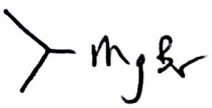
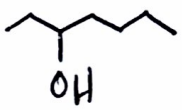
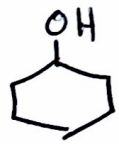
Chapter 13

7) a) 

b) 

c) 

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e) 

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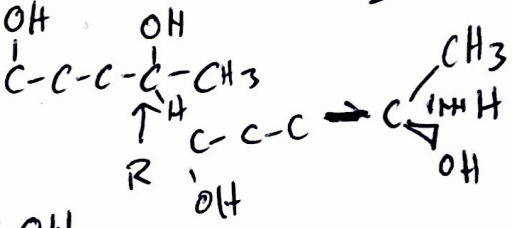
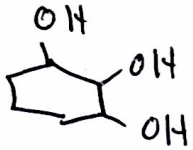
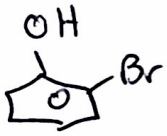
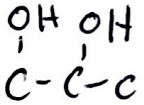
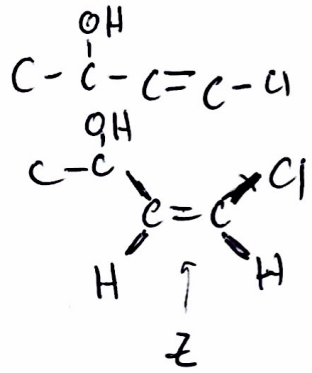
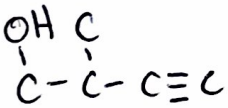
g) 

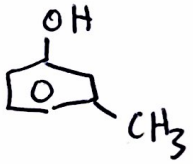
h) 

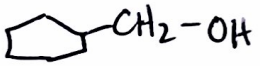
i) 

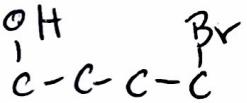
j) 

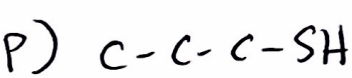
k) 

l) 

m) 

n) 

o) 

p) 

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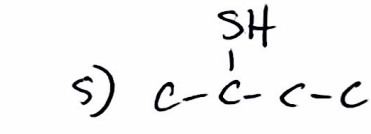
r) 

s) 

8) a) ethyl magnesium Bromide

b) cyclohexanol

c) Pentanol or 1-pentanol

d) 2-butanol

e) cis-cyclopentan-1,3-diol

f) Pentan-1,3,5-triol

g) p-Bromophenol or 4-Bromophenol

h) ethylene glycol or ethan-1,2-diol

i) 4,5-diethyl-4-hepten-3-ol

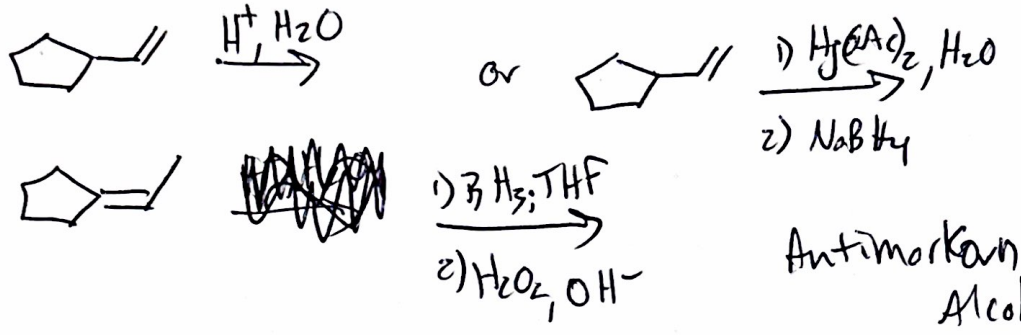
j) o-fluorophenol

k) m-cresol or m-methyl phenol

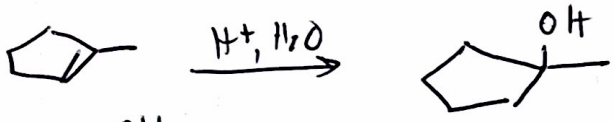
l) 3-cyclohexen-1-ol

13. 9) orthodox paradox metaphysics parachute metaphors orthodontist paradise

10) C

11) 

make markov. Alcohol.
Antimarkovnikov Alcohol

12) a) 

