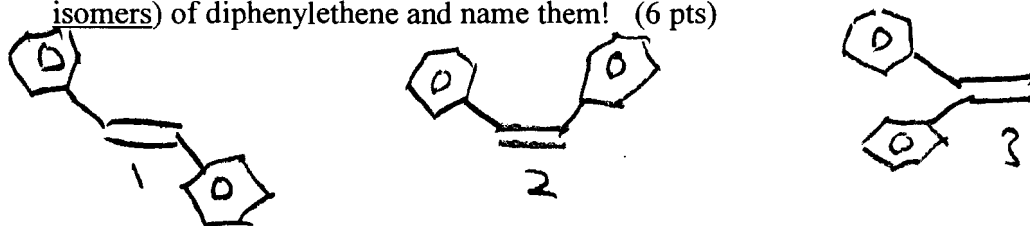
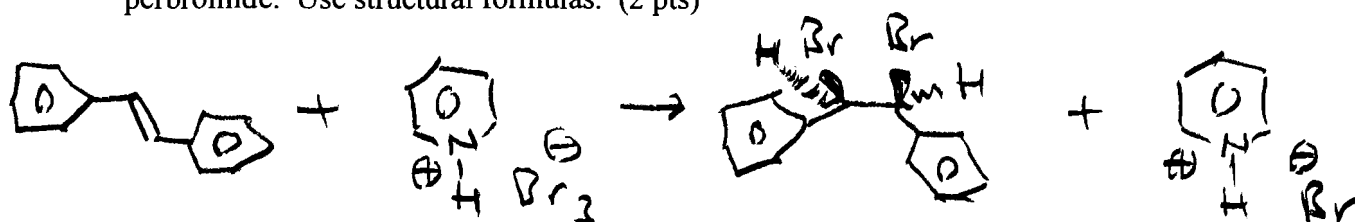


1. Show structural formulas of all valid isomers (stereoisomers and constitutional isomers) of diphenylethene and name them! (6 pts)



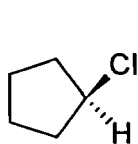
1: trans - 1,2 - diphenylethene  
 2: cis -  
 3: 1,1 - diphenylethene

2. Show a balanced reaction equation for the bromination of (E)-stilbene with pyridinium perbromide. Use structural formulas. (2 pts)

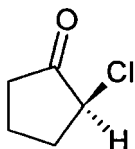


3. Indicate any correct statements:  A "I could have used bromine rather than pyridinium perbromide to accomplish last week's bromination"  B "acetic acid is a good solvent for pyridinium perbromide" C "The bromination of cis-1,2-diphenylethene (rather than the trans isomer) would have generated the exact same product",  D "acetic acid is a good solvent for pyridinium hydrobromide" (4 pts)

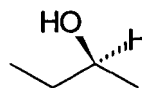
4. For each compound below, decide whether it is an R enantiomer, an S enantiomer, or this concept doesn't apply (N/A) 3 pts



1 N/A



2 S



3 S