Name:\_\_\_\_\_

1. Circle the product or reagents for the following reactions. (2 points)

i. a. b. c. d. TsOH, -H<sub>2</sub>O

ii.

a. b. c. d.

Na°, NH<sub>3</sub> 1. TsOH, HS SH 1. LiAlH<sub>4</sub> 1. TsOH, HS SH

MeOH 2. H<sub>2</sub>, Pt 2. H<sub>2</sub>O 2. Raney Ni

2. Provide the major product for the following reactions. (2 points)

i. O ⊕ PPh₃ H

3. Provide a mechanism to account for the following reaction. (6 points)