

Name: _____

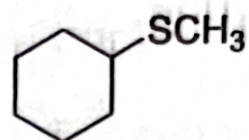
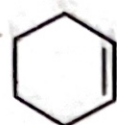
CHM 236 – Spring 2021 – Minger
Homework #1 – 25 points
Due February 9, 2021 at 11:59 p.m. MST

Read the instructions for each problem carefully. You must complete all the problems for full credit. Write your answers on these sheets only – no additional sheets. You may write your answers on notebook paper and submit a PDF of those as long as you keep the questions in order and on the same page as they appear in this document. Save your document as one PDF and upload it to Canvas by the due date.

1 – 5) For questions 1-5 (see next page), design reasonable multi-step syntheses of each of the target molecules using the provided starting material and organic and inorganic reagents of your choice. Show the reagents needed for each step and the product of each step. Do not show any mechanisms. Each of these transformations can be accomplished in two steps.

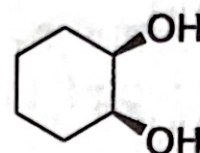
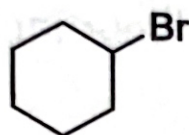
Write your answers like this (actual number of steps may vary):	A starting material → reagent(s) B → reagent(s) C → reagent(s) D target
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1.

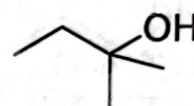
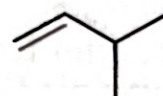


Hint: Sulfur atoms are very nucleophilic, whether they are neutral or have a negative charge

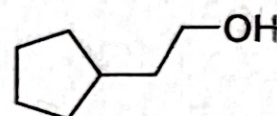
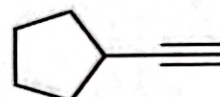
2.



3.



4.



5.

