Fall 2007 Homework #7

due: 10 a.m. Mon. Oct. 29th

1. (10 points) Deduce the structure of **B**, and draw an arrow-pushing mechanism for its formation.

2. (10 points) Draw an arrow-pushing mechanism for the transformation of C to D.

$$\begin{array}{c|c} CN & 1. & Br \\ \hline C & 2. LDA & D \\ \hline Br & & CN \\ \hline Br & & CN \\ \hline Br & & Br \\ \hline \end{array}$$

3. (10 points) Write a synthesis route to **E**. You may use any starting material that contributes three or fewer carbons to the final product.

 \mathbf{E}