## 1. Name/Draw the following molecules

methyl 3-methylhexanoate

oxalic acid

2. Draw the mechanism from (Z)-hex-3-en-3-ol to 3-hexanone with acidic conditions

3. Give either the starting material or product to the following aldol reactions, draw the mechanism



4. Why are carboxylic acids more acidic than alcohols?

5. Give the product for the following reactions. Draw the mechanism for the second one