1. For the following reaction, calculate $\Delta \mathrm{H}^{\circ}$ and label as exothermic or endothermic. Does the equilibrium lie to the left or right?

$$
\mathrm{CH}_{3} \mathrm{CH}_{3}+\mathrm{Br}_{2} \rightleftarrows \mathrm{CH}_{3} \mathrm{CH}_{2} \mathrm{Br}+\mathrm{HBr}
$$

2. On the back of the page, write a detailed mechanism for the reaction above.
