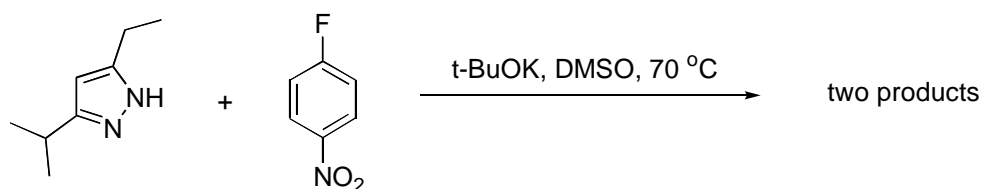
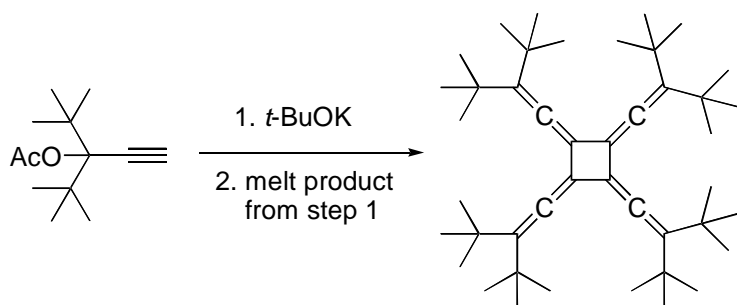


page 1

1. Predict the products of the reaction below, and provide a reasonable mechanism for their formation.



2. Provide a series of reasonable mechanisms for the transformations shown below. Show all products.



page 2

3. Provide a reasonable mechanism for the transformation shown below. Show all byproducts.

