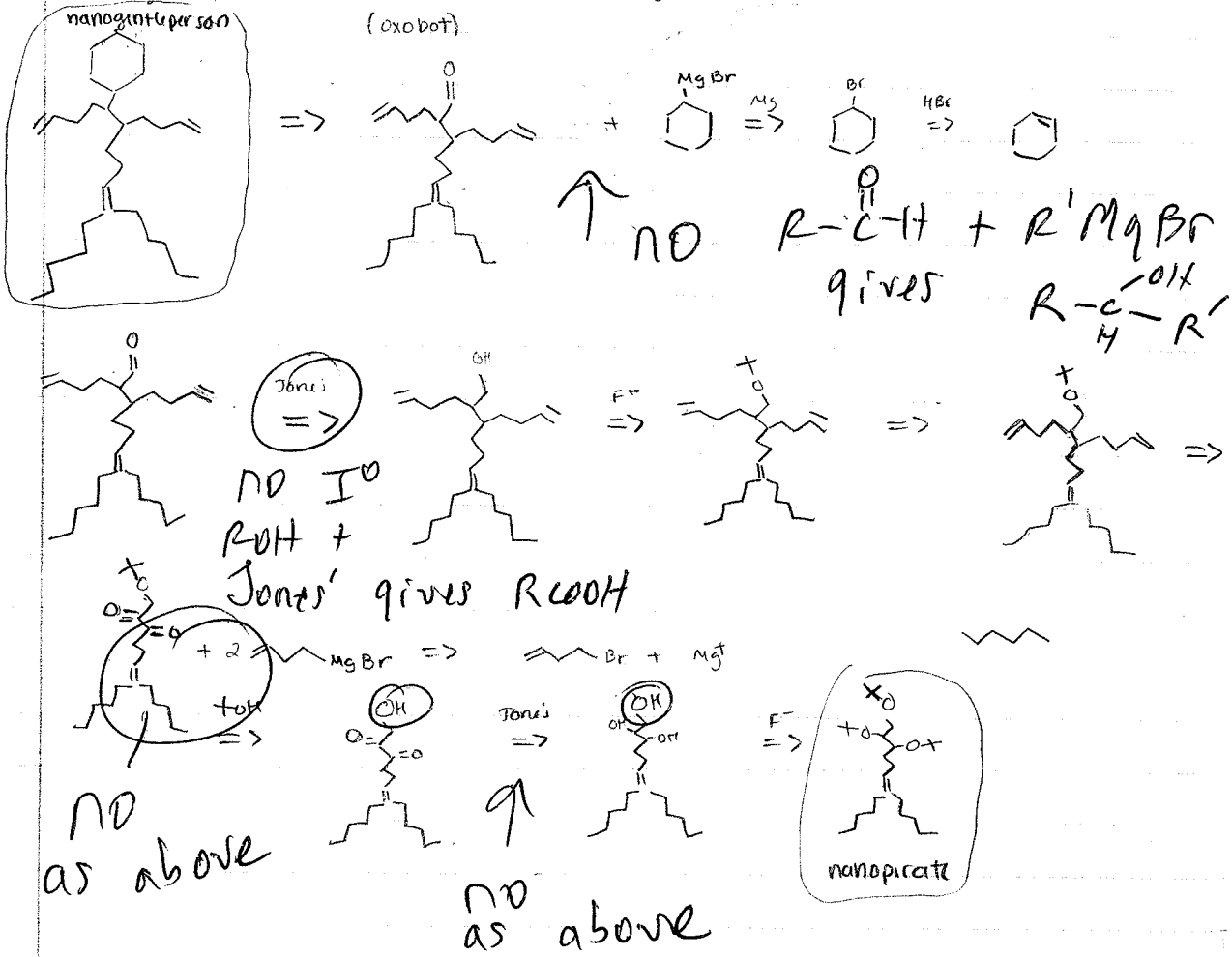


good Mo

Make prof's Gelb's glasses with a cycloalkene of 6 carbons or less.

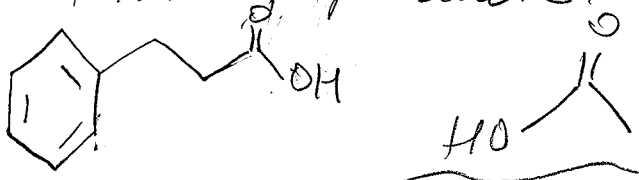
not good Mo

Protect society!
Take away Nanopirate's alcohol and make him a respectable Nanogentleperson! (AKA Rehabilitation by oxidation) (by Laura Walsh and Jammie Yang)

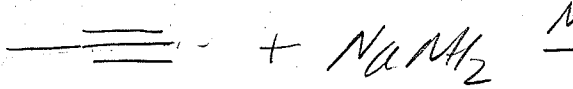


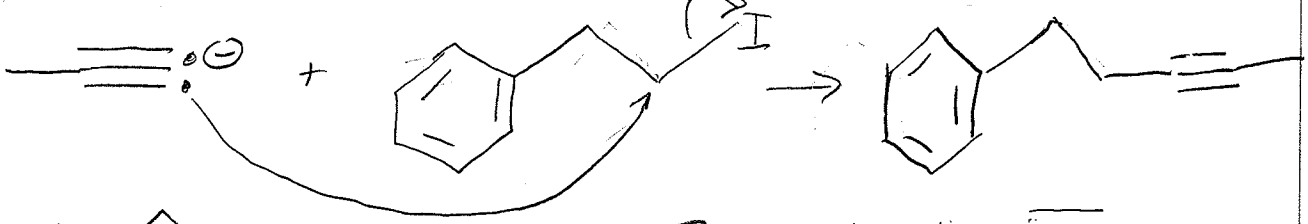
Professor: Michael Gelb | Chem 336 | Igor Tikhonov

