

NAME (Print): _____

SIGNATURE: _____

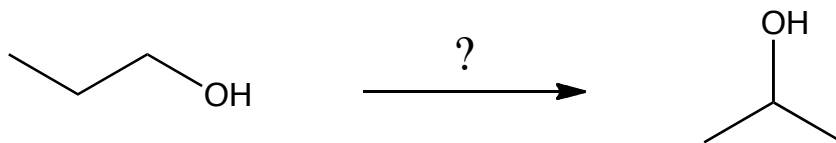
**Chemistry 320M/328M
Dr. Brent Iverson
Synthesis Practice
November 16, 2022**

**Please print the
first three letters
of your last name
in the three boxes**

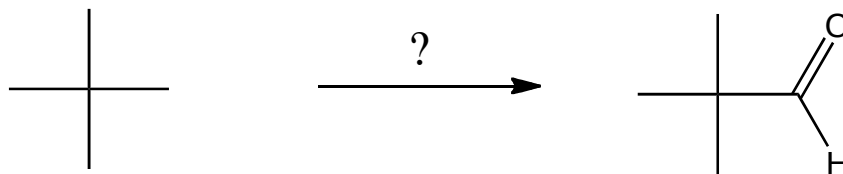
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1. These are synthesis questions. You need to show how the starting material can be converted into the product(s) shown. You may use any reactions we have learned. Show all the reagents you need. Show each molecule synthesized along the way and be sure to pay attention to the regiochemistry and stereochemistry preferences for each reaction because only predominant products can be used. All the carbon atoms of the product(s) must come from the starting material(s) shown.

A) 4 pts

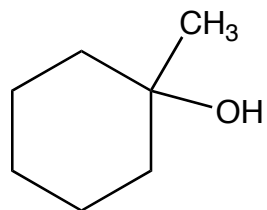
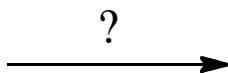
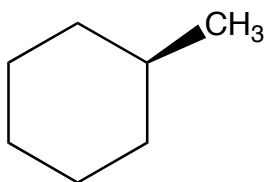


B) 7 pts

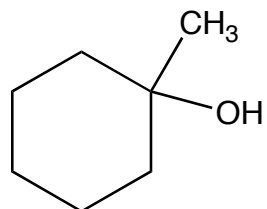
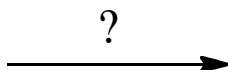
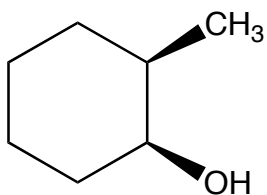


1 (cont.). All the carbon atoms of the product(s) must come from the starting material(s) shown.

C) 7 pts

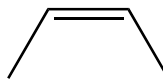
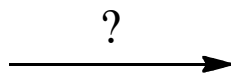
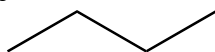


D) 4 pts



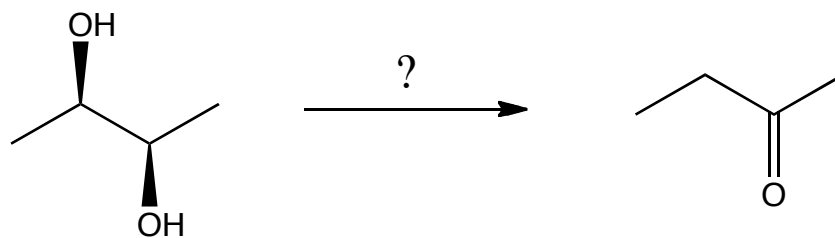
1 (cont.). All the carbon atoms of the product(s) must come from the starting material(s) shown.

E) 13 pts

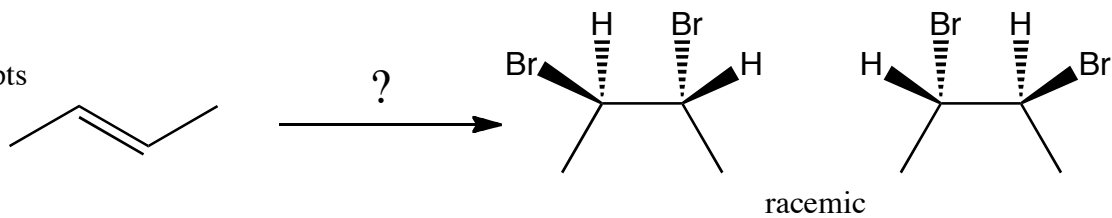


1 (cont.). All the carbon atoms of the product(s) must come from the starting material(s) shown.

F) 7 pts

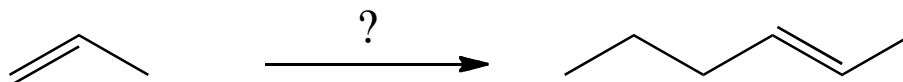


G) 10 pts



1 (cont.). All the carbon atoms of the product(s) must come from the starting material(s) shown.

H) 15 pts



1 (cont.). All the carbon atoms of the product(s) must come from the starting material(s) shown.

(Hint: This one is very much related to the last problem)

I) 20 pts