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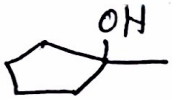
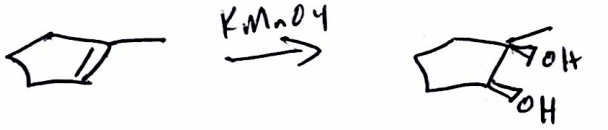
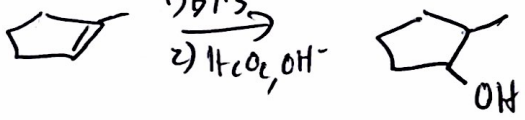
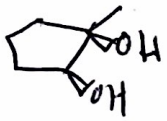
b) 

c) 

Syn-glycol

d) 

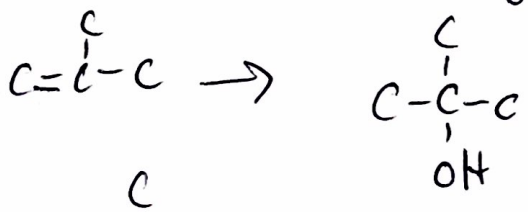
Anti-mark

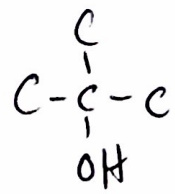
e) 

Syn-glycol

f) 

Anti-glycol

g) 

h) 

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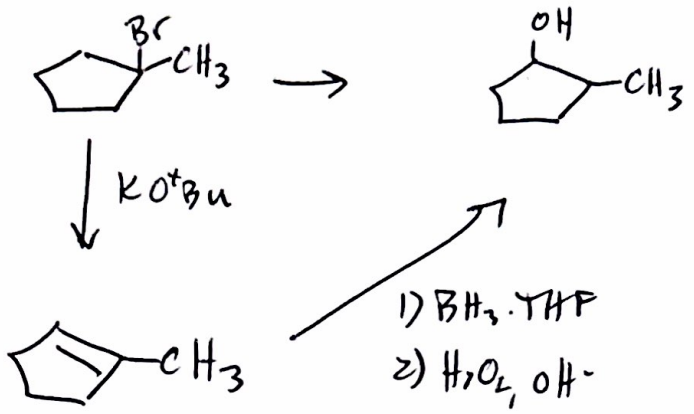

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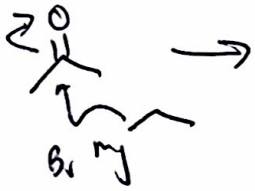
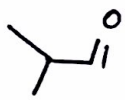
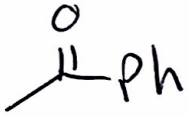
a) 

b) 

c) 

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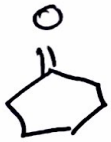
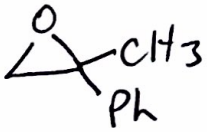
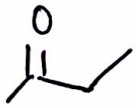
e) 

f) 

g) 

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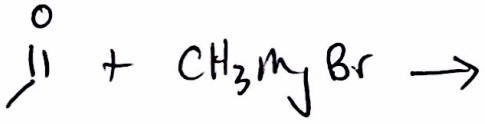
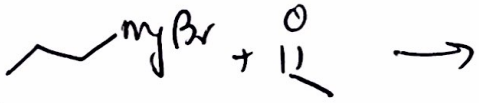
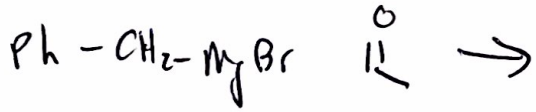
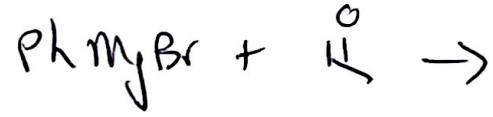
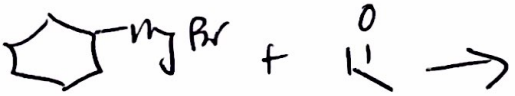
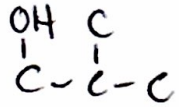
16) a) 

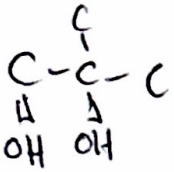
b) 

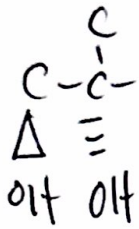
c) 

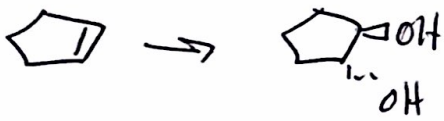
d) 