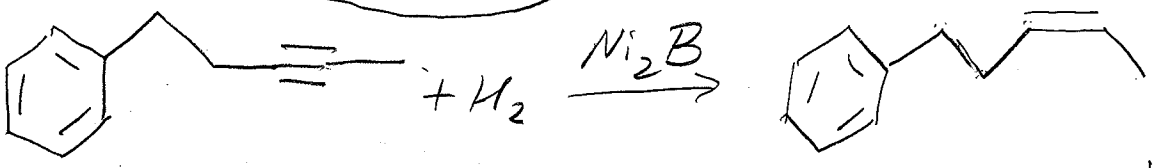
Using 1-propyne and 1-Iodo-2-phenylethane reagents, give a practical synthesis of the following products:

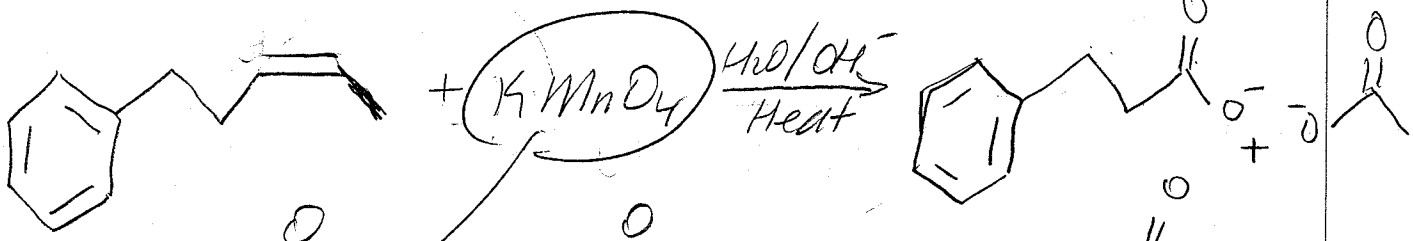


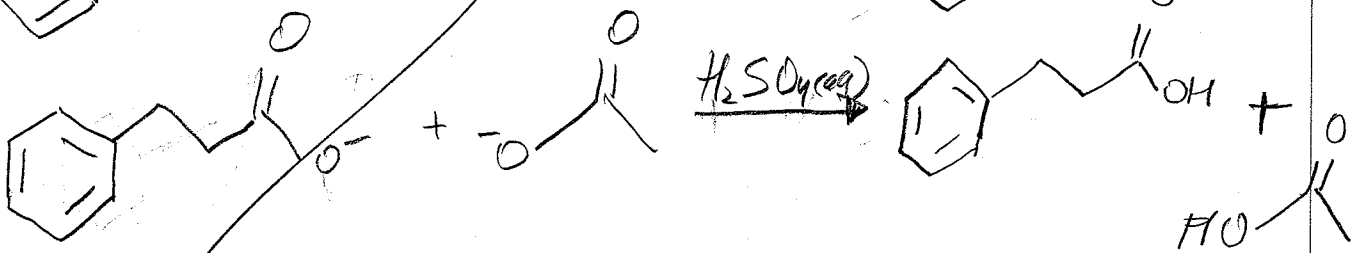
Answer:

1. 

2. 

3. 

4. 

5. 

