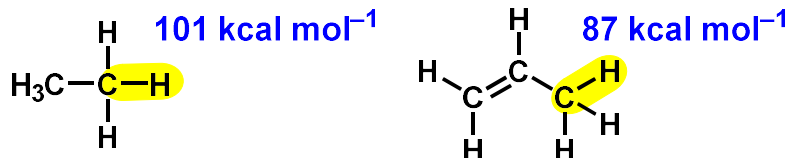
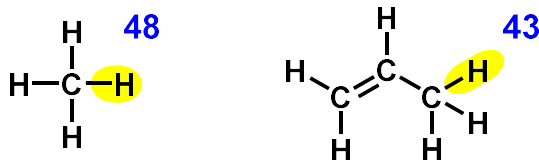
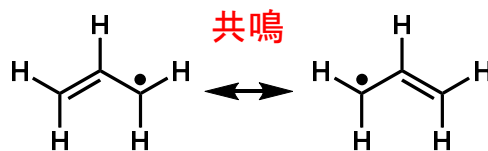


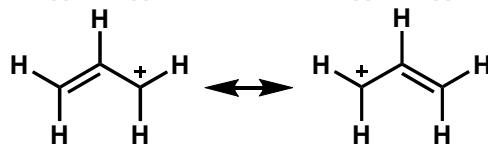
## ● 結合解離エネルギー

●  $pK_a$ 

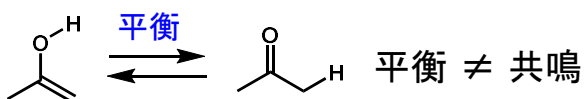
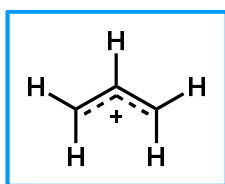
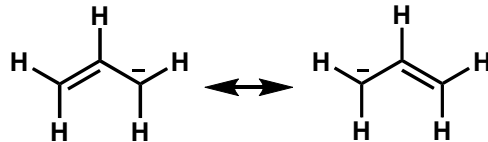
①アリルラジカルは安定



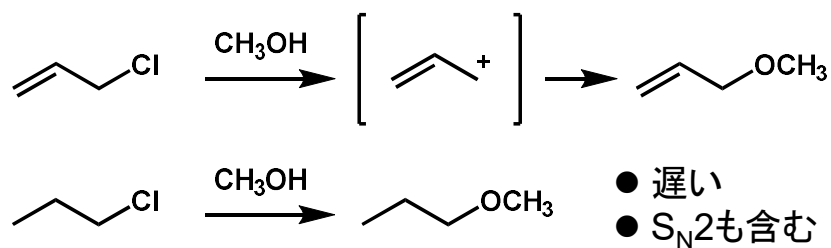
②アリルカチオンは安定



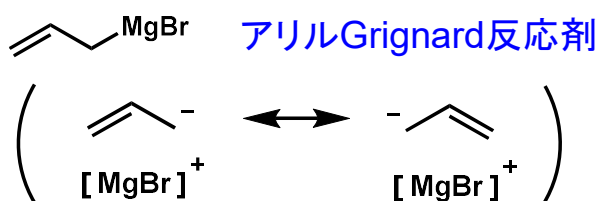
③アリルアニオンは安定



共鳴では原子の位置は変わらない

S<sub>N</sub>1反応

## アリル金属種



## アリル位のラジカル的臭素化

