**EXERCISE 13: ROADMAP PROBLEMS WITH AROMATICS**

Organic Chem II Alfred State College

**13.1 STARTERS: making hooks and handles**

Starting from benzene , aliphatic alcohols, chlorides or acid chlorides and all the usual organic reagents provide routes to:









**at least two ways for this one…**

**13.2 REACTIONS OFF THE AROMATIC `HOOKS & HANDLES’**

from benzene and alcohols (or alkyl halides)

a)make ArCH-CH2-CH2Cl

b)make ArCHOH-CH CH3

c)make ArCH2 -CHOH-CH3



d)make ArCH2-CH2 –CH2OH

e)find a route to 1-chloro-1-phenyl-2-propanol

**12.3. DIFFERENT STARTS TO THE SAME END**

**Starting from each of the compounds below, prepare phenyl ethanol**





**phenyl ethanol**

**12.4 MAKING MULTI-AROMATIC COMBINATIONS FROM SCRATCH**

**1) Find a route to 1,2-diphenylethane**







**2) Find a route to diphenyl methane**



**3)Find a route to:**



**12.5 Three mole Buck opportunity**

**Starting from benzene, alcohols & alkyl halides (R-X only) with 4 or fewer carbons, propose a route to the compound below**



**(Hint: check text and Supplement 4**

**for how phenols now get made**

**from benzene)**