3. (15 pts) Draw both Newman Projections of tert-butylcyclohexane, circle the more stable conformation and briefly explain your reasoning.

**Brief Explanation:**

4. (10 pts) **Explain** with (as always) sentences and **additional** structures the order of stability of the structures below.

\[
\begin{align*}
\text{more stable} & \quad > \\
\text{less stable}
\end{align*}
\]

5. (10 pts) An unknown, C\textsubscript{3}H\textsubscript{6}Br\textsubscript{2}, exhibits three signals in both the \textsuperscript{1}H- and \textsuperscript{13}C-NMR. Draw all structures consistent with this information.