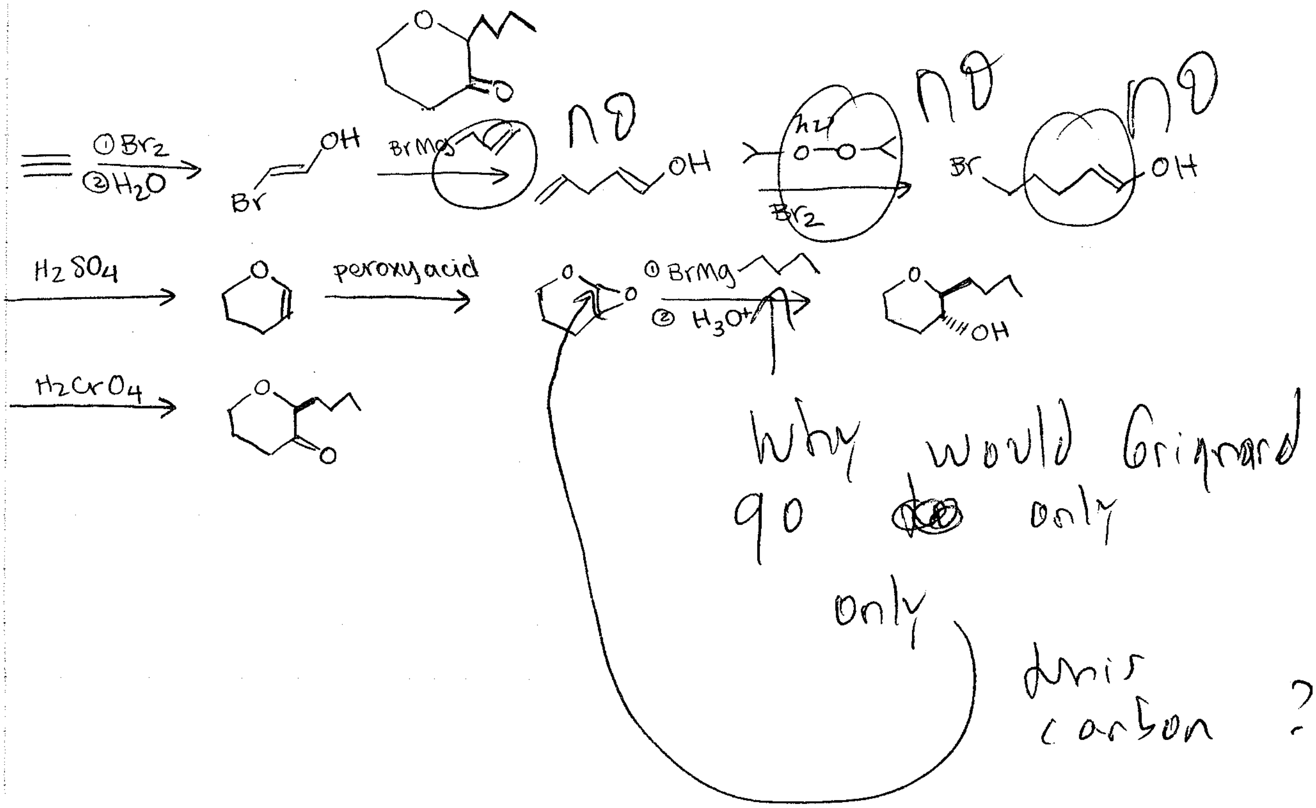
Good

I think this reaction will give 

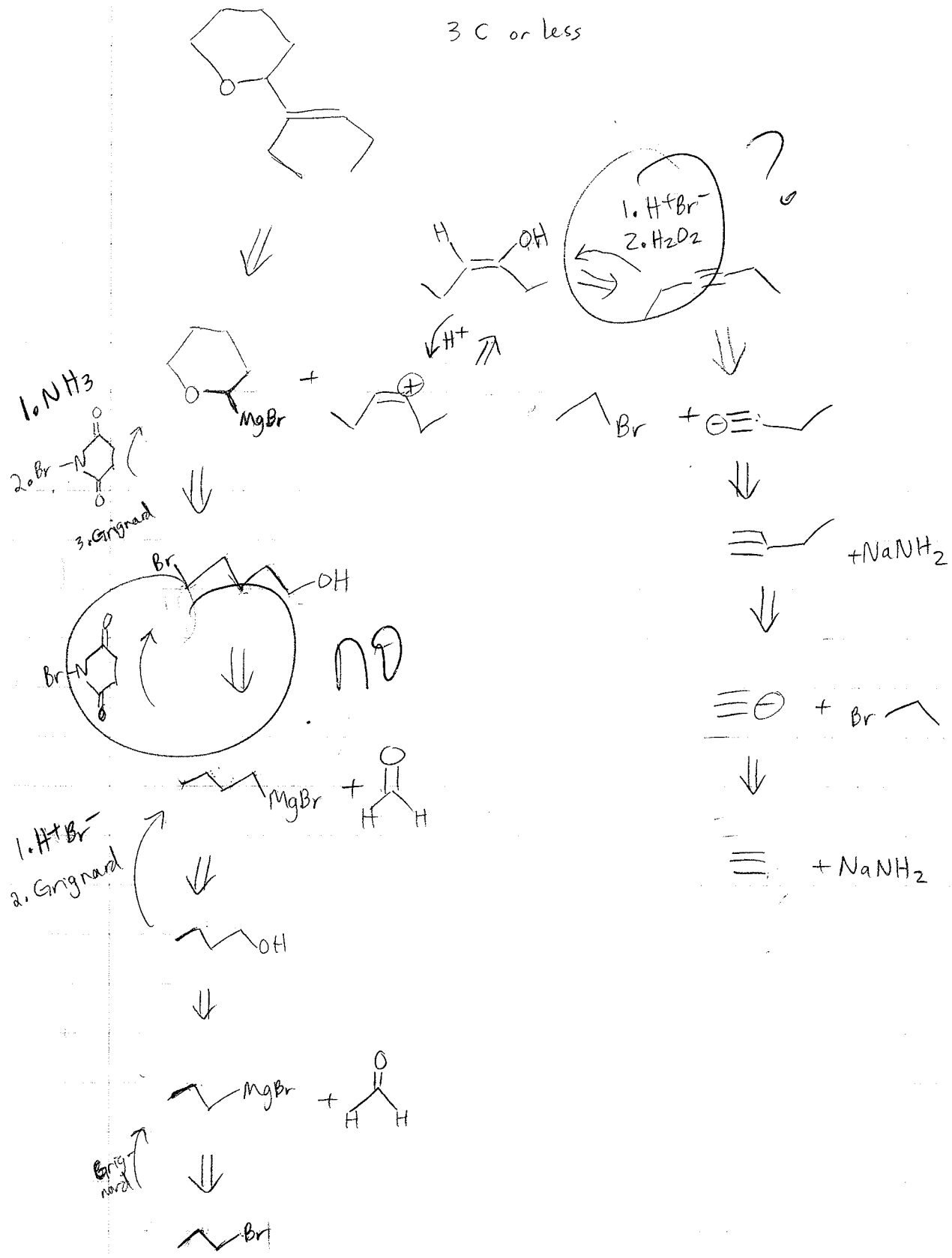
but this will be shown in a later chapter

Rebecca Reh

Synthesis the following compound beginning with a 2 carbon alkyne.



