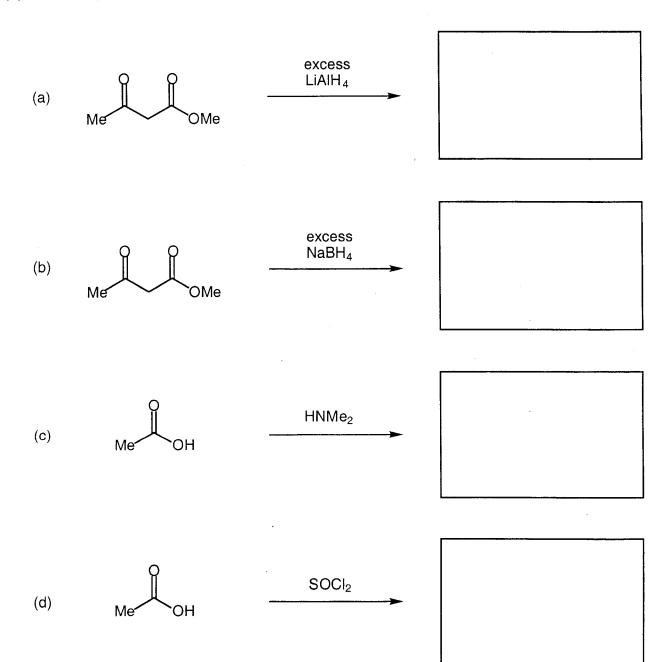
## Massachusetts Institute of Technology

## 5.13: Organic Chemistry II

Spring 2003

## **Practice for Test 3**

(1) Draw the products of the following reactions. Write "NR" if no reaction occurs.



(2) (a) Provide a mechanism to account for the illustrated transformations. Please carefully show all arrow-pushing.

HO Me OMe 
$$H_2O$$
 Me Me  $H_2O$   $H_2O$ 

- (b) Briefly provide an explanation for why these two reactions afford different products.
- (3) Synthesize the indicated compounds from the allowed organic starting materials and any inorganic reagent.

## Allowed starting materials