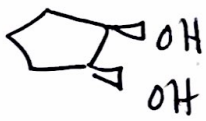
e) 

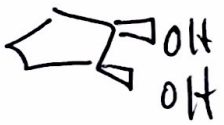
12) i)  Anti-Mark

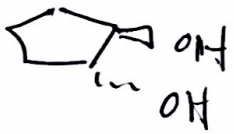
j)  syn-glycol

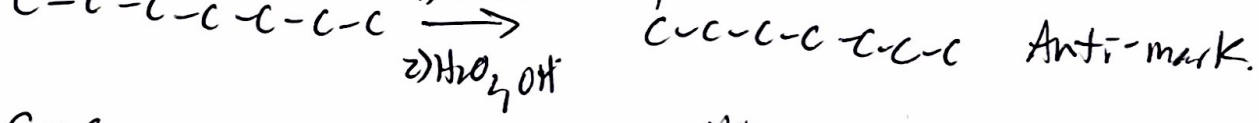
k)  Anti-glycol

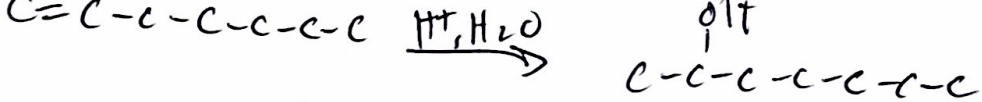
l)  Anti-glycol

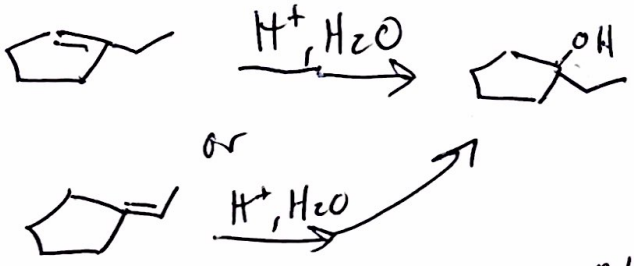
m)  syn-glycol

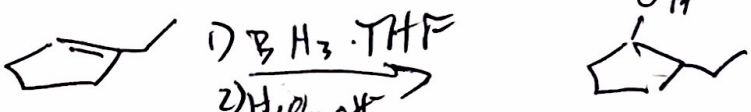
n)  syn-glycol

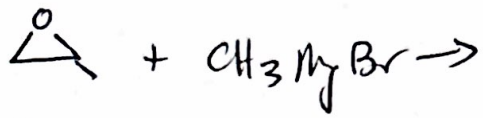
o)  Anti-glycol

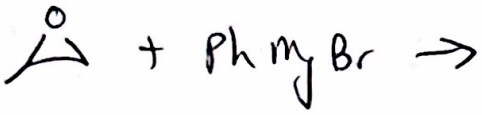
13) a)  Anti-mark.

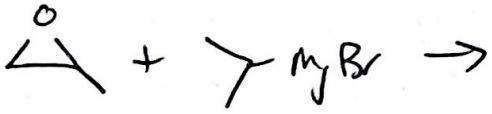
b)  Mark.

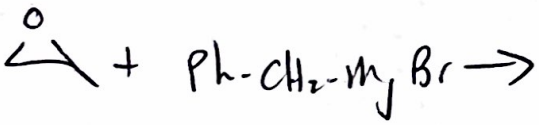
c)  Mark.

d)  Anti Mark.

17) a) 

b) 

c) 

d) 