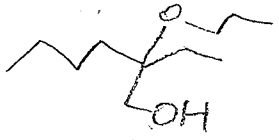
JoAnn Lin


3 C or less
1. H+Br−
2. H2O2
OH
H+
MgBr
Br
1. NH3
2. Br
3. Grignard
NaNH2
Br
OH
MgBr
1. H+Br−
2. Grignard
OH
MgBr
Grignard
Br

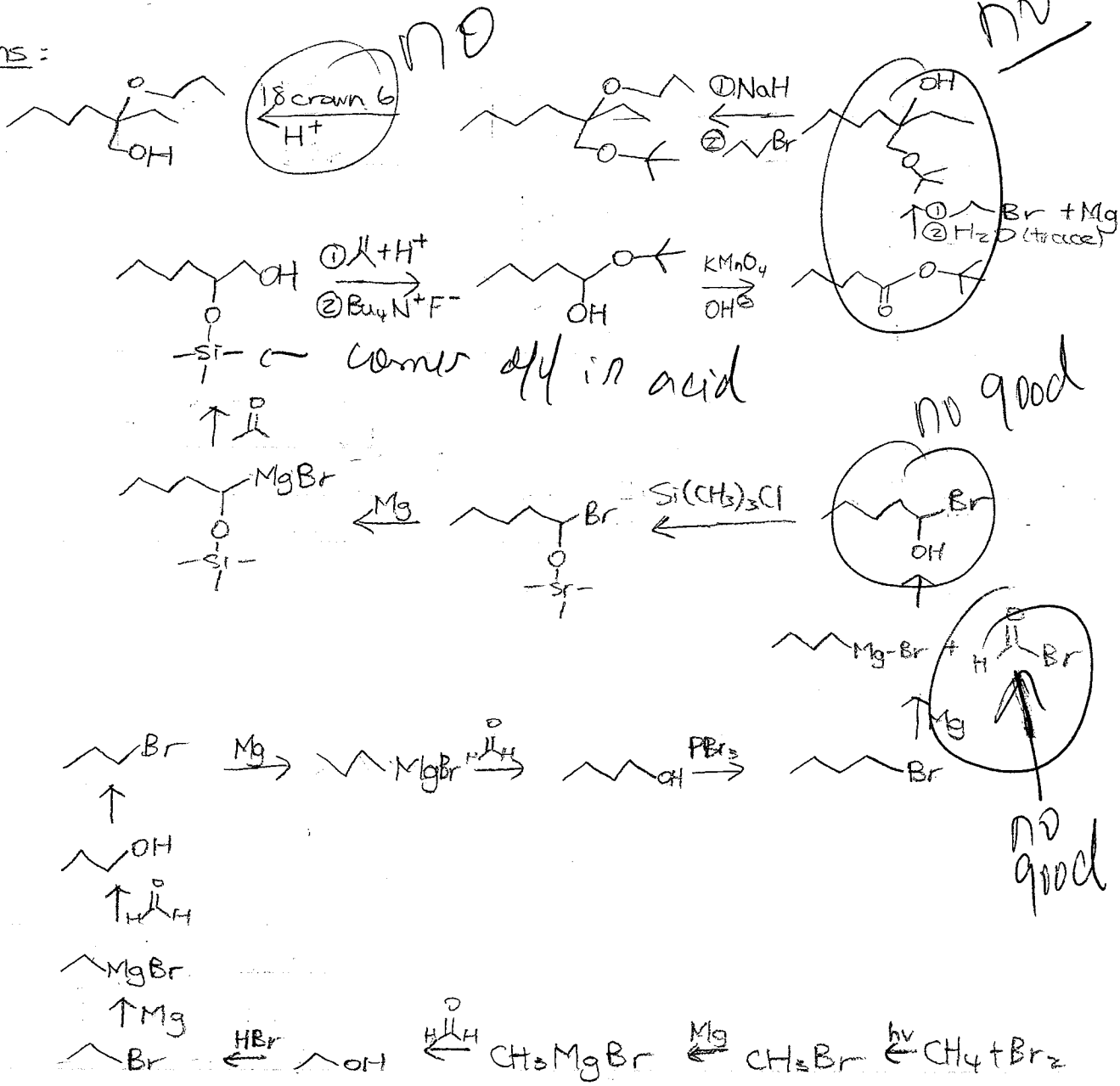
Timothy Chao
2-7-05

Chem 336
Retrosynthesis

① Device a synthesis of the following compound starting compounds containing <u>One</u> carbon:

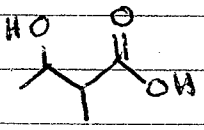


<u>Ans:</u>

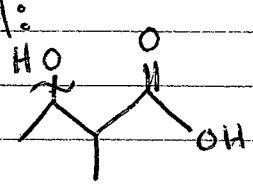


Audrey M.

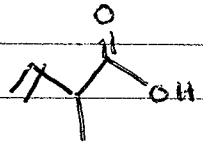
2/9/05

Q: Make  from a starting compound consisting only of 3 carbons or less.

