HOMEWORK ASSIGNMENT #7 ORGANIC CHEMISTRY II

Making ringies with thingies

due Wednesday 29 March 25 pts

**7.1 Modern Dancing ( 9 pts total/3 pts each)**

**Starting from alcohols with 4 or fewer carbons, acetone, and benzene or phenol, suggest a synthetic route to the compounds below**









NCS

light



**7.2. Different strokes to the same folks**

**Starting from each of the compounds below, prepare phenyl ethanol. (2 pts each/8 pts total)**









Mg

**phenyl ethanol**



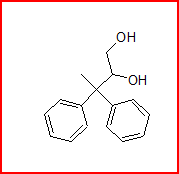
NaBH4/OH-



**homework 7 chem4524 (cont.)**

**7.3. Willie Nelson problem (On the road again…..)**

**Starting from benzene and 1-chlorobutane, suggest a route to the syn-diol below (4 pts):**



A helpful hint for next time…

AlCl3 ‘s activity is quenched by OH- bearing compounds, so making the diol should be done right at the end of the reaction, not in the middle.



**7.4 Naming ( 1 pt each/4 pts total)**



**1-bromo-4-(2-chloro-3-methylpentyl)benzene**

**IUPAC name**



**o-xylene (1,2-dimethylbenzene)**

**IUPAC or common**



**3 –or- m-methyl benzoic acid**

**IUPAC or common**



**Biphenyl or phenyl benzene**

**IUPAC or common**