

CH328N Homework 9

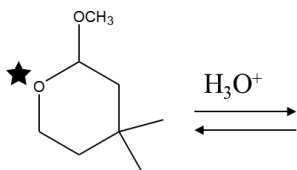
Due: in the box by 5PM on Monday, March 28th

Read: "Know" the mechanisms on pages 614-615, 620 – 621, and 717-718 read 635-640, and Chapter 17.

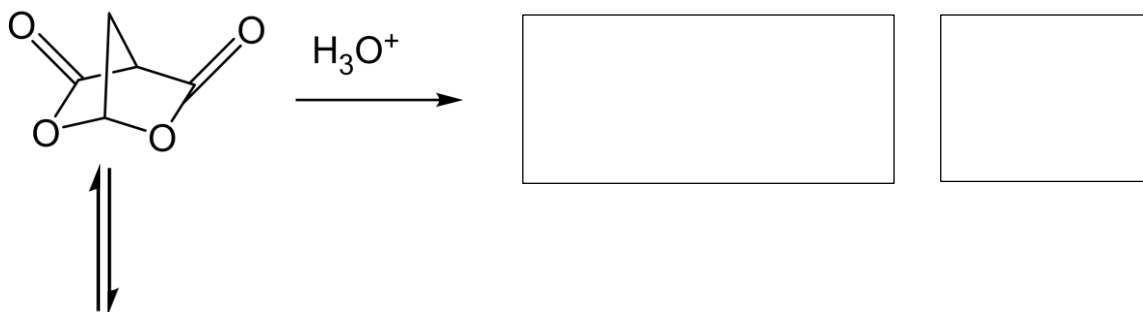
Do: 16.10; 16.11b; 16.12a,b; 16.19a; 16.20; 16.29; 16.31;16.37; 16.43a,b, c, d, g, h,

Supplemental Problems:

1. The acetal shown below is labeled with isotopic ^{18}O at the position marked with the star. Please write the step by step mechanism for the acid catalyzed hydrolysis of this compound and show where the labeled oxygen ends up in the products.



2. Predict the products of hydrolysis of the lactone below in hot aqueous acid. Using the curved arrow convention, please write the step by step mechanism for the formation of these products. Hint....one product is a gas!



3. Outline a synthesis of the compound below. Any carbon that is included in your final structure must come from benzene or any substance you choose that has no more than 3 carbon atoms.