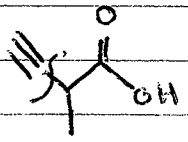
A:



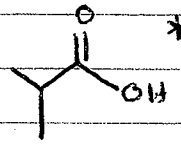
① $CH_2(OAc)_2$
② $NaBH_4$, OH^-



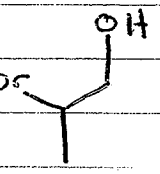
H_2
$Pd/CaCO_3$



NaH/NH_3

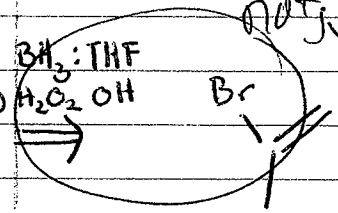


* Jones Reagent *

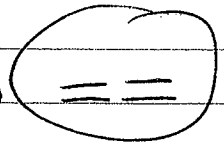


not sure

① BH_3:THF
② H_2O_2 OH



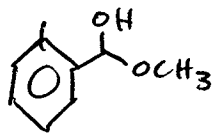
HBr

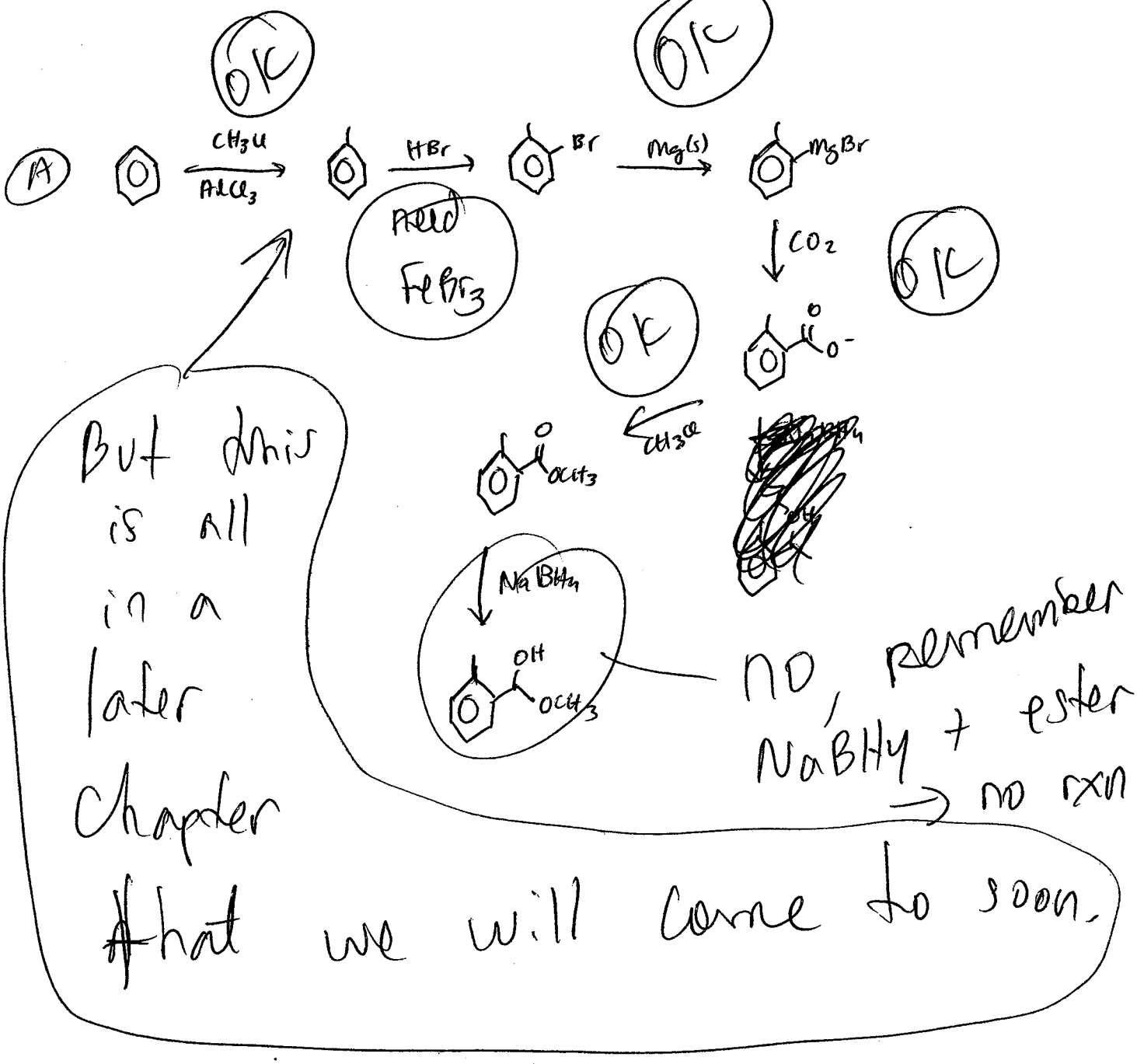


not sure
not can do this

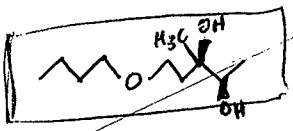
K. Noble

⇒ Starting with benzene & using no other starting materials with >1 carbon, synthesize:





