

CH0310, ORGANIC CHEMISTRY I
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Quiz 4, Take home, due midnight Friday, Feb. 6, 2009

Hand in before/after class
Drop off at 1101 CSC (before 5 pm)
Fax to 412-624-9861 (till midnight)
Email to lynne@pitt.edu (till midnight, pdf file only)

Conformations of Cyclohexanes

To prepare:

- read Chapter 4, pp. 139-149
- review lecture notes from Feb, 2 and 4
- Do problems 18, 19, 22-34 in Chapter 4

You should be able to name cyclohexanes and draw chair and boat forms of substituted cyclohexanes and evaluate their relative energies.

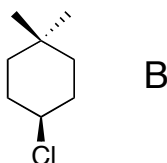
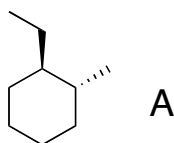
The quiz is on the other side

NAME

SIGNATURE

Cyclohexane Conformations

Answer the following questions about molecules **A** and **B**.



1) Give IUPAC names for **A** and **B**. Be sure to include cis and trans, if needed. (2 points)

2) Draw all possible chair conformations of both **A** and **B**. (6 points)

3) Calculate the relative energies of your chair conformations in **A** and **B** by using the ΔG° values in Table 4-3 on page 145 of the text. (2 points)