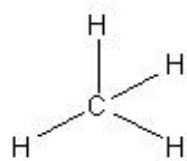


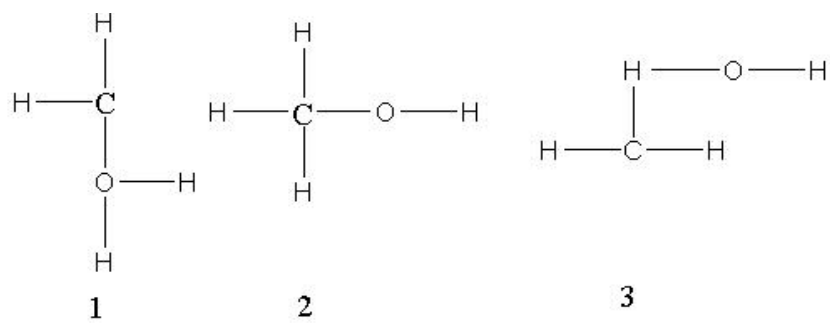
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CH₄



			:				
						(C)	1
(I)	(Br)	(Cl)	(F)	(H)			2
					(S)	(O)	3
					(P)	(N)	4

CH₄O



2

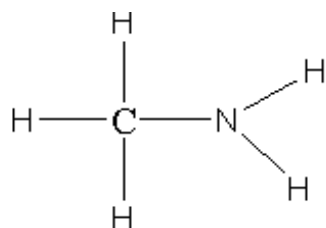
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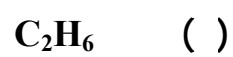


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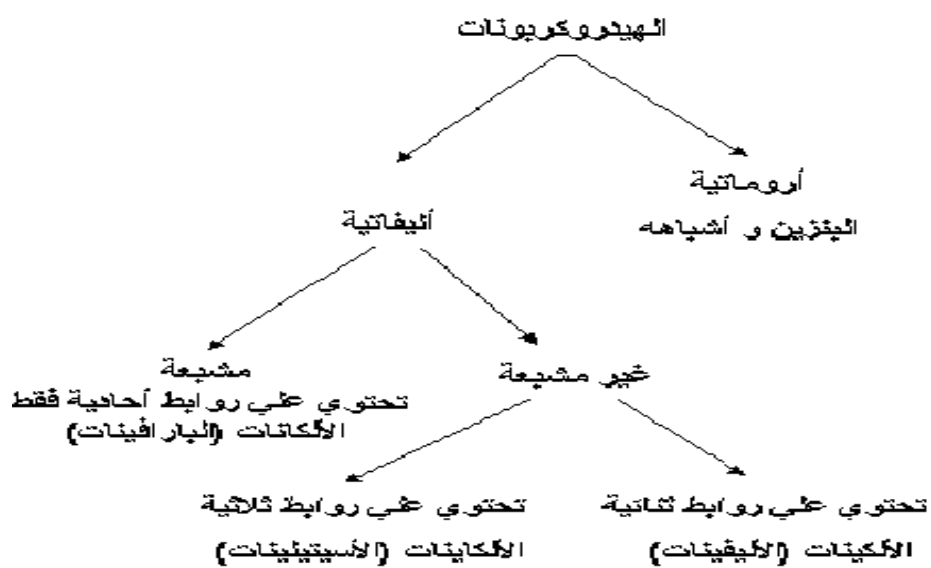


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مقال	المجموعة الفعالة	الفصيلة
الايثان $\text{CH}_3\text{-CH}_3$	C-H و C-C	الألكانات
الاثيلين $\text{CH}_2=\text{CH}_2$	C=C	الألكينات
الأسيتيلين $\text{HC}\equiv\text{CH}$	-C≡C-	الألكاينات
الإيثانول $\text{C}_2\text{H}_5\text{-OH}$	C-OH	الكحولات
اثير ثنائي الميثيل $\text{H}_3\text{C-O-CH}_3$	C-O-C	الايثرات
الأسيتالدهيد $\text{H}_3\text{C-C(=O)-H}$	-C(=O)-H	الألدهيدات
الأسيتون $\text{H}_3\text{C-C(=O)-CH}_3$	C-C(=O)-C	الكيتونات
حمض الأسيتيك $\text{H}_3\text{C-C(=O)-OH}$	-C(=O)-OH	الأحماض الكربوكسيلية
أستات الاثيل $\text{H}_3\text{C-C(=O)-OC}_2\text{H}_5$	-C(=O)-O-C-	الاسترات
ميثيل أمين $\text{H}_3\text{C-NH}_2$	C-N-	الأمينات