⇒ No starting materials with >2 carbons. Synthesize



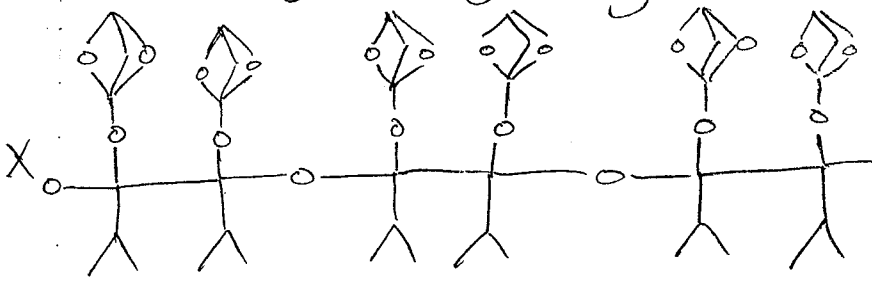
(A) $HC\equiv CH$ ① $NaNH_2$ ② $\wedge Br$ → $\equiv CH$ → H_2, Lindlar's catalyst → ① BH_3 ② OH^-, H_2O_2 → OH

OH → NaH → O^- → Br → O → $KMnO_4$, OH^- → O, OH, CH_3, OH

Disclaimer: I have no idea if this will work ☹ I certainly don't think it would be a major product. But it looked to silly not to try it.

Nick Cox

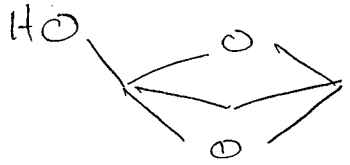
Seeing as this exam will be on Valentine's Day, I figured I'd use the holiday as sort of a theme for my synthesis. The end goal is to prepare this polymer using starting compounds of 3 carbons or less:



Overall there is some valid & invalid Chemistry here

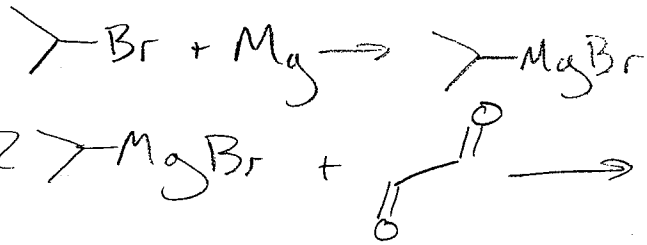
I suppose that since I'm a member of the ACLU, avid supporter of same-sex marriages, and since it makes this synthesis a lot easier, neither of the two anthropomorphic groups have any gender defining features.

We need to make "legs" and "heads". Heads are easy since



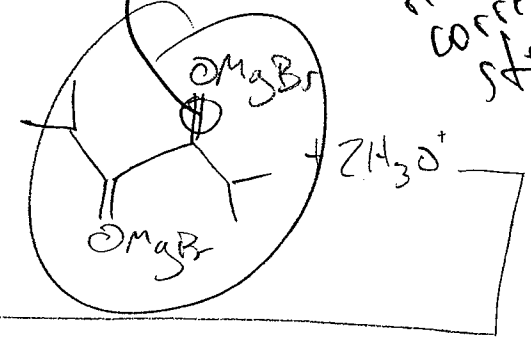
only has 3 carbons.

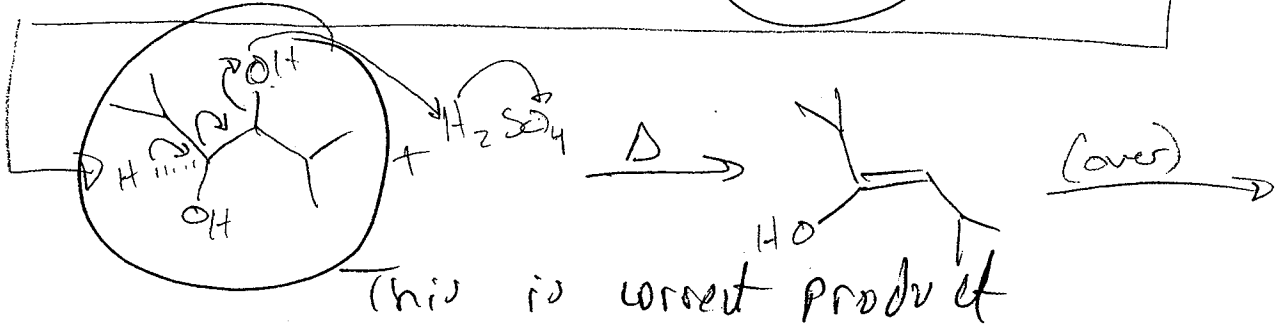
Legs on the other hand...



