HOMEWORK ASSIGNMENT #9 ORGANIC CHEMISTRY II

(the last %^$# one !!)

Your name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_/30

 Playing in Carbonyl Hell Due Monday 4 May

1)



 + HCl

 =(Ar)3P

 A





A + Reaction name ?

 \_\_\_\_\_\_\_\_\_\_\_\_\_

2) Run a Peroxidate cleavage on isopropyl ethyl ketone



3)

 + H2O (each case)

 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ name of above class

 \_\_\_\_\_\_\_\_\_\_\_\_ name of above class

4) Run a Baeyer-Villager oxidation on 2-butanone

\_\_/9



5)

 then H2O

2



6)

 Br2

 Acetic acid \_\_\_\_\_\_\_\_\_\_\_ substitution

7a) Run a Wolff-Kishner reaction that produces pentane

7b) in a single step, convert benzaldehyde to toluene

8)



\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ hellish name of this reaction

9) Correctly oxidize methanol then run a Cannizzaro reaction on the product.

\_\_\_/10

10. Write:

Three different oxidations of acetaldehyde

1)

2)

3)

Two different oxidations of acetone

1)

2)

A Wittig reaction involving 2-chloropropane and diethyl ketone

An alpha-substitution of Br on acetone

Make an immine from acetone

Make a carboxylic acid from CN- and acetone

Make a acetic acid directly from acetone

\_\_\_/11