3A) (10 pts) Given the Newman projections below, sketch an energy diagram showing the relative energies of the conformers. Start with  $\bf A$  at  $0^{\circ}$  and clearly label your diagram.

3B) (8 pts) In the box provided for each equilibrium, indicate which direction (forward, reverse or neither) is favored and <u>briefly but clearly</u> explain why. **No explain = no credit.**