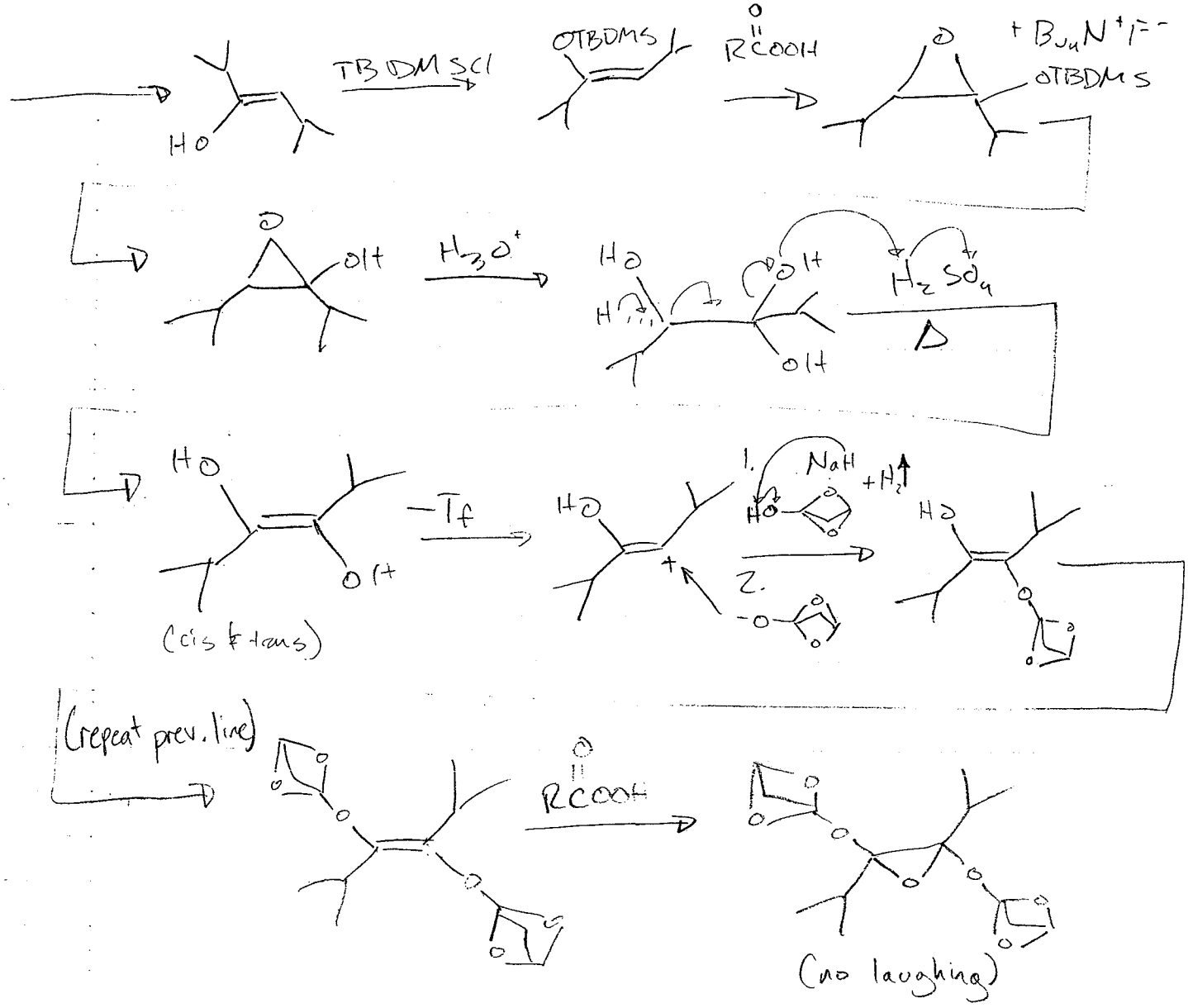
should be single bond

This is not correct structure

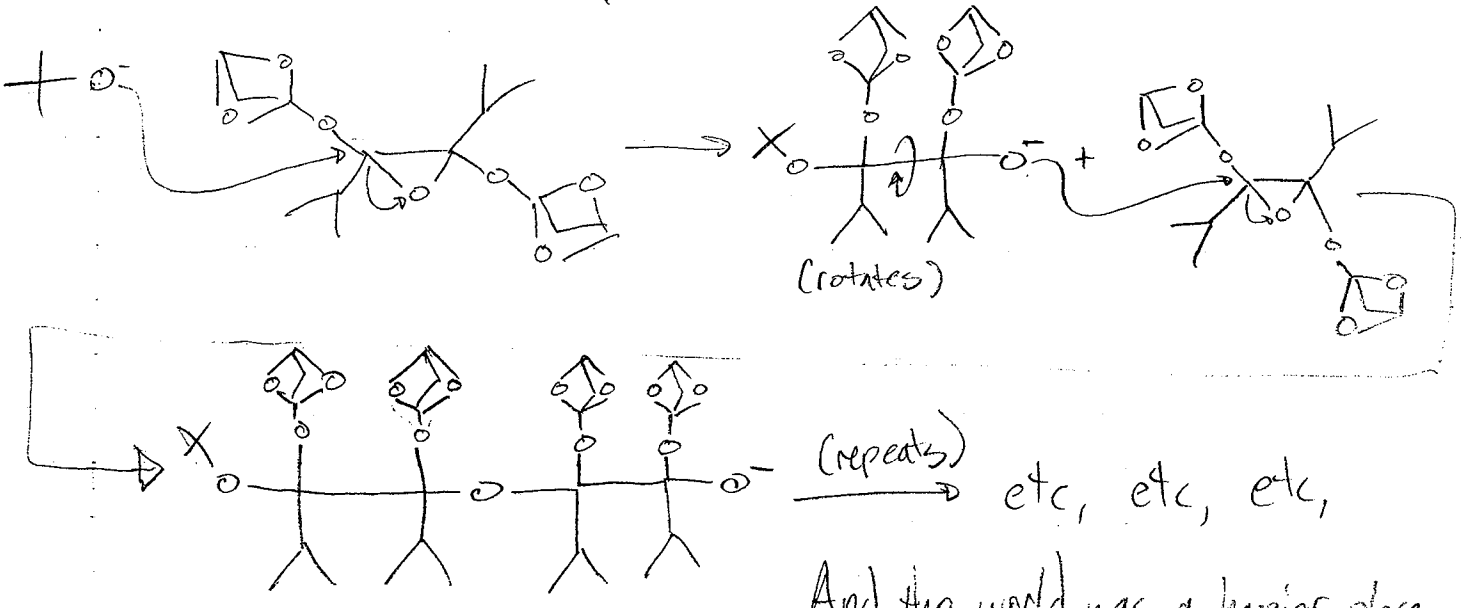




This is correct product

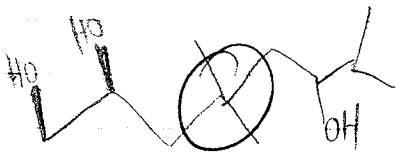


Nav: $+OH + NaH \rightarrow +O^- + H_2\uparrow + Na^+$

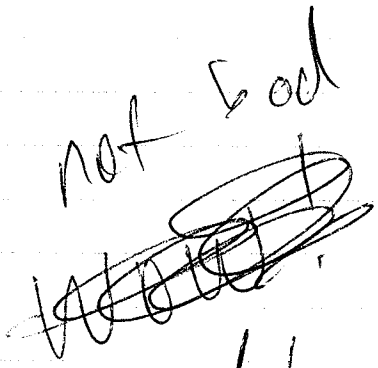


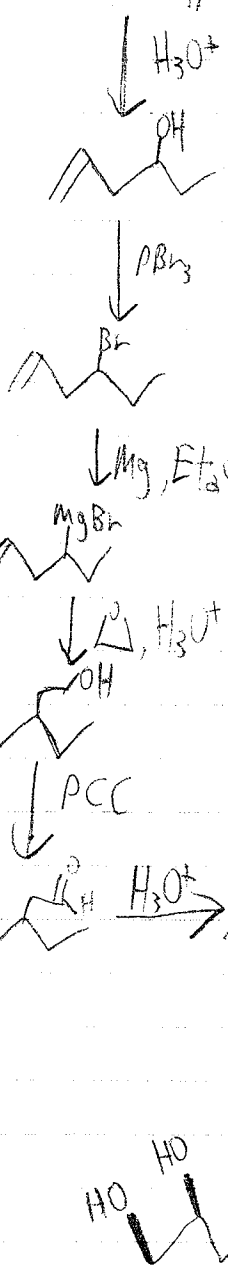
etc, etc, etc,

And the world was a happier place.

