Please take 15 minutes to complete the following questions.

1. Write a complete mechanism (arrow formalism) leading to products for the following reactions.  
12 points  Write all resonance structures for products and reactions having resonance stabilization.  
10 points

a. 

b. 

base

NaH

H

\[ \text{Py} \rightarrow \text{product} \]  

c. 

\[ \text{Ar} + \text{HOCH}_3 \rightarrow \text{product} \]  

\[ \text{Resonance structures} \]