

Chemistry 2301
Professor Steven Kass
Test 4
December 1, 2004

(Please Print Your Name)

**This exam consists of 11 pages (1-11) including this one. Please
make sure that you have all 11 pages before you get started.**

Points

1. _____

2. _____

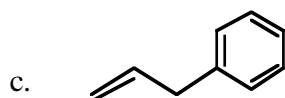
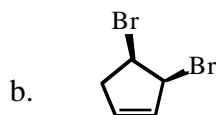
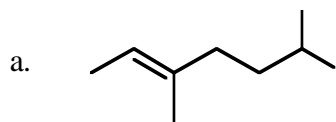
3. _____

4. _____

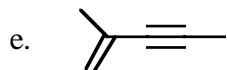
Total: _____

You have one hour to answer all of the following questions. Note the point values (110 total), be sure to budget your time, and **write all your answers below in ink**. Good luck!

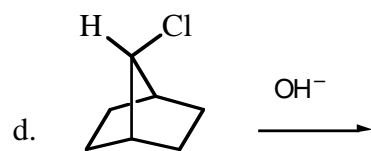
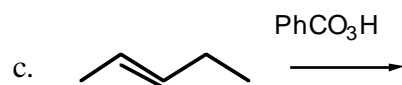
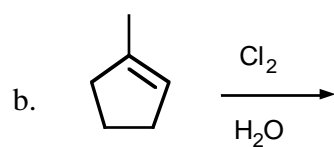
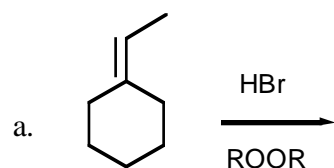
1 (20 Points). Supply the systematic (IUPAC) name or the structure, whichever is missing, for the following compounds.

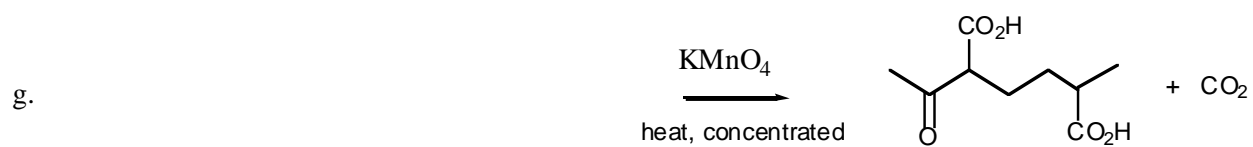
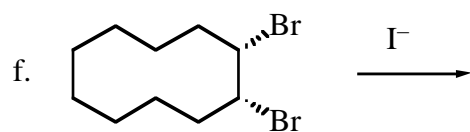
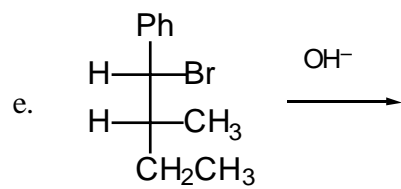


d. (Z)-4-vinyloct-4-ene

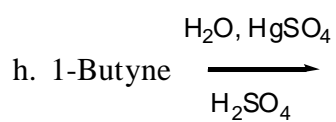


2 (50 Points). Provide the missing information (reactant(s), product(s) or reagent(s)) for the reactions shown below.



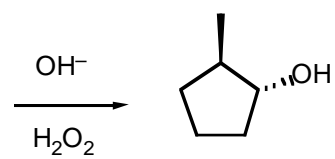


(For g, the starting material is a hydrocarbon (i.e. only C and H in the molecule))





j.



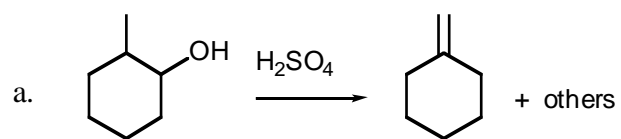
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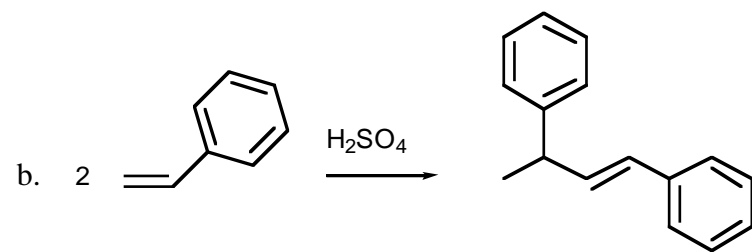
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missing

3 (20 Points). Consider the reactions shown below, and provide a detailed step by step mechanism for each showing the formation of the indicated product.





4 (20 Points). Synthesis. Choose 2 of the following 3 problems and show how to transform the given molecules into the indicated products; note – all of these transformations require 2 or more steps to complete. You should show each step.