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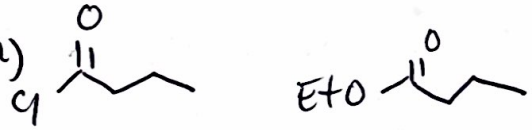
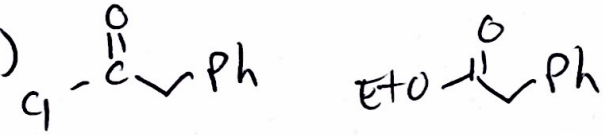
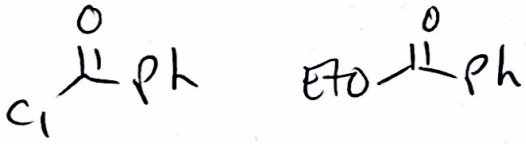
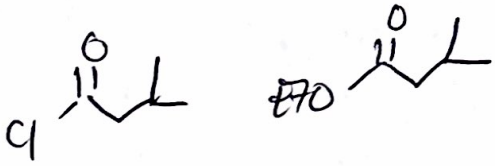
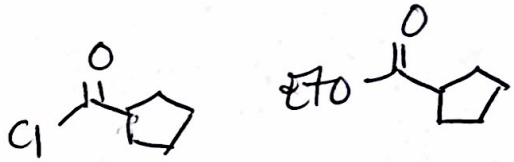
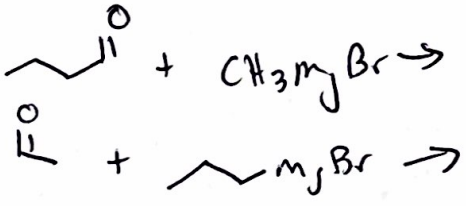
18) a) 

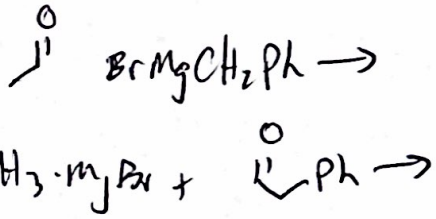
b) 

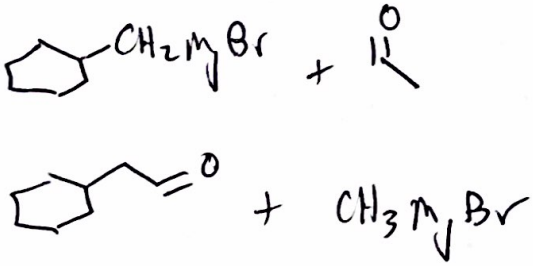
c) 

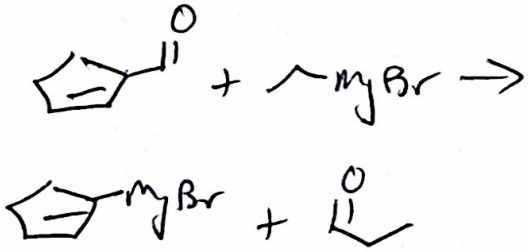
d) 

e) 

19) a) 

b) 

c) 

d) 

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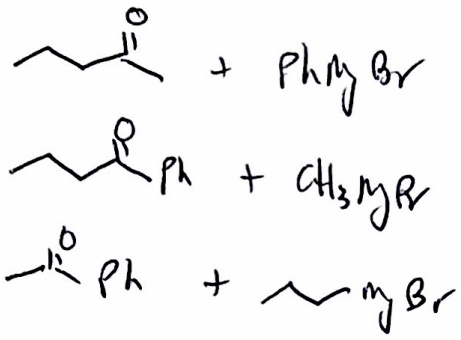
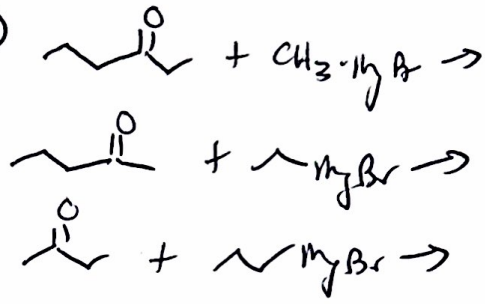
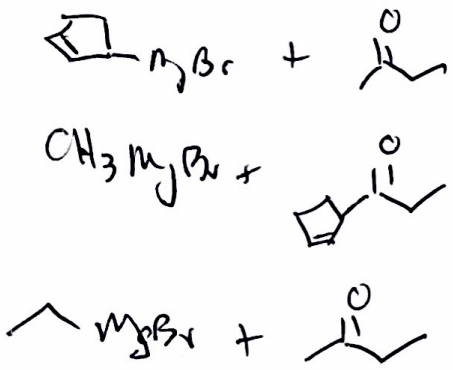
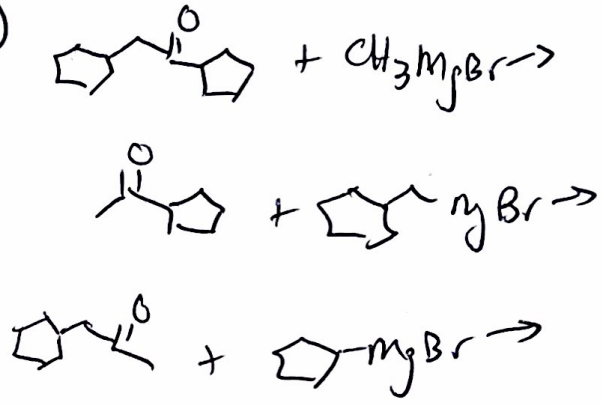
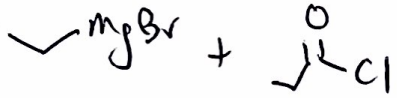
a) 

