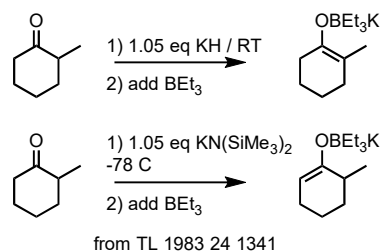


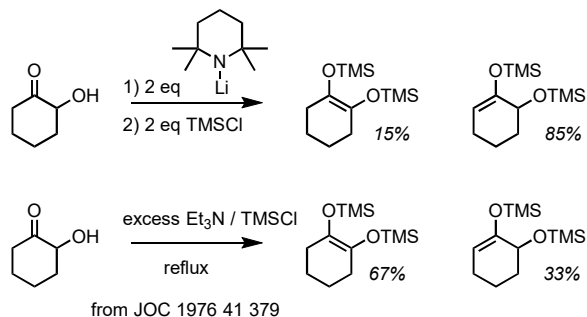
ENOLATE FORMATION

Based on the data, determine which is the thermodynamic enolate and which is the kinetic enolate, and explain why. Try some mechanisms too as practice.

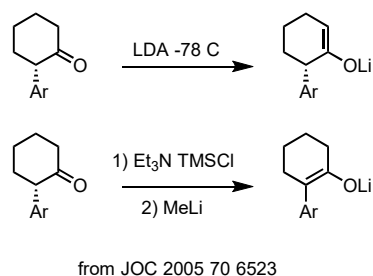
A



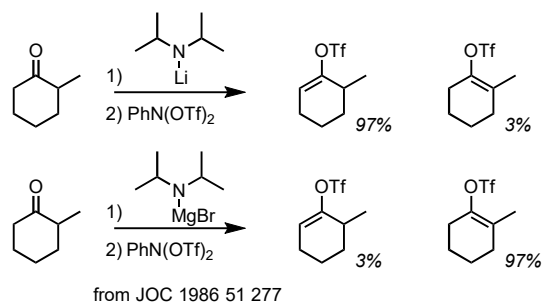
B



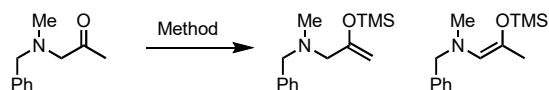
C



D



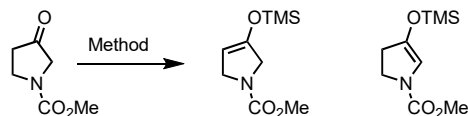
E



Method A: Ketone added to 1.1 eq LDA at -78, then add TMSCl	75%	25%
Method B: Ketone added to 0.8 eq LiHMDS at 0C	30%	70%
Method C: Ketone heated with TMSCl, Et ₃ N	5%	95%

from JOC 1980 45 2307

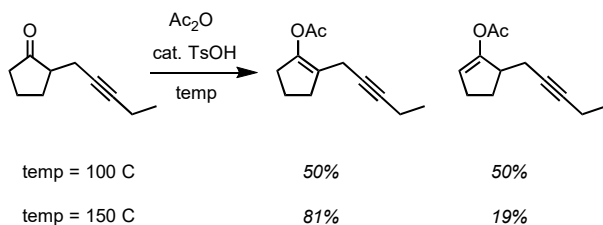
F



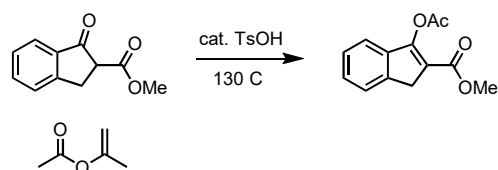
Method A: Ketone added to 1.1 eq LDA at -78, then add TMSCl	50%	50%
Method B: Ketone added to 0.8 eq LiHMDS at 0C	63%	37%
Method C: Ketone heated with TMSCl, Et ₃ N	80%	20%

from JOC 1980 45 2307

G



H



from JACS 2019 141 18127