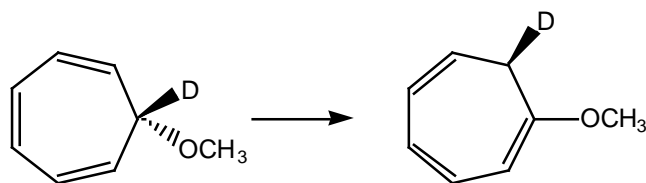


Problem Set #8
CH242-2002S

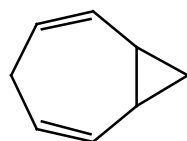
- (1) (a) Which of the following two compounds is expected to undergo ring-opening at the faster rate? Clearly explain your reasoning and provide a structure for the product of the faster reaction.



- (b) How would you classify the following pericyclic reaction? Predict whether it is likely to occur under thermal or photochemical conditions. Does the reaction proceed antarafacially or suprafacially?



- (c) Explain why the ^{13}C NMR of homotropylidine shows only three signals.



Homotropylidine

- (2) Show how the products are formed in the following reactions.

