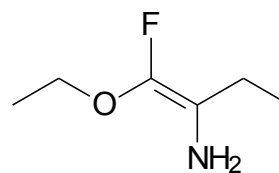
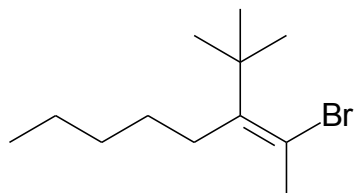
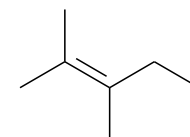
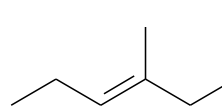
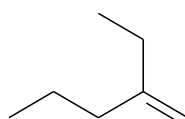
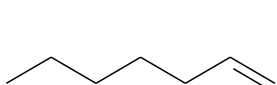
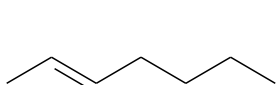


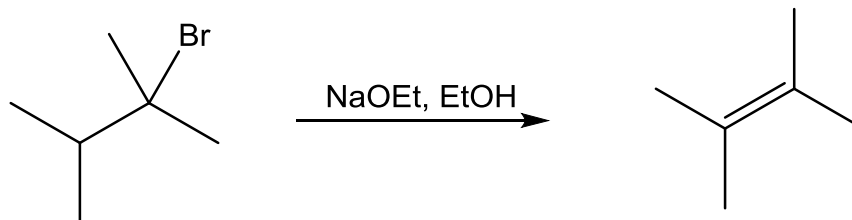
1. (2 pts) Assign the configuration [(*E*) or (*Z*)] of the alkenes shown below. Do not name the alkenes.



2. (4 pts) Rank the alkenes below from MOST STABLE to LEAST STABLE. (Most, 2nd Most, 3rd, ...).



3. (2 pts) Draw a step by step mechanism for the reaction of 2-bromo-2,3-dimethylbutane with sodium ethoxide (below). Use arrows to show "pushing" of electrons.



4. (2 pts) Draw the structure of the Transition State (the high energy intermediate) that would occur during the reaction of 2-bromo-2,3-dimethylbutane with sodium ethoxide (above).