2A) (4 pts) Name the following compounds according to the IUPAC rules. Remember to designate stereochemistry, when appropriate. Show all your work to receive full credit.

2B) (6 pts) Provide a drawing for the following compound: (S)-4-(1-methylethyl)-1-octene

2C) (8 pts) The **anion** below, CH<sub>2</sub>NO<sub>2</sub><sup>-</sup>, has **three** important resonance contributors. On the structure below, **supply any missing formal charges**, and then draw **two additional** resonance forms. (Do not rank them.)

(overall -1 net charge)

2D) (5 points) Two isomers of the given alkene are known; the boiling point (bp) of one is 47 °C, and the other bp is 60 °C. Draw the two isomers, match each with the correct bp, and explain why the bp's are so different.