Synthesize  ← not same as product at page bottom

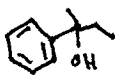
Starting materials of 3 carbons or less

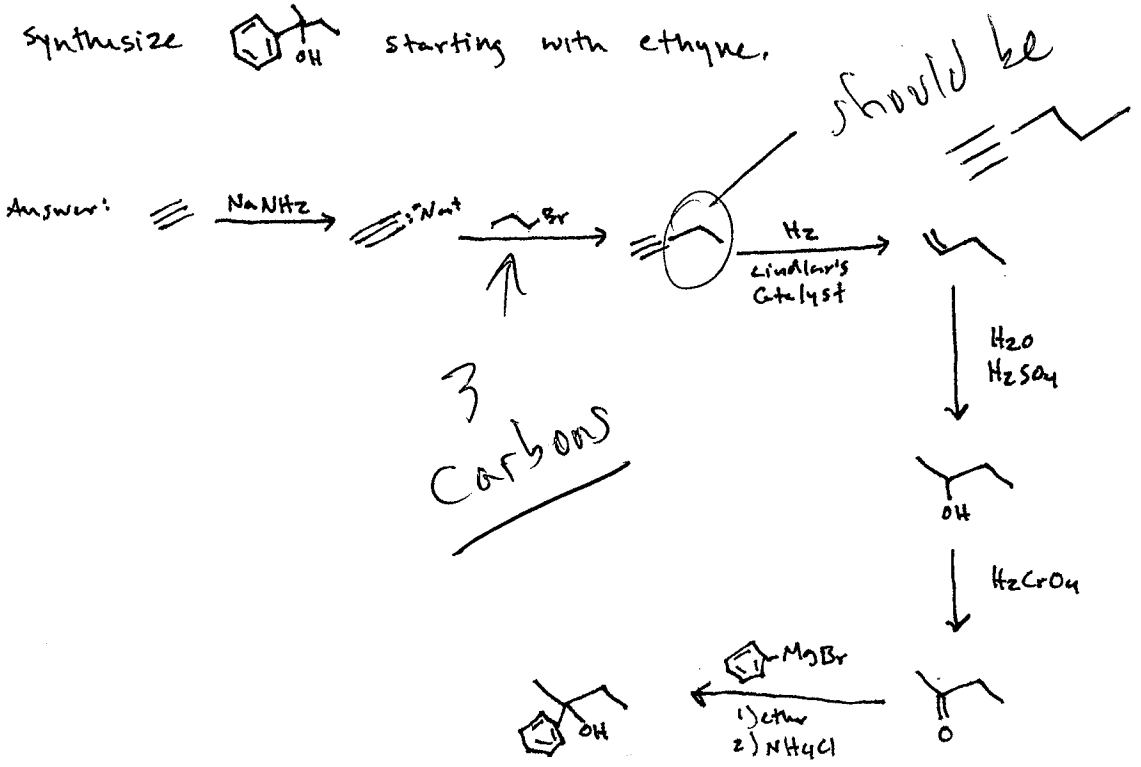




Nina Miller
2/9/05

Homework: Synthesis Problem

Synthesize  starting with ethyne.



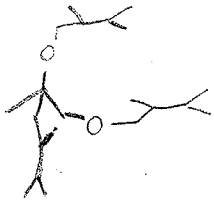
good

just 1 silly error

MB

Leah Thompson
Chem 356
2/8/05

Synthesize the following: (2 carbon compound)



Answer: