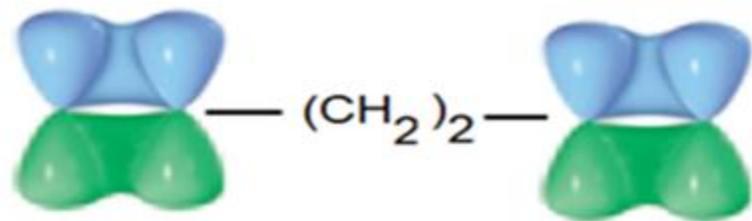
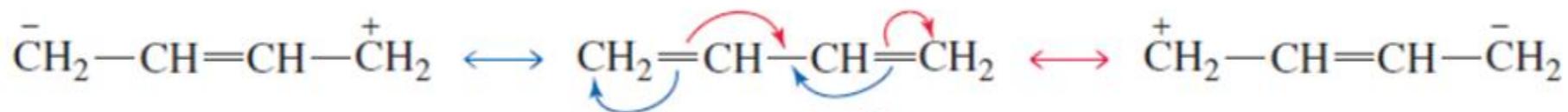
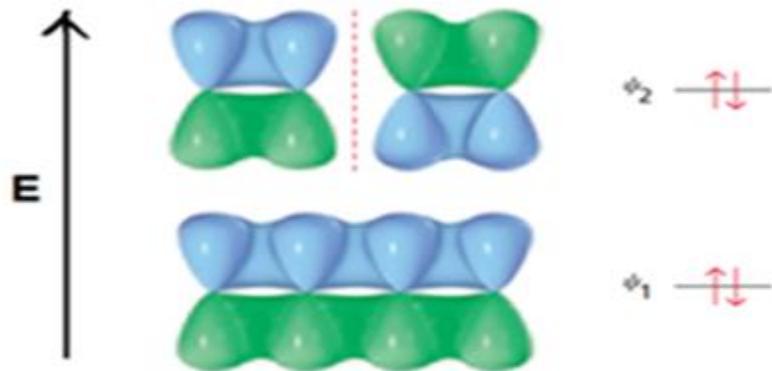


REAÇÕES DE DIENOS

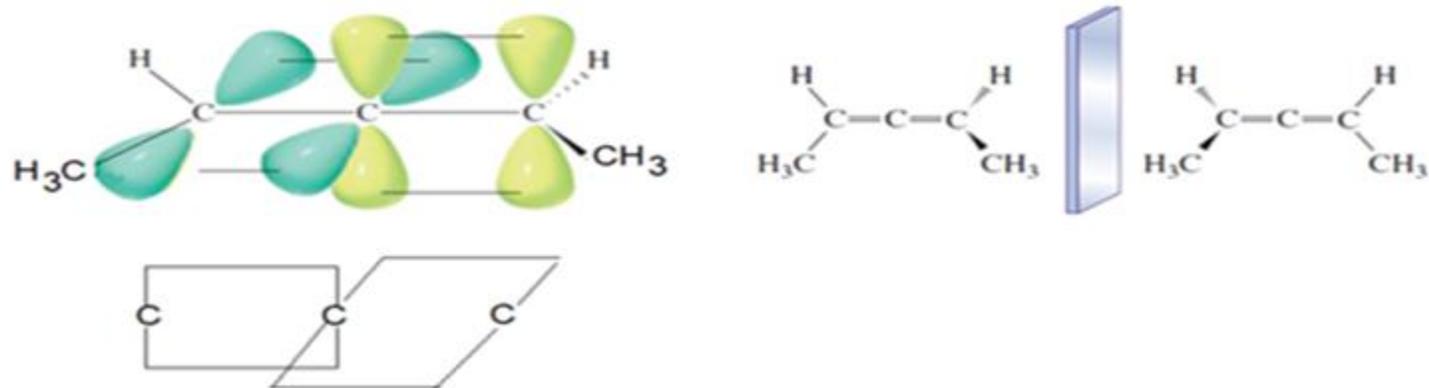
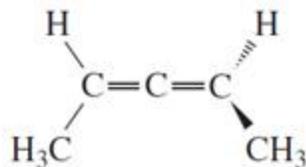
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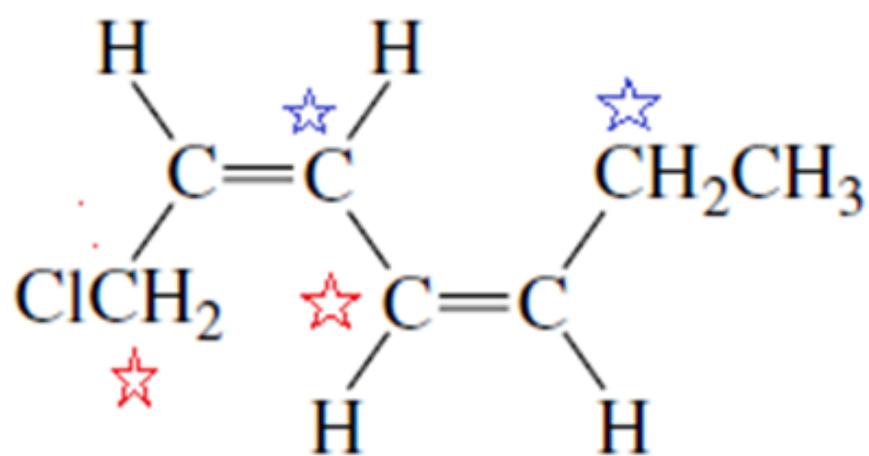


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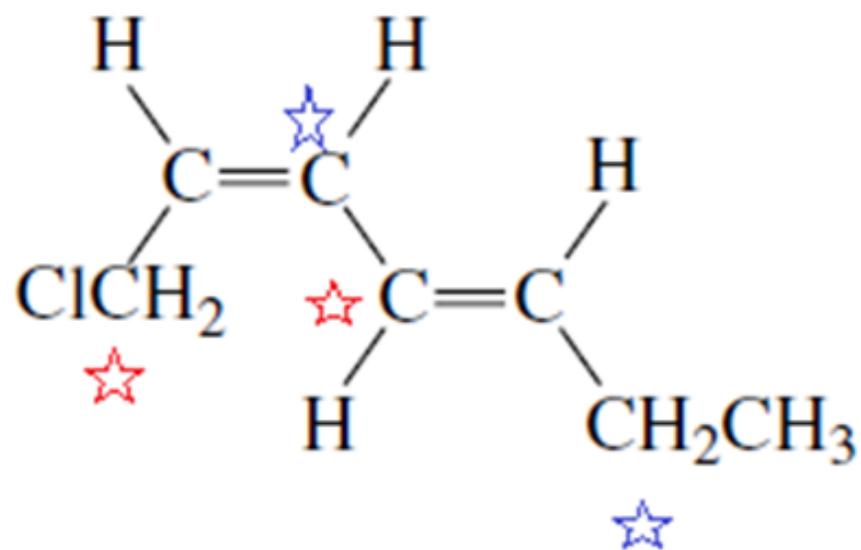


DIENOS ACUMULADOS



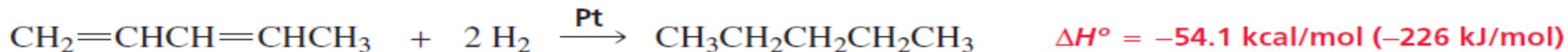
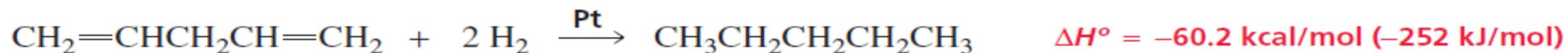
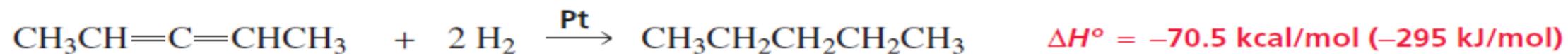


(2Z,4Z)-1-cloro-2,4-heptadieno



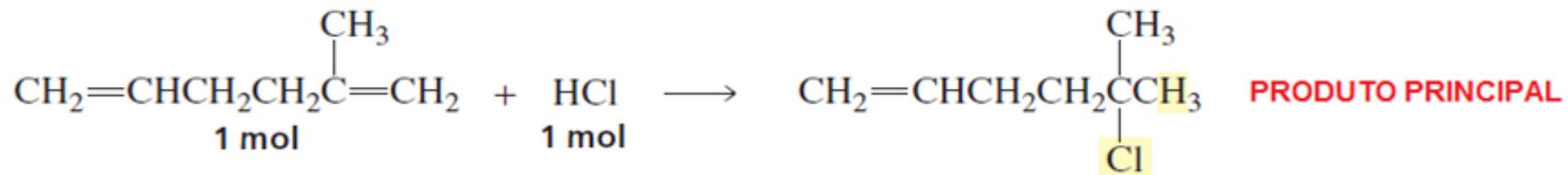
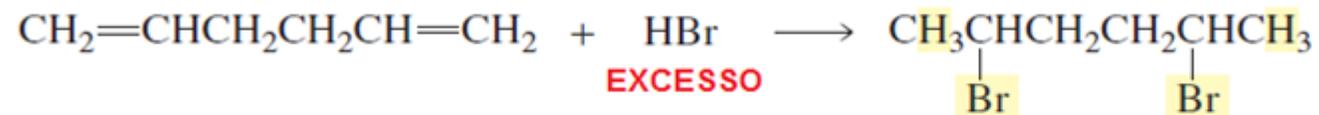
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ESTABILIDADE RELATIVA DE DIENOS

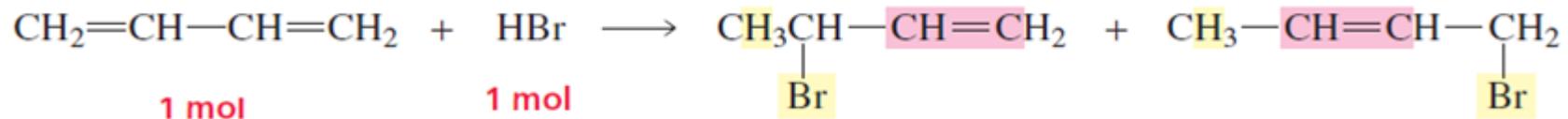


ADIÇÃO DE HX

A DIENOS ISOLADOS:



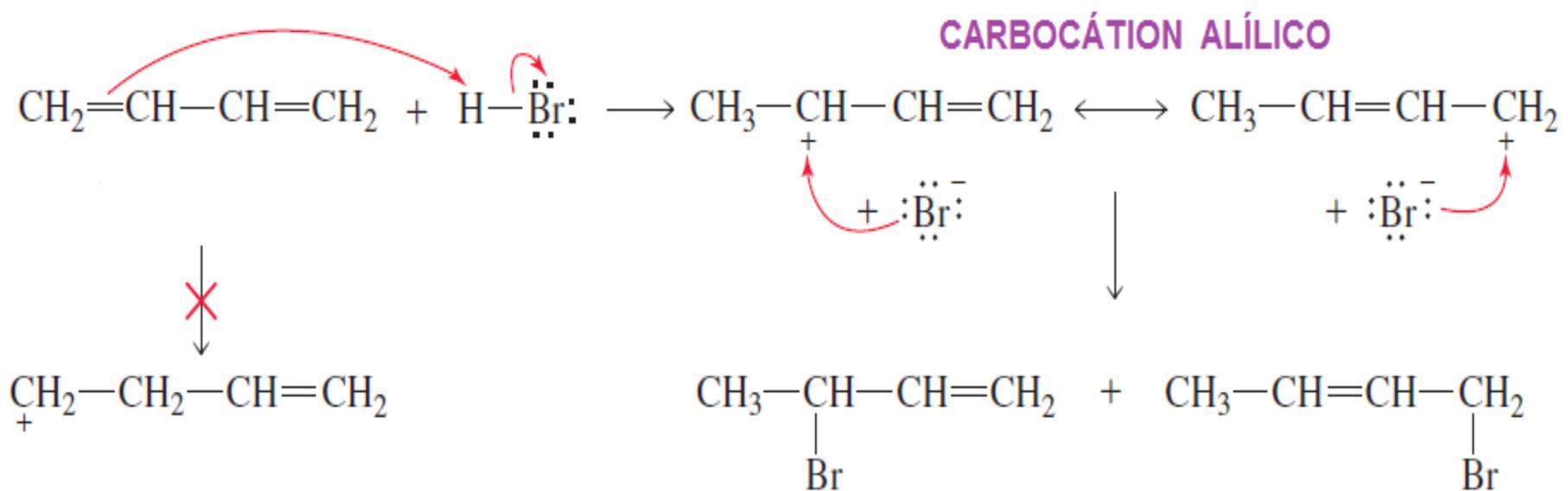
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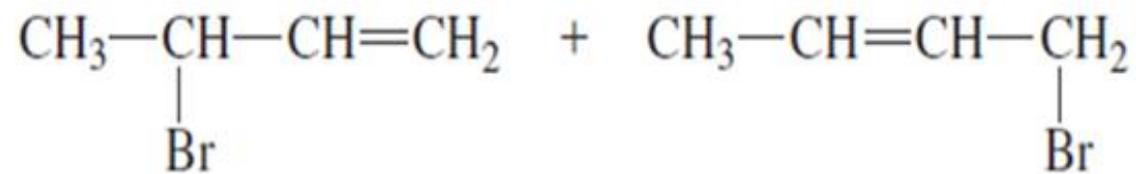
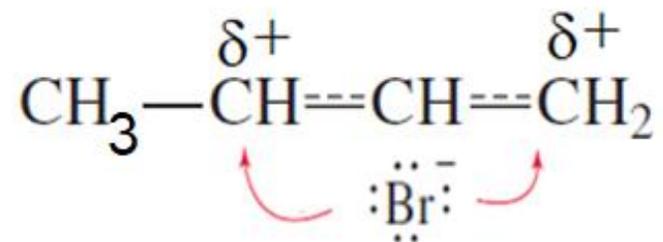
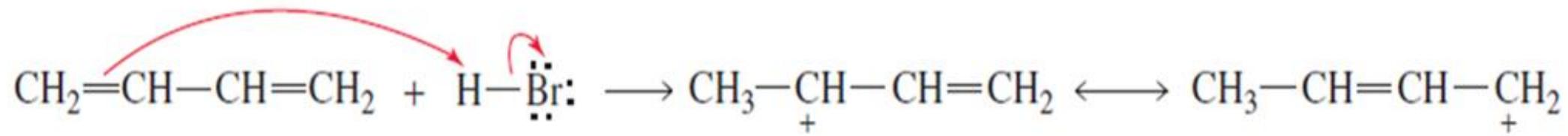
adição 1,2

adição 1,4

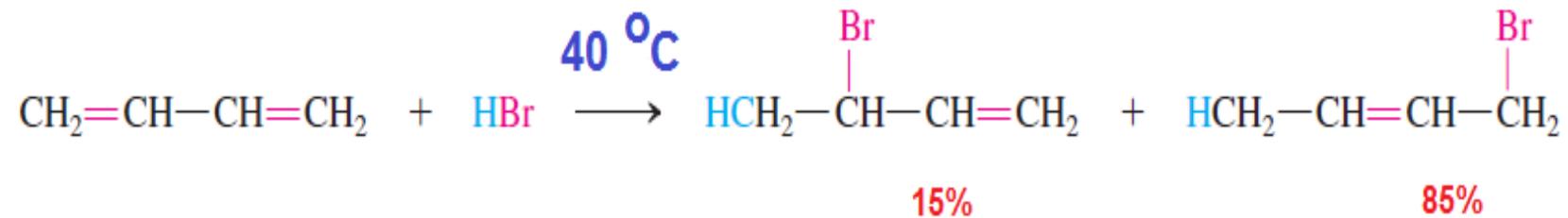
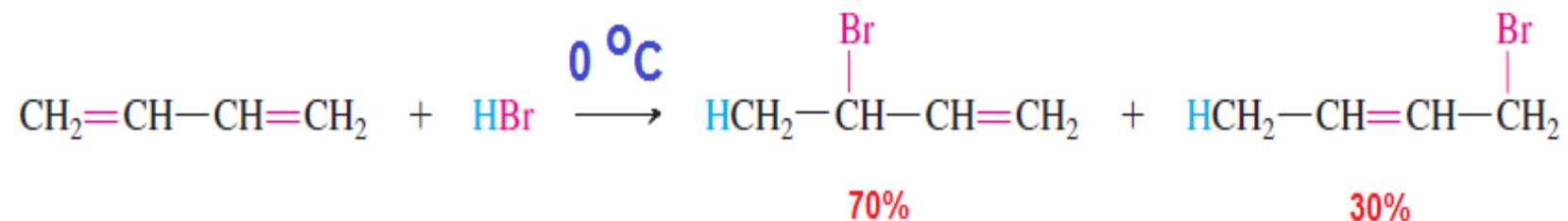
MECANISMO DA ADIÇÃO DE HX A DIENOS CONJUGADOS



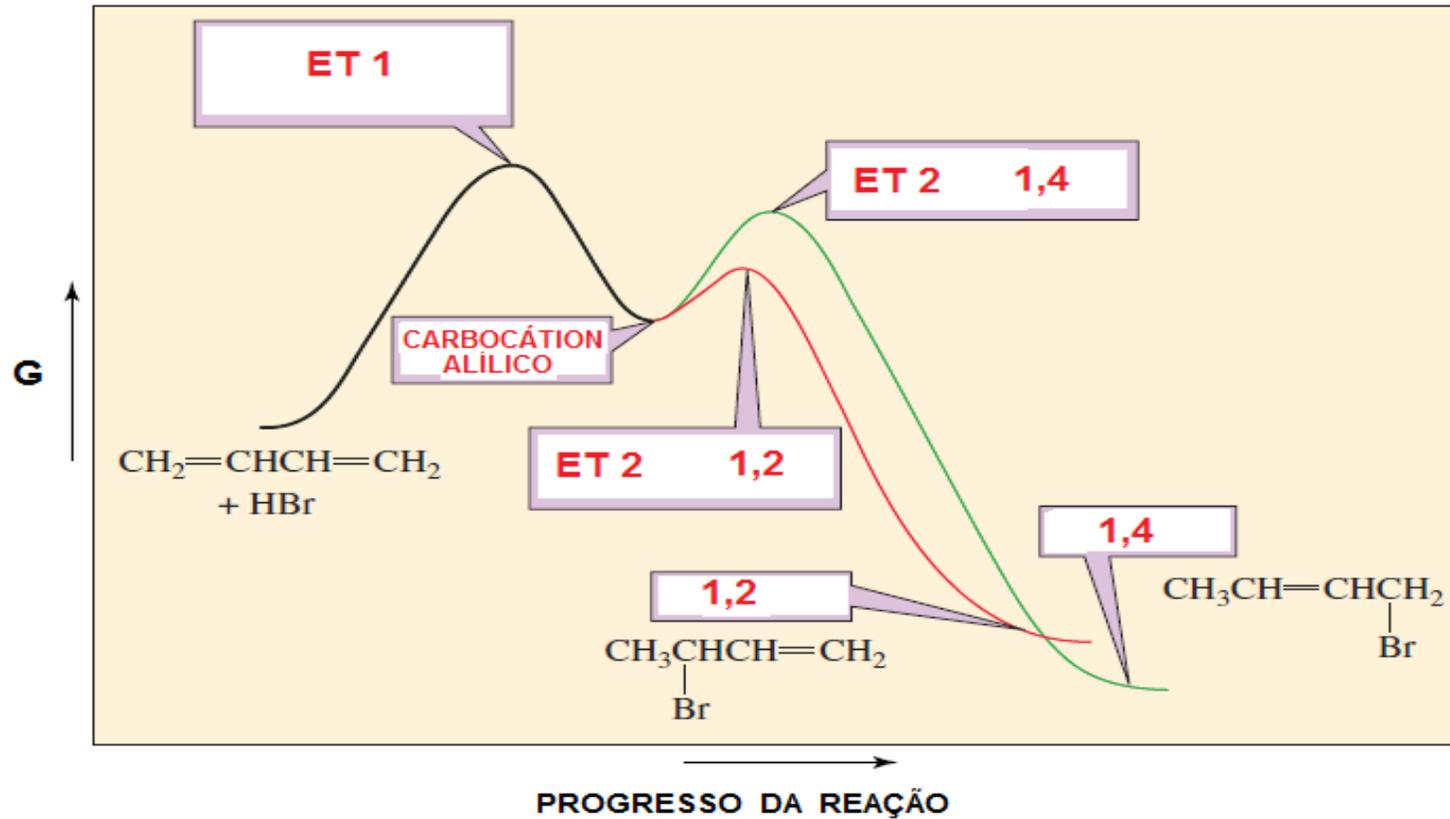
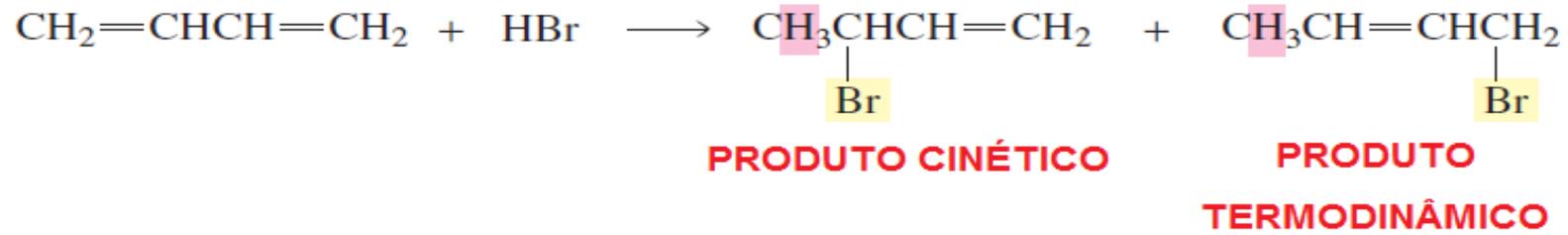
CARBOCATION ALÍLICO



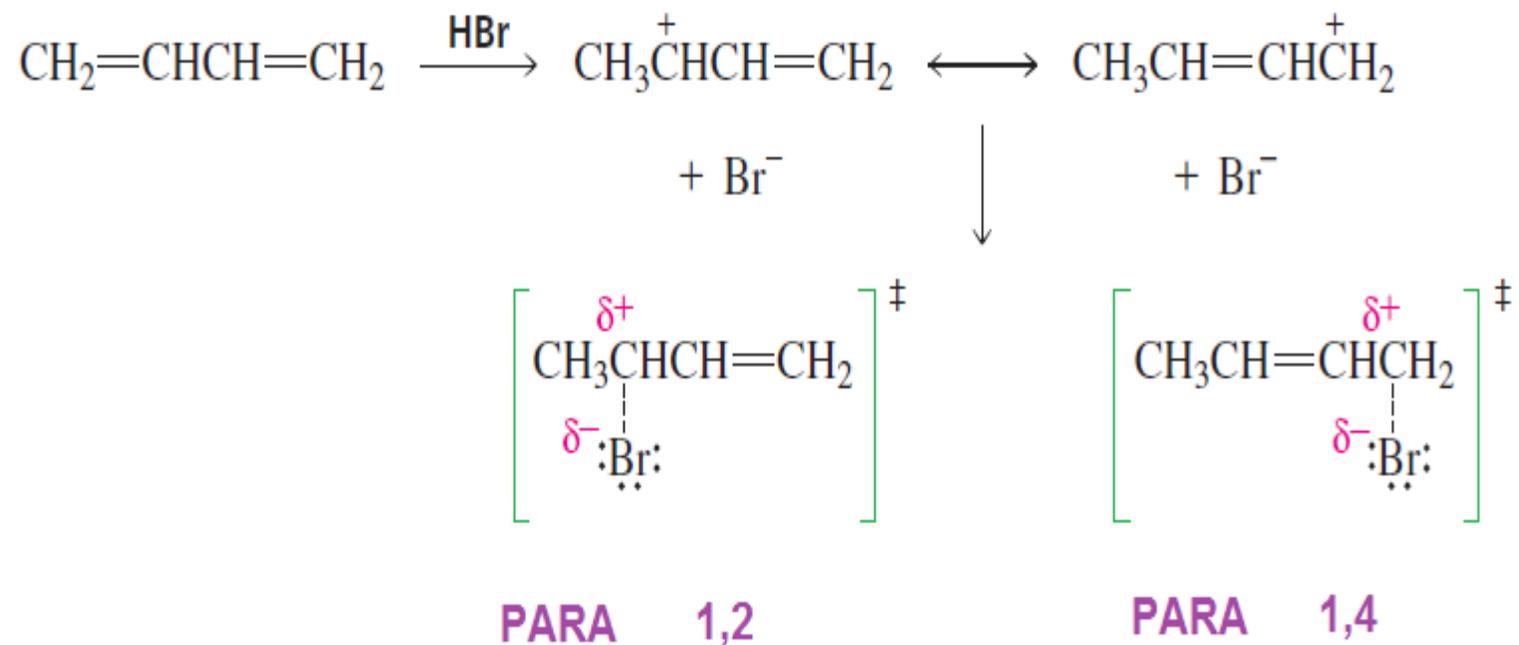
EFEITO DA TEMPERATURA : CONTROLE CINÉTICO X TERMODINÂMICO



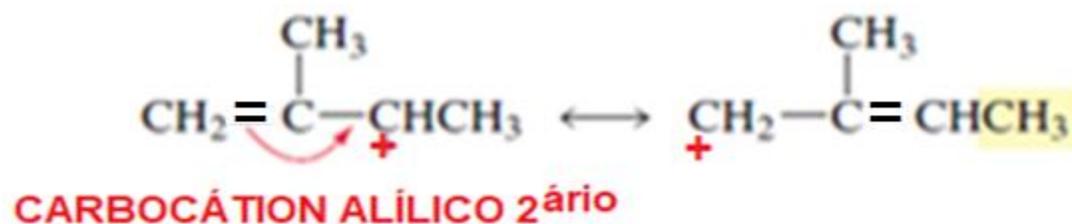
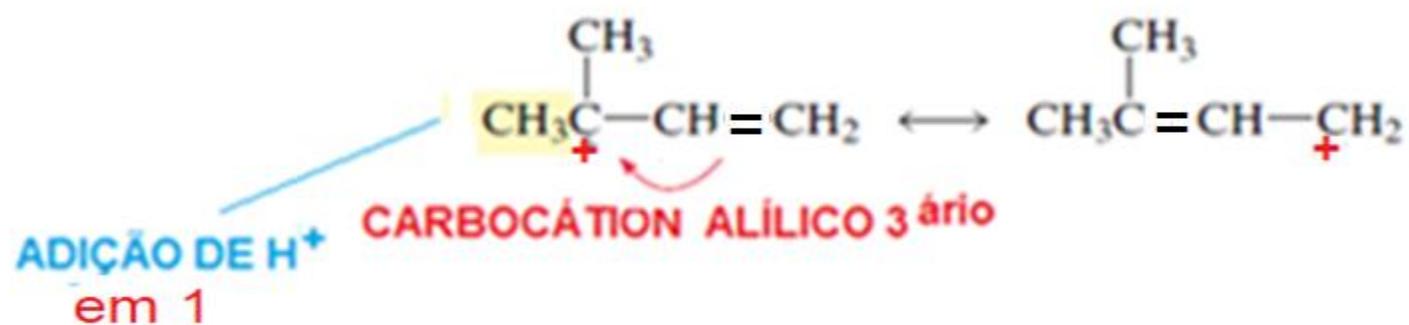
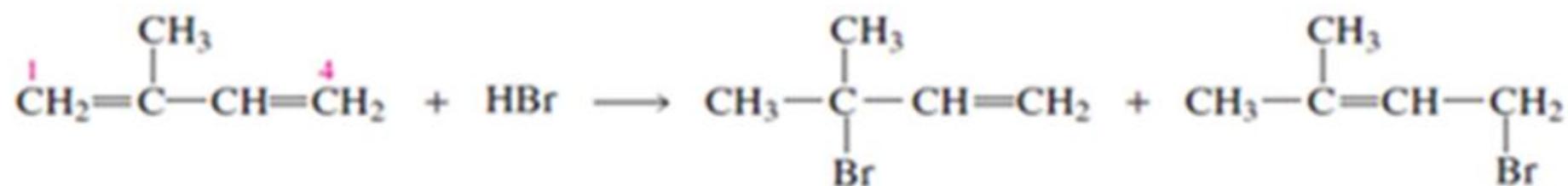
CONTROLE CINÉTICO X CONTROLE TERMODINÂMICO



A ESTABILIDADE RELATIVA DOS ESTADOS DE TRANSIÇÃO 2

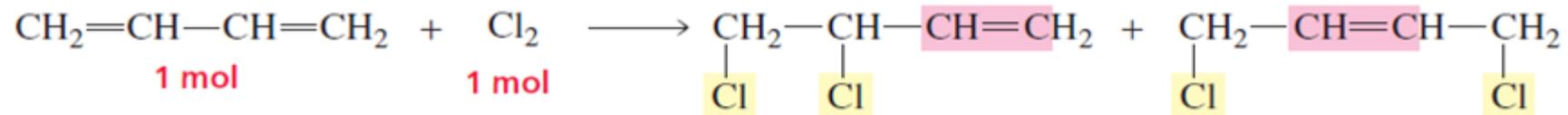
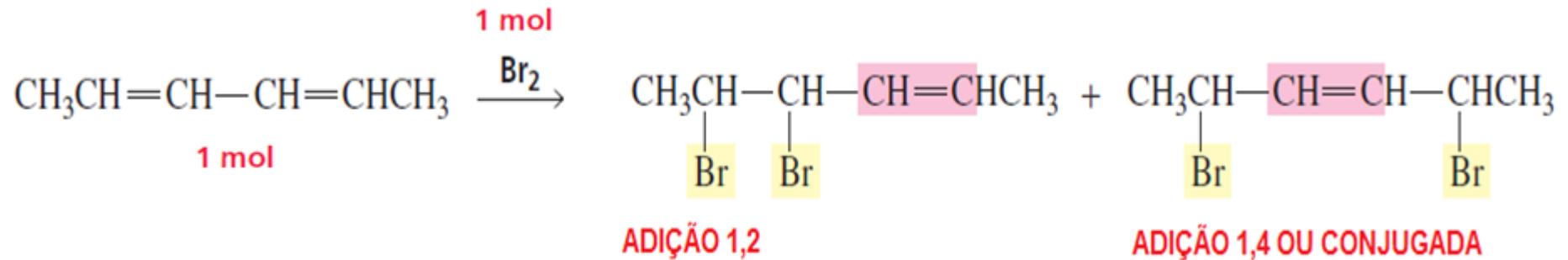
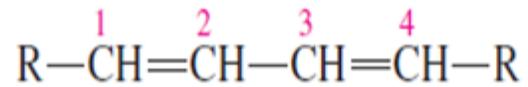


PROCURAR SEMPRE O ALÍLICO MAIS ESTÁVEL!

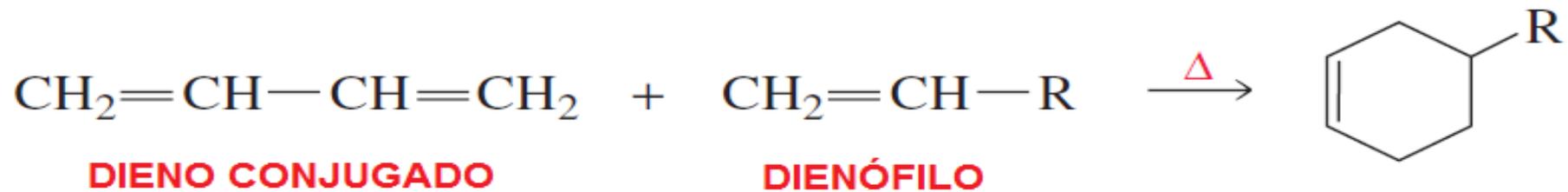


ADICÃO DE H⁺
em 4

ADIÇÃO DE HALOGÊNIOS A DIENOS CONJUGADOS

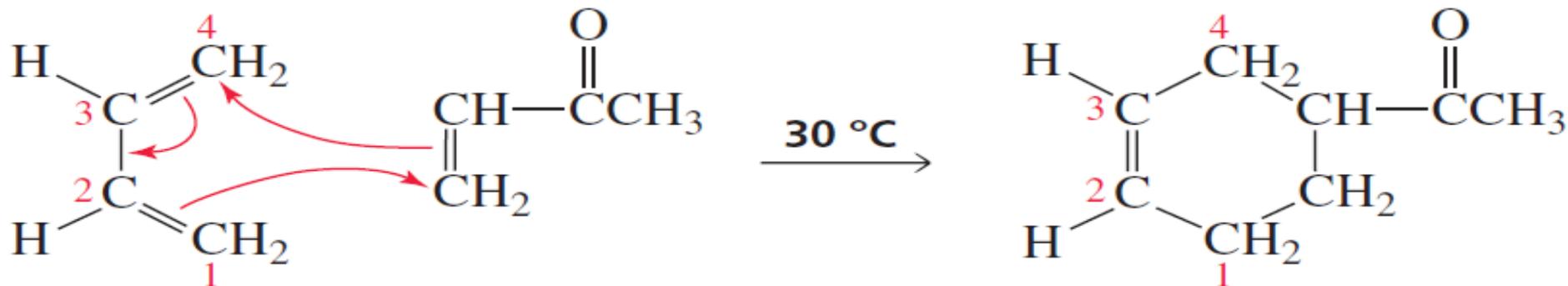


A CICLOADIÇÃO DE DIELS-ALDER

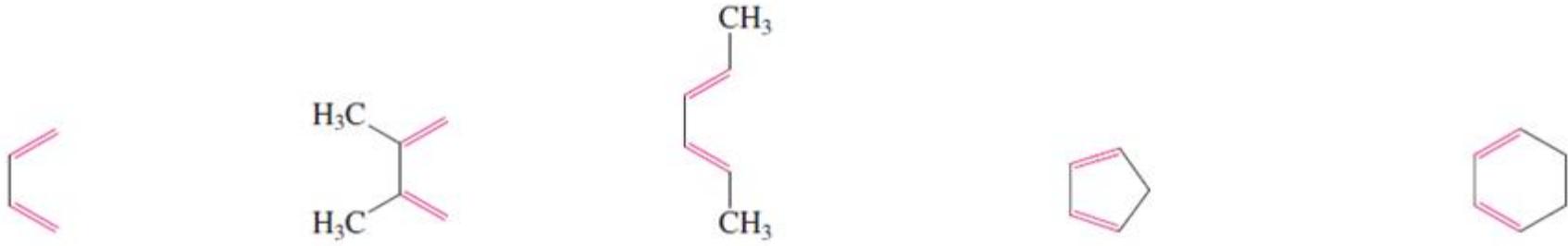


R : C=O . C≡N , etc.

MECANISMO CONCERTADO : É UMA CICLOADIÇÃO

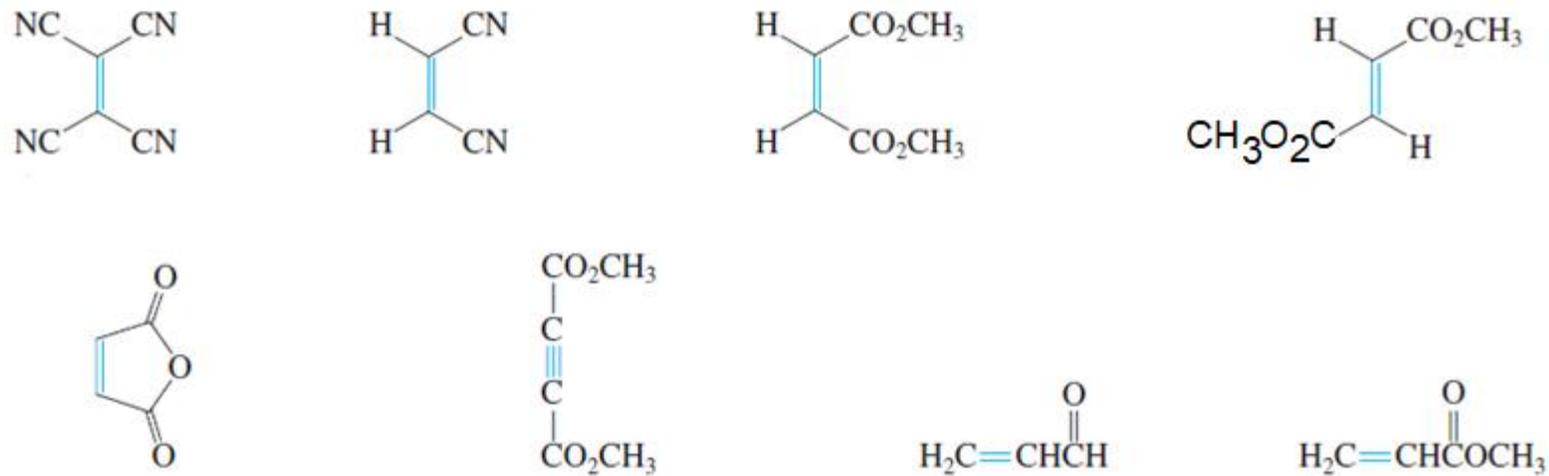


DIENOS



necessariamente *s-cis*

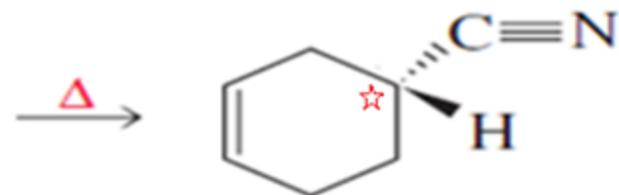
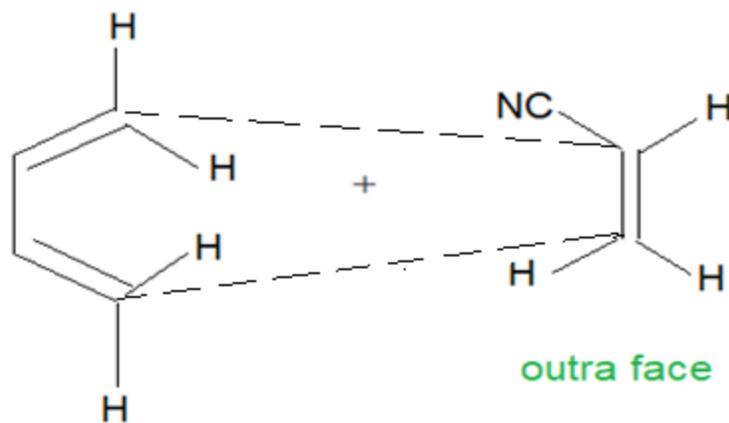
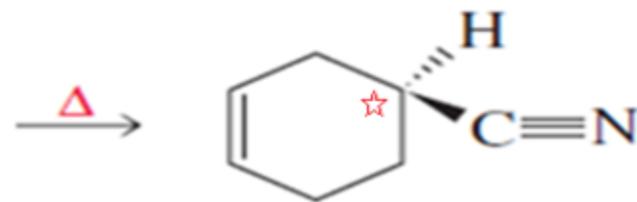
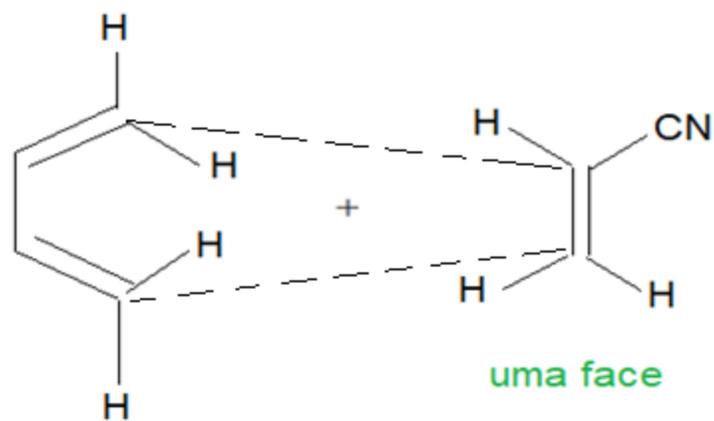
DIENÓFILOS



contendo grupo elétron-atraente

ESTEREOQUÍMICA DA REAÇÃO DE DIELS-ALDER

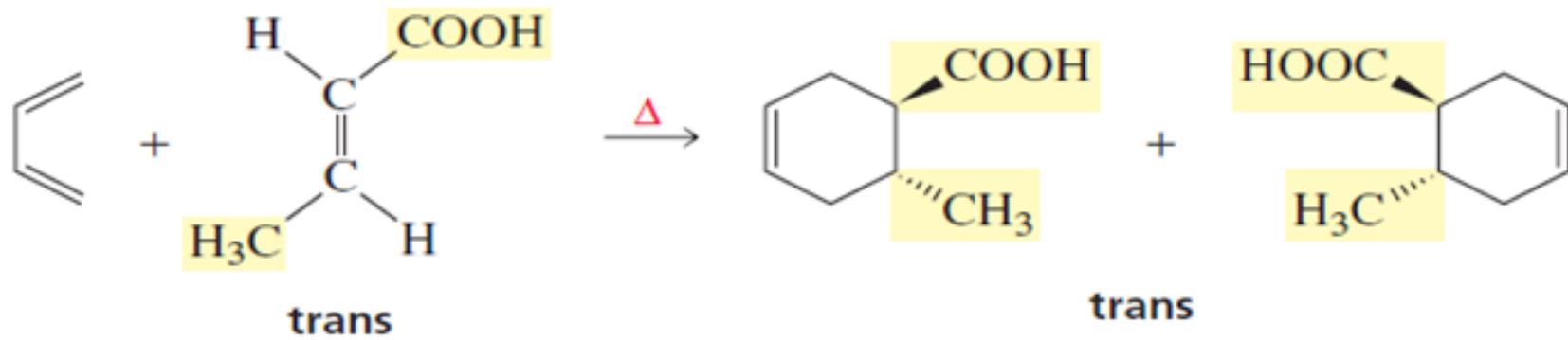
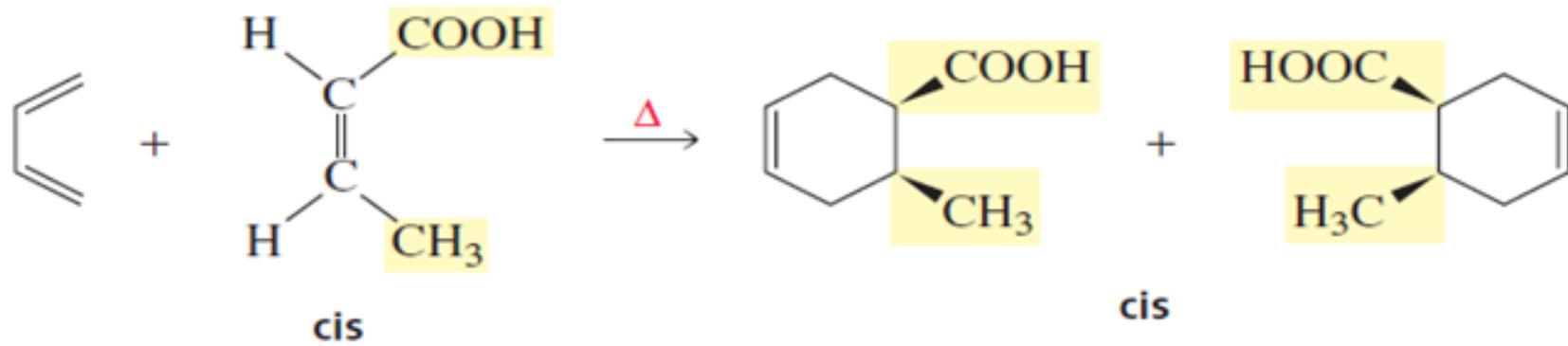
CRIANDO UM CENTRO ASSIMÉTRICO  MISTURA RACÊMICA



CRIANDO DOIS CENTROS ASSIMÉTRICOS

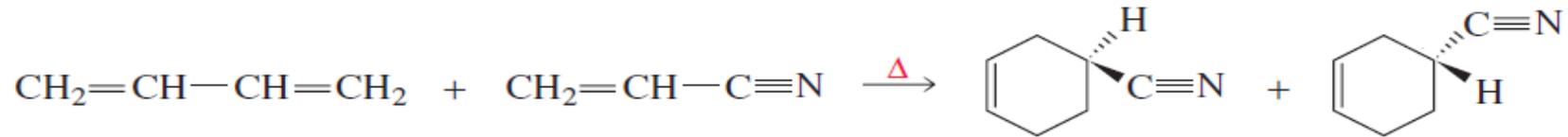


ESTEREOESPECÍFICA

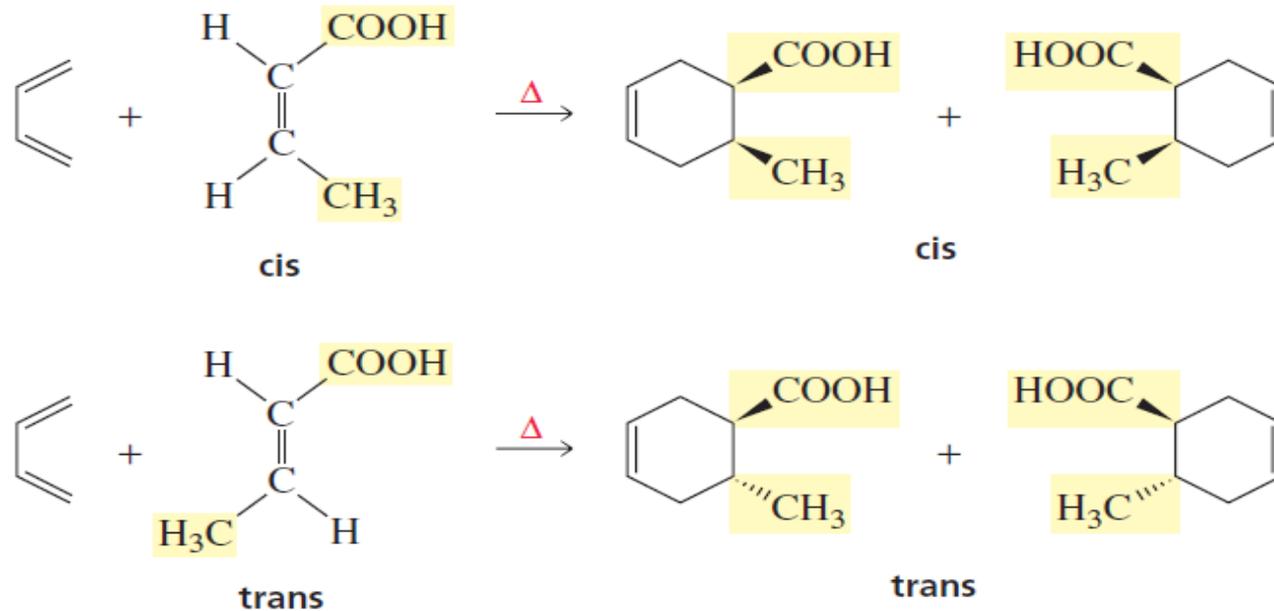


ESTEREOQUÍMICA DA REAÇÃO DE DIELS-ALDER

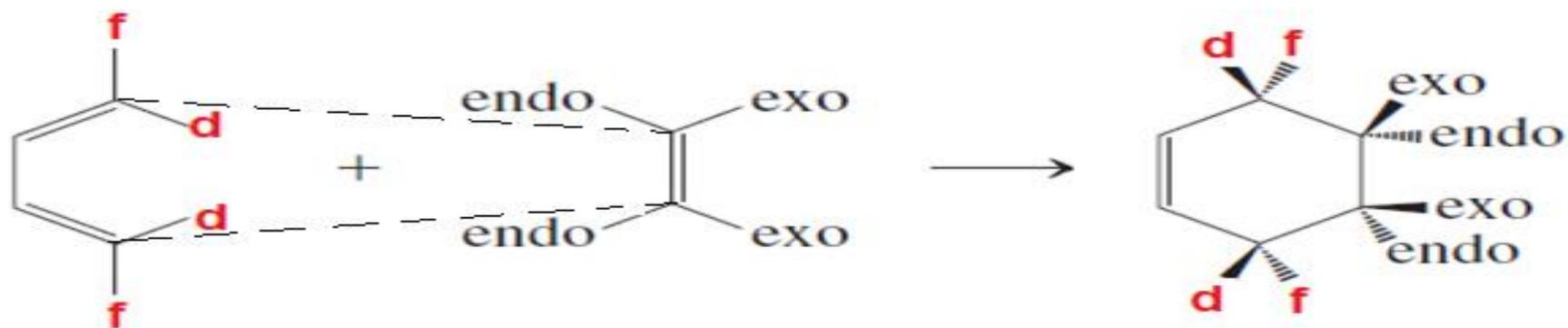
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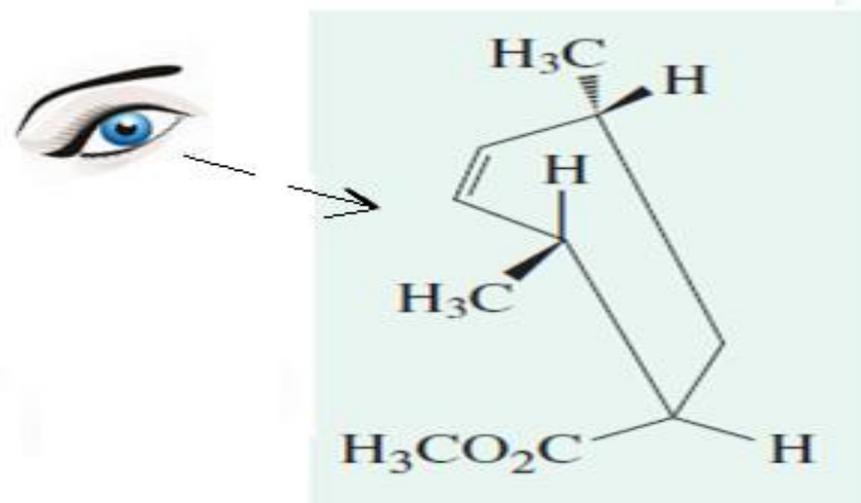
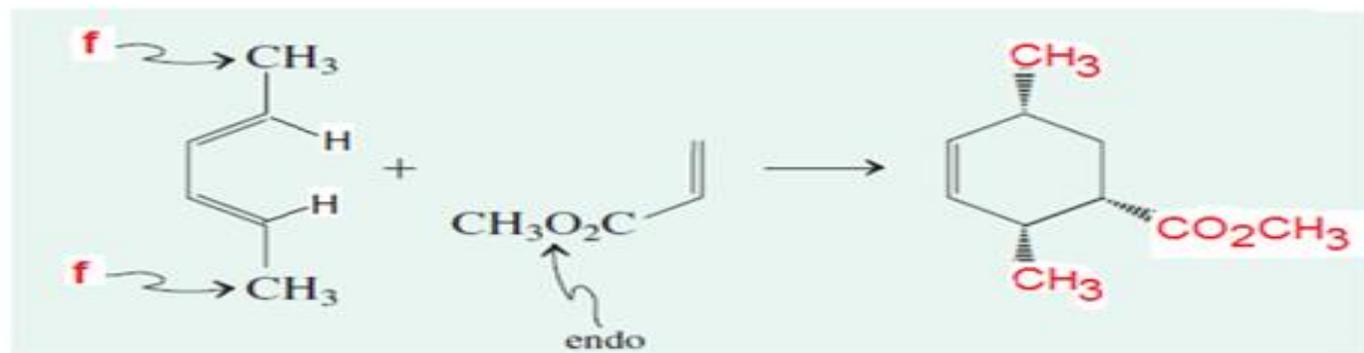
CRIANDO DOIS CENTROS ASSIMÉTRICOS \Rightarrow ESTEREOESPECÍFICA



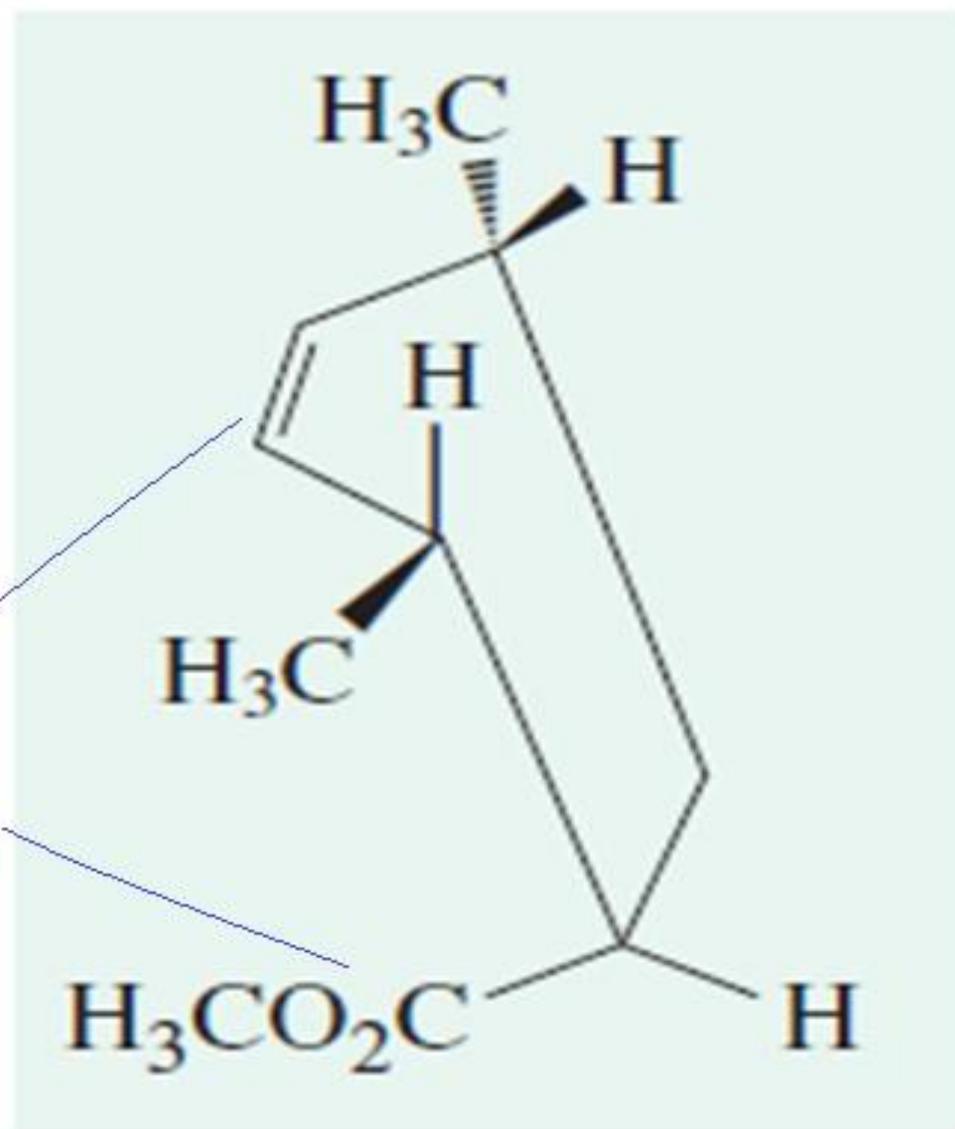
REGRA PRÁTICA



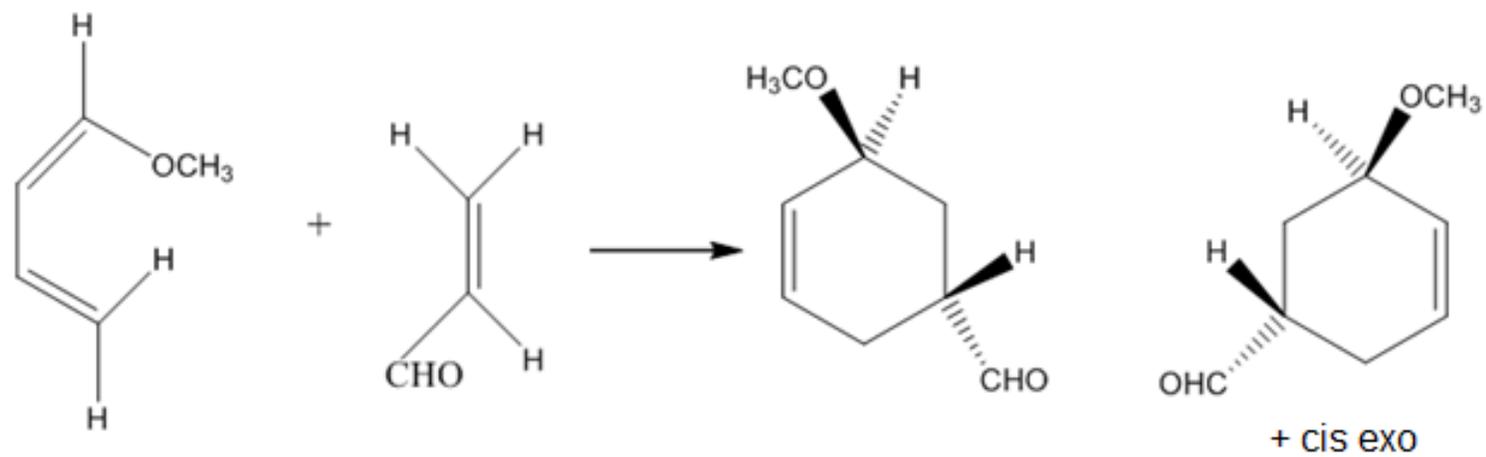
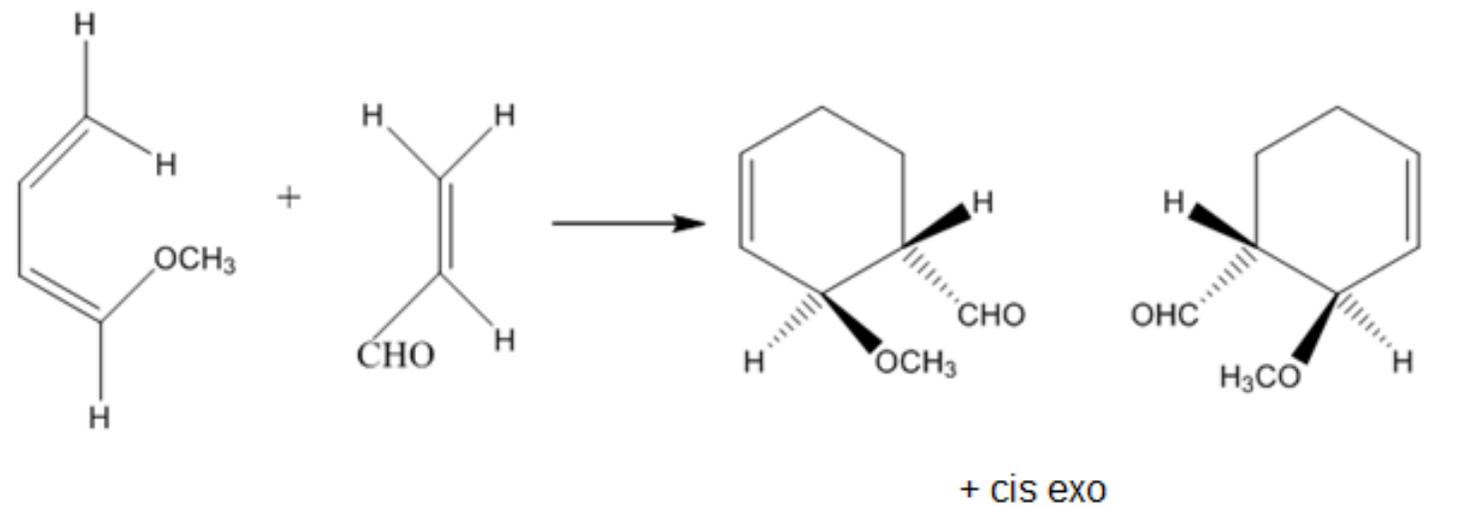
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f = fora



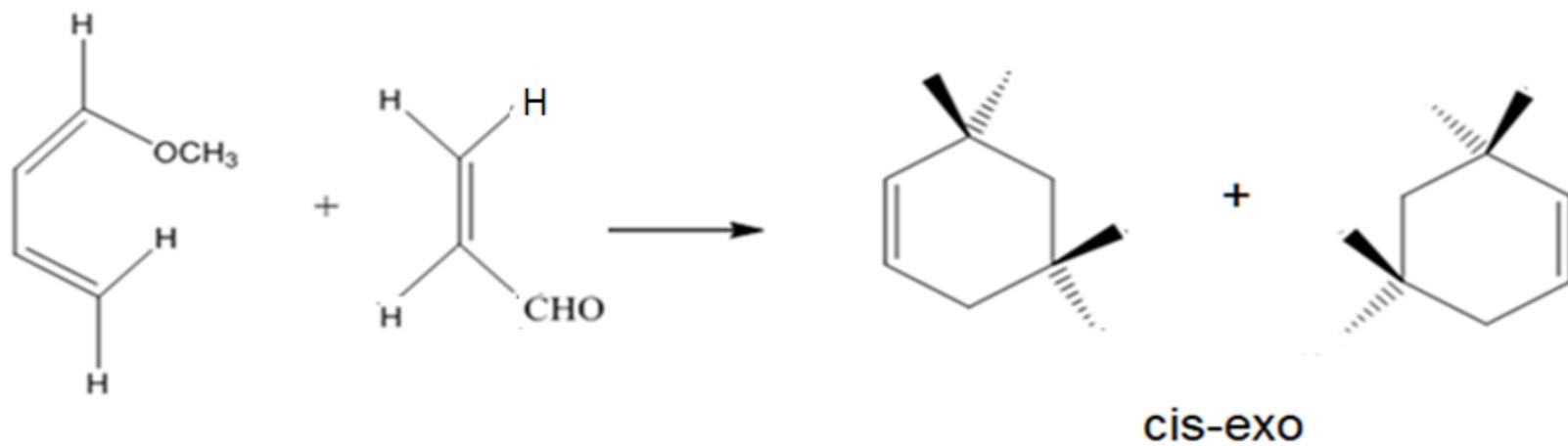
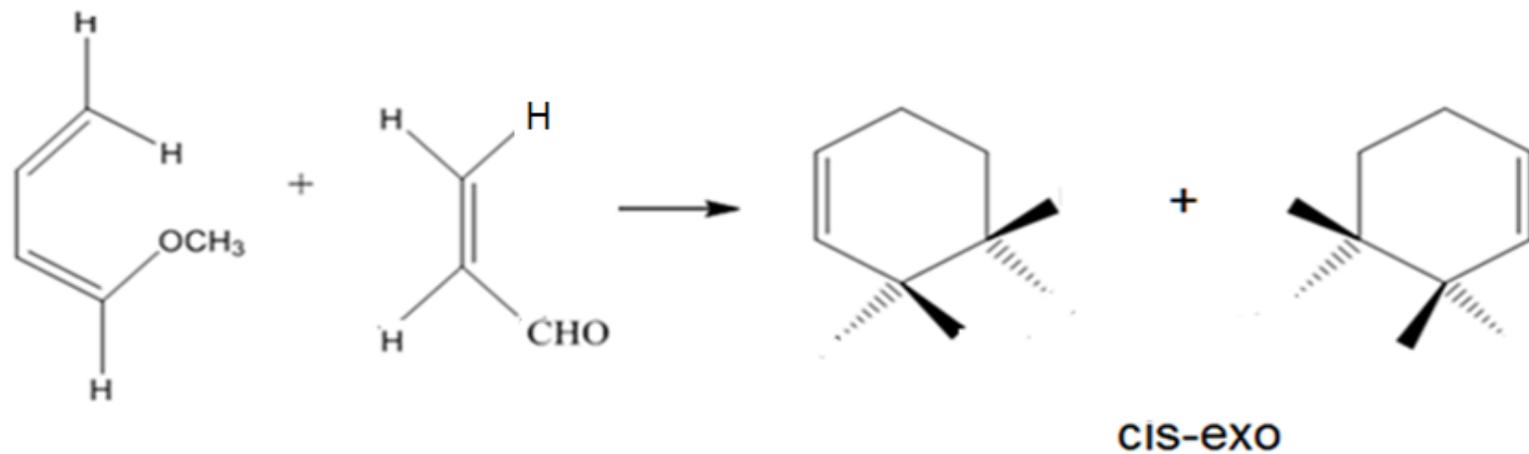
ENDO
(DO MESMO LADO)



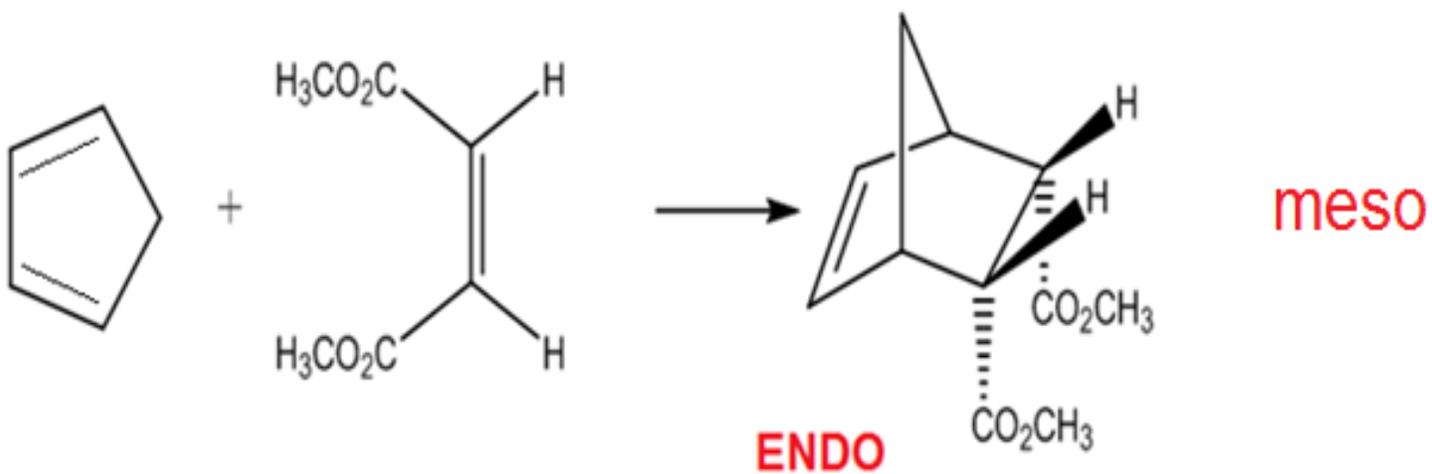
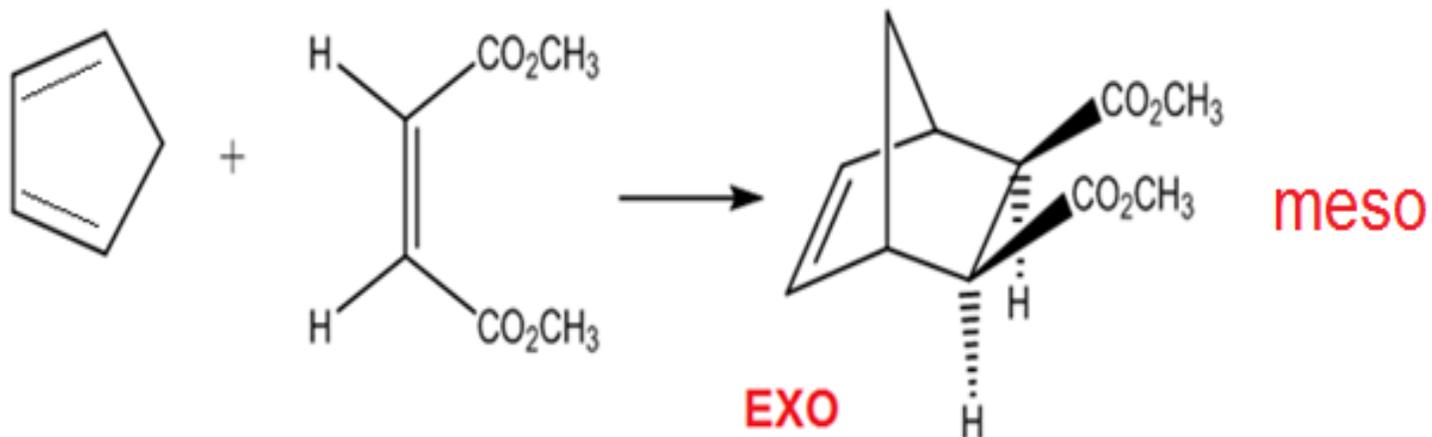
ESTEREOQUÍMICA DA REAÇÃO DE DIELS-ALDER



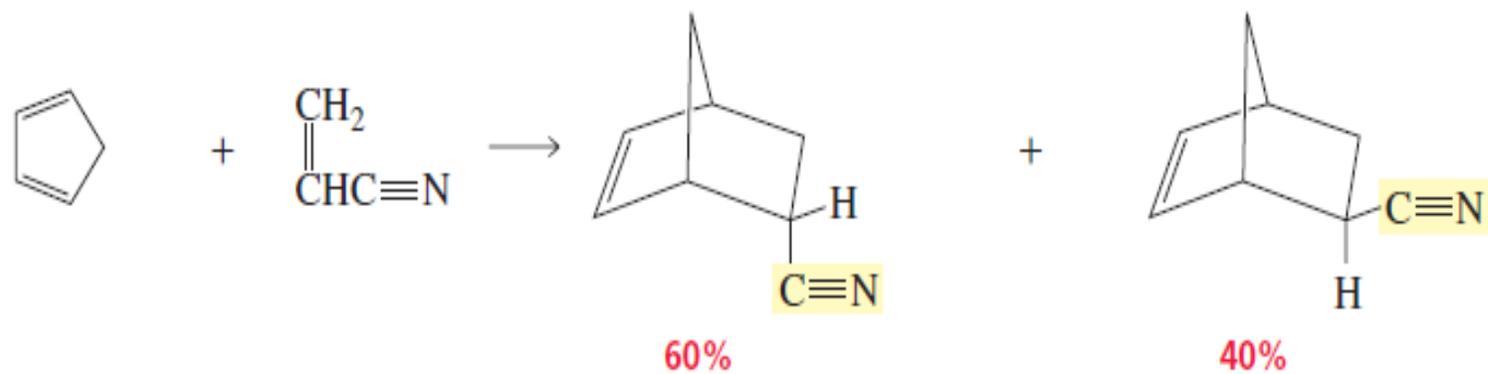
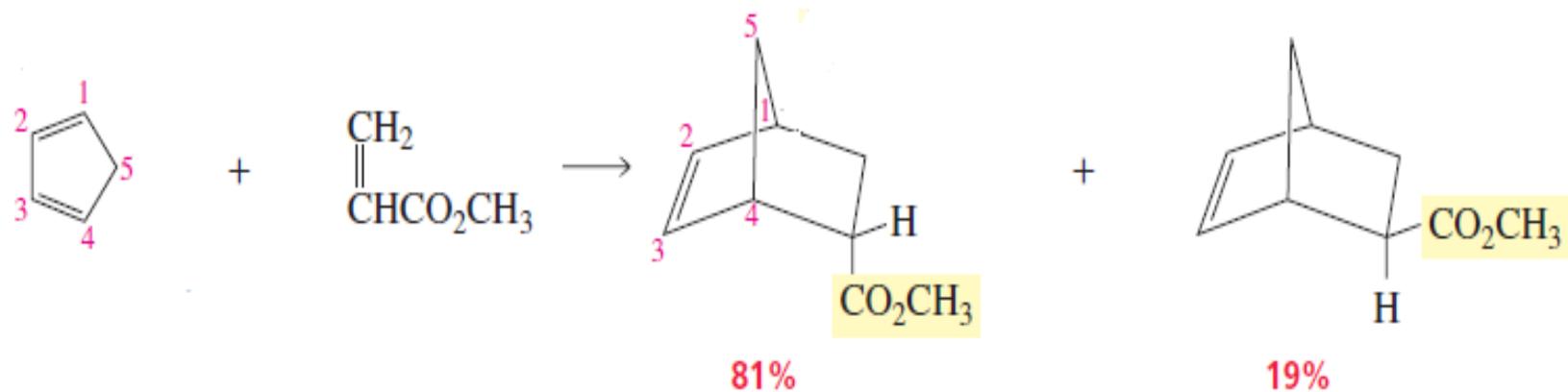
complete as fórmulas dos adutos de Diels-Alder



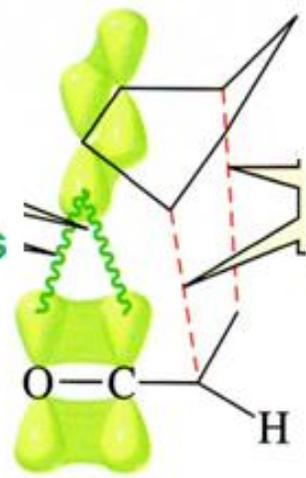
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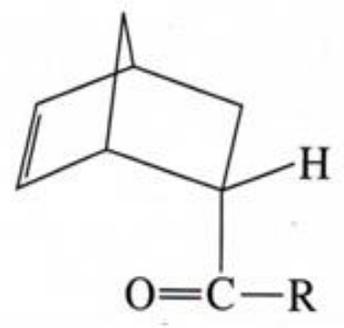
EXEMPLOS:



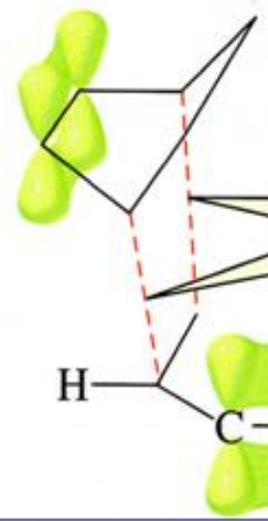
intereções secundárias



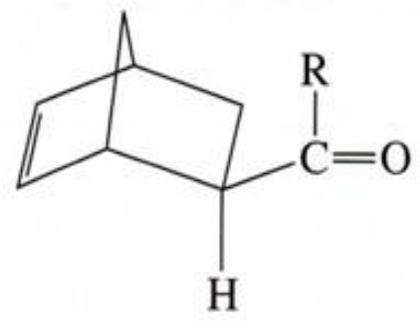
novas ligações



ENDO

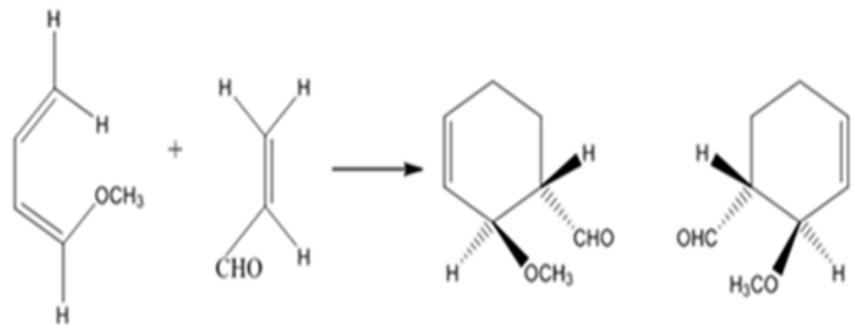


novas ligações

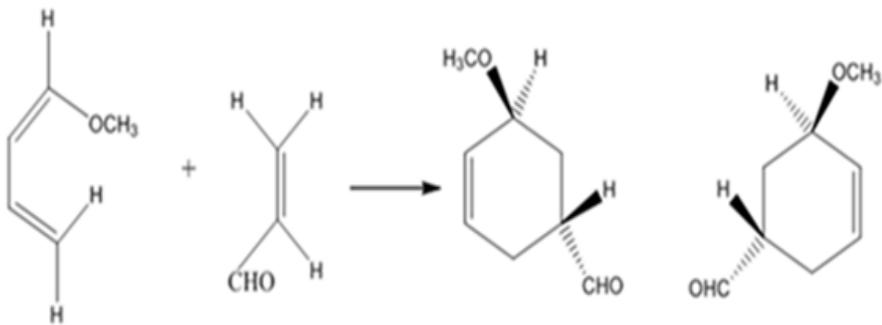


EXO

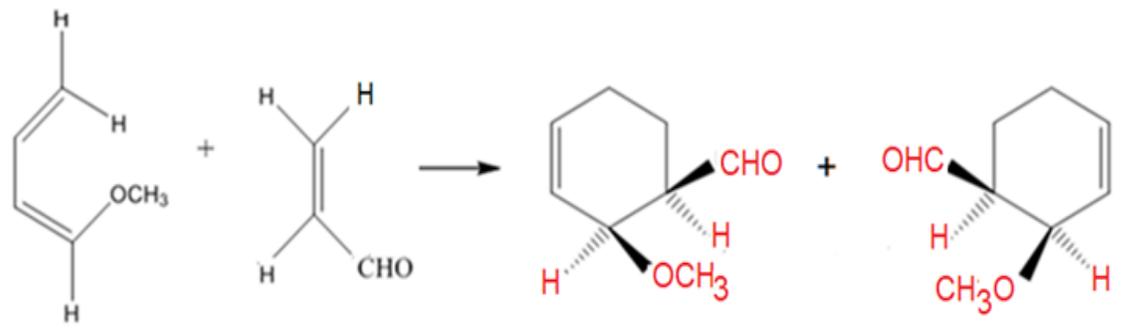
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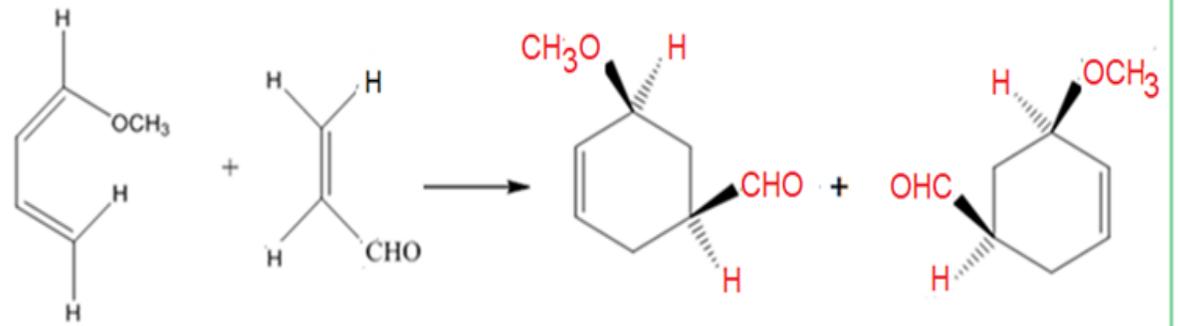
trans-endo



trans-endo



cis-exo



cis-exo