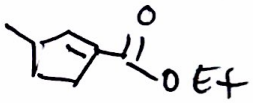
b) 

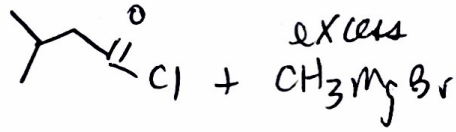
c) 

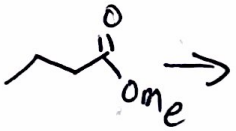
d) 

21)

a) excess 

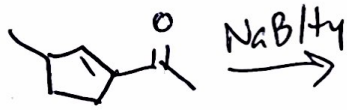
b) excess CH_3MgBr + 

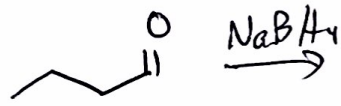
c) 

d) excess $PhMgBr$ + 

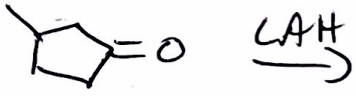
22)

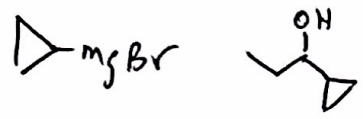
a) 

b) 

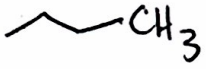
c) 

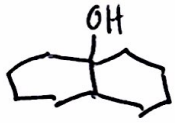
d) 

e) 

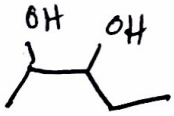
23) a) 

b)  Grignard Reagent Grabs H on N.

c) 

d) 

MARK.

e) 

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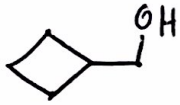
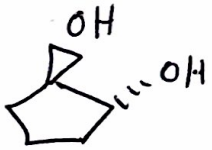
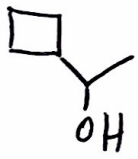
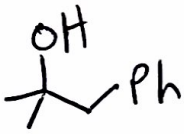
g) 

h) 

i) 

j) 

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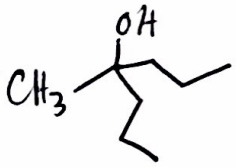
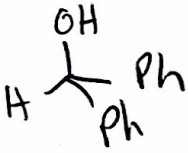
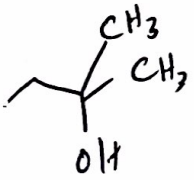
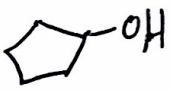
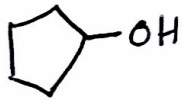
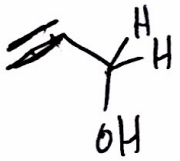
l) 

m) 

n) 

o) 

p) 

q) 

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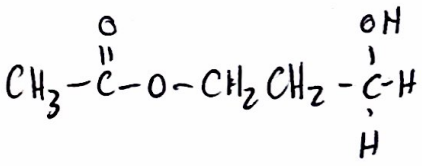
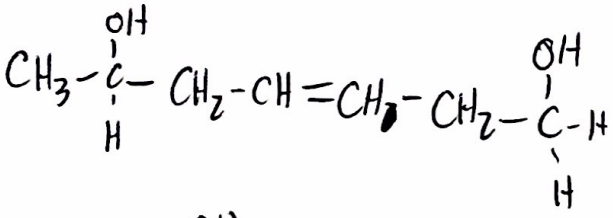
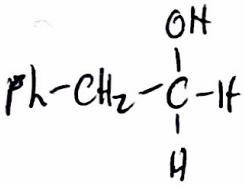
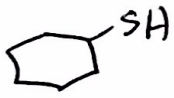
s) 

t) 

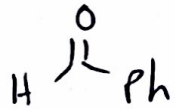
u) 

v) 

