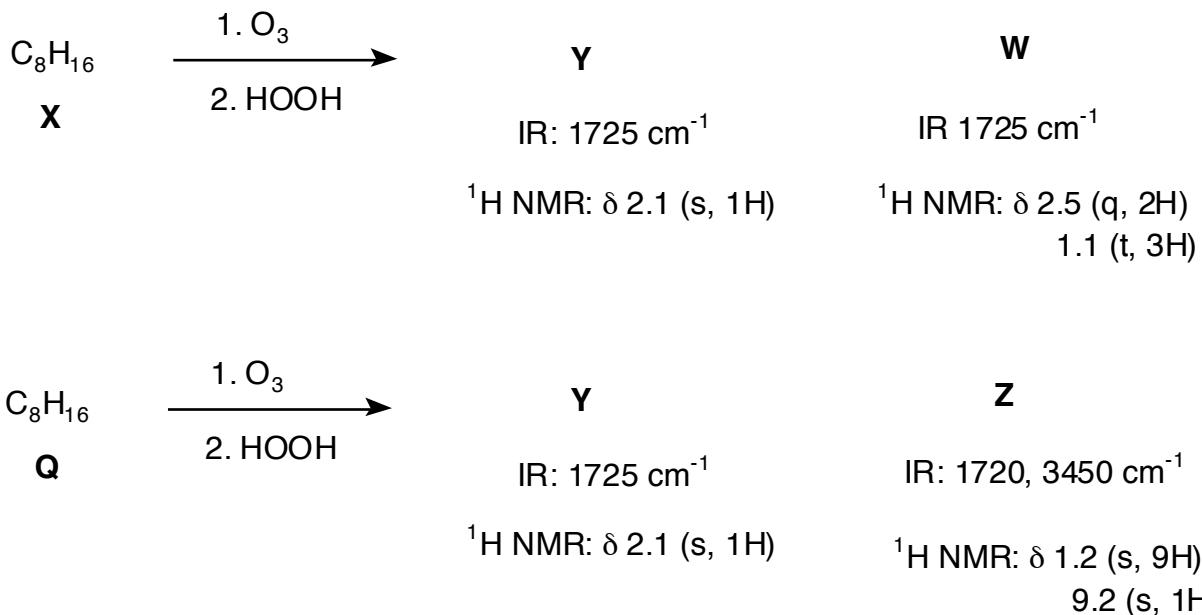


Problem 96, Chemistry 301X - 2006

(a) Ozonolysis of compound **X** leads to two products **Y** and **W**. Another compound **Q** of the same formula treated the same way gives **Y** and **Z**. In doing problems such as this one, go first to the products. In this case, use the spectral data to work out the structures of the products and then reason back to what the starting material must have been.



(b) Two different compounds of the formula C_5H_8 each give a single different product on ozonolysis followed by oxidative workup. Each product has only three ^{13}C NMR signals.