NAME:\_\_\_\_\_ TA: Robert Section: 1E

## Quiz #2

1. In today's experiment, we will be reducing camphor with sodium borohydride in the presence of excess methanol. Draw and label the major product isoborneol and the minor product borneol (4pts). What is the stereochemistry at the new chiral centers produced for each product (2pts).



- 2. Explain why isoborneol is the preferred product. Is isoborneol the endo or the exo product? (2pts)
- **3.** How much material is needed to get an accurate melting point? (2pts)
- 4. What is the driving force for the reduction of camphor using sodium borohydride? (2pts)
- 5. When using the rotary evaporator, why should you not fill the round bottom flask more than halfway? (4pts)

6. Why is NaBH<sub>4</sub> used in this reaction today instead of LiAlH<sub>4</sub>? (4pts)