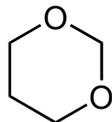


4A) (4 pts) Which compound has a higher boiling point (**I**, **II** or neither)? Explain briefly.

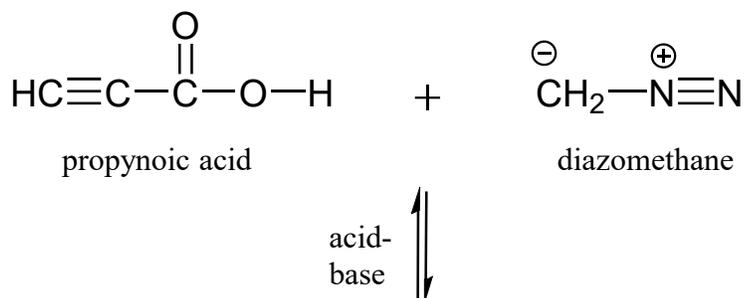


I

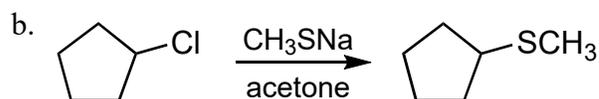
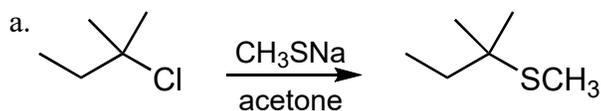


II

4B) (8 pts) **Complete the Lewis structures** of diazomethane and propynoic acid (add missing lone pairs), **predict the products** of the acid/base (proton-transfer) reaction they will undergo, and **provide a mechanism** for the forward reaction. Pay close attention to details including lone pairs, formal charges and the use of curved arrows.



4C) (5 pts) Determine which reaction will be faster and briefly explain why. Which mechanism occurs? If you expect no significant difference in the reaction rates, say so.



mechanism: Explain:

faster?