V. A. (8 pts) Shown below is a chair conformation (A) of a substituted cyclohexane. In the boxes provided, answer the question regarding structure A. Using the second chair given below, draw the other chair conformation (B). Which conformer (A, B or neither) predominates at equilibrium? Explain briefly.

Are the two groups on the ring cis or trans?

More stable conformation? Explain.

B. Nomenclature (10 pts)
A) Name the following compound according to the IUPAC rules.
   You must show your work for full credit.

   \[
   \begin{align*}
   &\text{CH}_3 \\
   &\text{CH}_3 - \text{CH} - \text{CH} - \text{CH}_3 \\
   &\text{CH}_2\text{CH}_3
   \end{align*}
   \]

B) Name the following compound according to the IUPAC rules.
   You must show your work for full credit.

   \[
   \begin{align*}
   &\text{Br} \\
   &\text{Br}
   \end{align*}
   \]

C) Draw isopropylcyclobutane