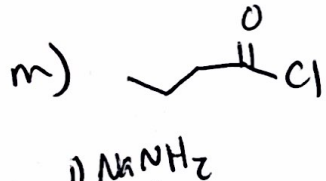
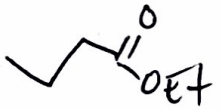
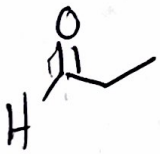
24) a) 1) $NaBH_4$ 2) H_2O, H^+ b) 1) LAH 2) H^+, H_2O

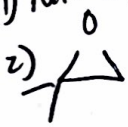
c) H_2, Raney Ni d) 1) LAH 2) H^+, H_2O

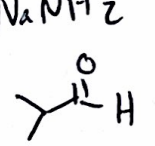
e) 1) $NaBH_4$ 2) H^+ f) H_2, Raney Ni g) 1) $BH_3 \cdot THF$ 2) H_2O_2, OH^-

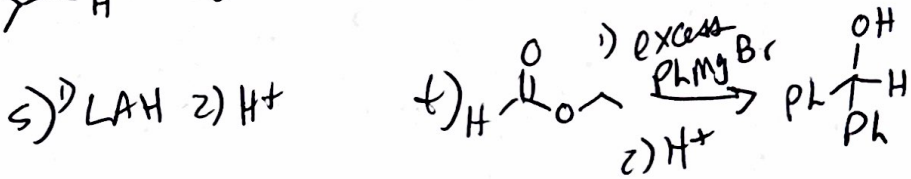
h) 1) Li 2) CuI i)  j) OsO_4

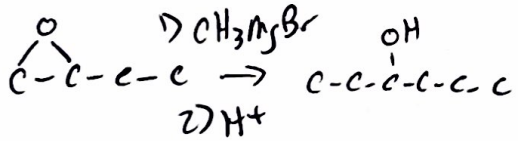
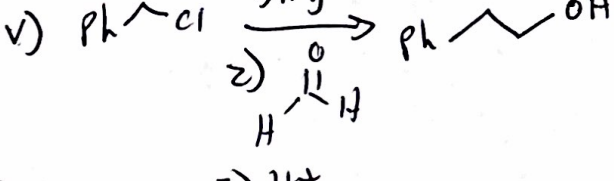
k)  l) H^+, H_2O or 1) $Hg(OAc)_2$, H_2O 2) $NaBH_4$

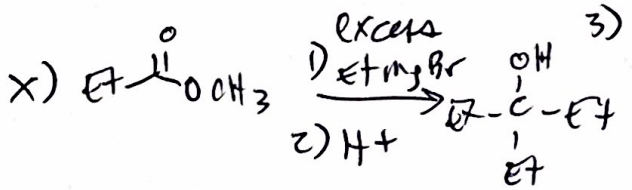
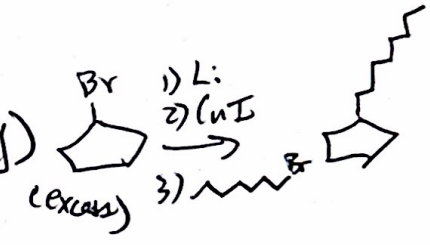
m)  or  n) 

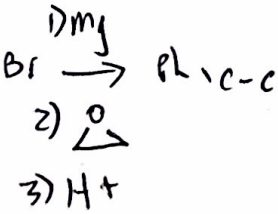
o) 1) $NaNH_2$ 2) 

p) 1) $NaNH_2$ 2)  q) 1) LAH 2) H^+

r) excess 1) $PhMgBr$ 2) H^+ s) 1) LAH 2) H^+ t) 

u)  v) 

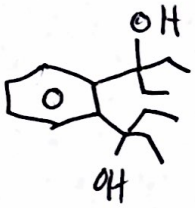
w) NaOH x)  y) 

z) OsO_4 aa)  bb) NaSH

25) a) A META B ORTHO C PARA

b) No Reaction

c) 

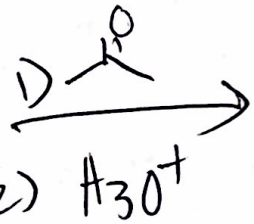
d) 

26) a) H on N would Quench the Grignard Reagent

b) The H on OH would Quench the Grignard Reagent made.

c) The H on the Carbox. ACID would Quench the Grignard Reag.

d) Without using numbers for the Reagents on the arrow. IT means throwing them in all at the same time. The H_3O^+ would Quench the Grignard Reagent.



is correct.