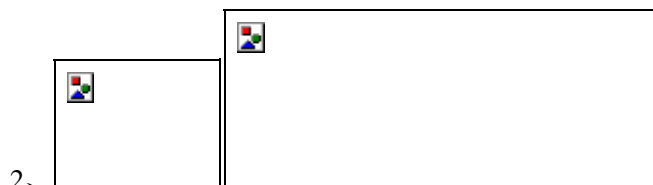
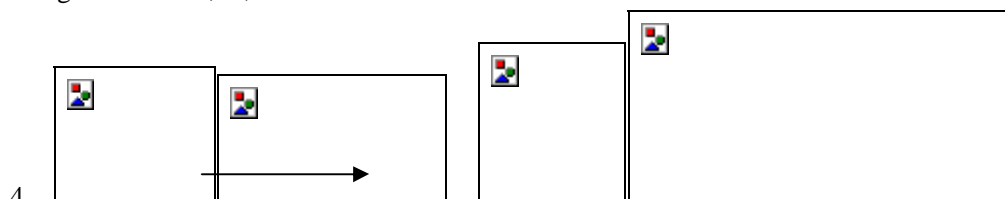


## 5道现代有机化学试题-答案

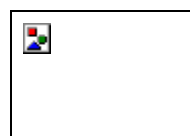
完成反应:



伯胺双甲基化,甲基脱保护,酯化反应J.Am.Chem.Soc. 2003,125,14260

炔键与 $\text{Cu}^{2+}$ 配位,N-H对炔键加成 J Org Chem 2004,69,1126炔键与 $\text{Cu}^{2+}$ 配位,KH夺掉N上H,N负离子对炔键加成,生成烯- $\text{Cu}^{2+}$ 键,再亲核进攻顶掉OTs  
J Org Chem 2004,69,1126烯键被m-CPBA环氧化,环醚被 $\text{RuIO}_4$ 氧化成内酯,用Eschenmoser's salt生成环外烯烃  
J Am Chem Soc 2004,126,9106

推测机理

催化剂的P-H被LDA夺掉,亲核进攻羰基,Si重排,加成,1,4-Si迁移  
J Am Chem Soc 2004,126,3070