Problems

February 24, 2009.

1. When alcohol **A** was subjected to the following reactions, **B** was formed. Provide a structure for **B**, including stereochemistry.

Ph
$$A$$

1. NaH, then Me CO_2Et

2. i -Bu₂AlH, -78 °C

3. Ph_3PCH_3I , $KN(SiMe_3)_2$

4. $Cl_2(PCy_3)_2Ru$ =CHPh

2. In their studies on tungsten carbonyl chemistry, Wulff and co-workers discovered a way to construct all four rings of the steroid skeleton in a single cascade. The final step of the reaction is the tungsten mediated reduction of intermediate **A**.