(c)

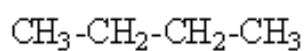
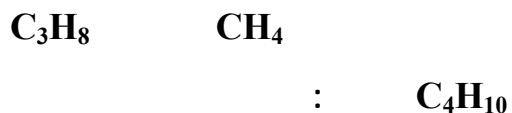
(H)



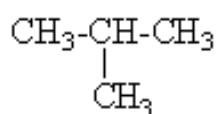


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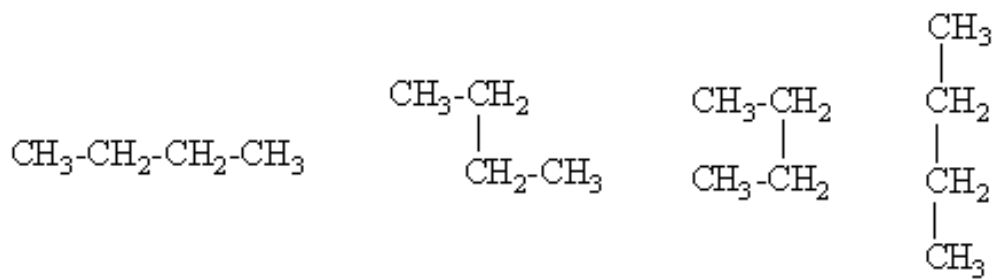
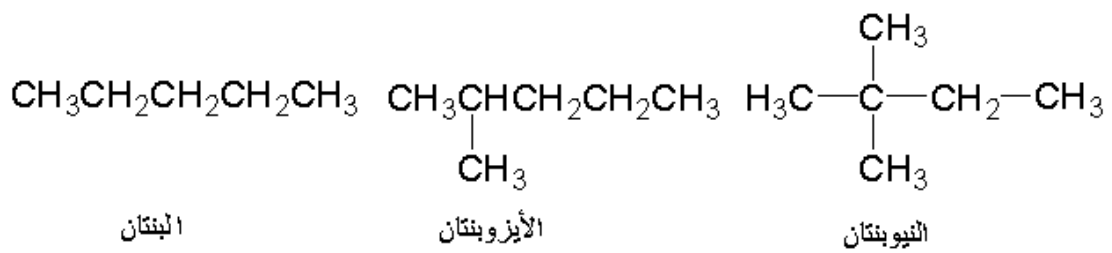
الصيغة البنائية	الصيغة الجزيئية	الاسم	n
CH ₄	CH ₄	الميثان	1
CH ₃ -CH ₃	C ₂ H ₆	الايثان	2
CH ₃ -CH ₂ -CH ₃	C ₃ H ₈	البروبان	3
CH ₃ -CH ₂ -CH ₂ -CH ₃	C ₄ H ₁₀	البيوتان	4
CH ₃ -CH ₂ -CH ₂ -CH ₂ -CH ₃	C ₅ H ₁₂	البنزان	5
CH ₃ -CH ₂ -CH ₂ -CH ₂ -CH ₂ -CH ₃	C ₆ H ₁₄	الهكسان	6
CH ₃ -CH ₂ -CH ₂ -CH ₂ -CH ₂ -CH ₂ -CH ₃	C ₇ H ₁₆	الهيبتان	7
CH ₃ -CH ₂ -CH ₂ -CH ₂ -CH ₂ -CH ₂ -CH ₂ -CH ₃	C ₈ H ₁₈	الأكتان	8
CH ₃ -CH ₂ -CH ₂ -CH ₂ -CH ₂ -CH ₂ -CH ₂ -CH ₂ -CH ₃	C ₉ H ₂₀	النونان	9
CH ₃ -CH ₂ -CH ₂ -CH ₂ -CH ₂ -CH ₂ -CH ₂ -CH ₂ -CH ₂ -CH ₃	C ₁₀ H ₂₂	الديكان	10



البيوتان العادي



الأيزو بيوتان



:

(5) C_6H_{14}

عدد المتشابهات	الصيغة الجزيئية	الاسم
1	CH ₄	الميثان
1	C ₂ H ₆	الايثان
1	C ₃ H ₈	البروبان
2	C ₄ H ₁₀	البيوتان
3	C ₅ H ₁₂	البنتان
5	C ₆ H ₁₄	الهكسان
9	C ₇ H ₁₆	الهيبتان
18	C ₈ H ₁₈	الأكتان
35	C ₉ H ₂₀	النونان
75	C ₁₀ H ₂₂	الديكان

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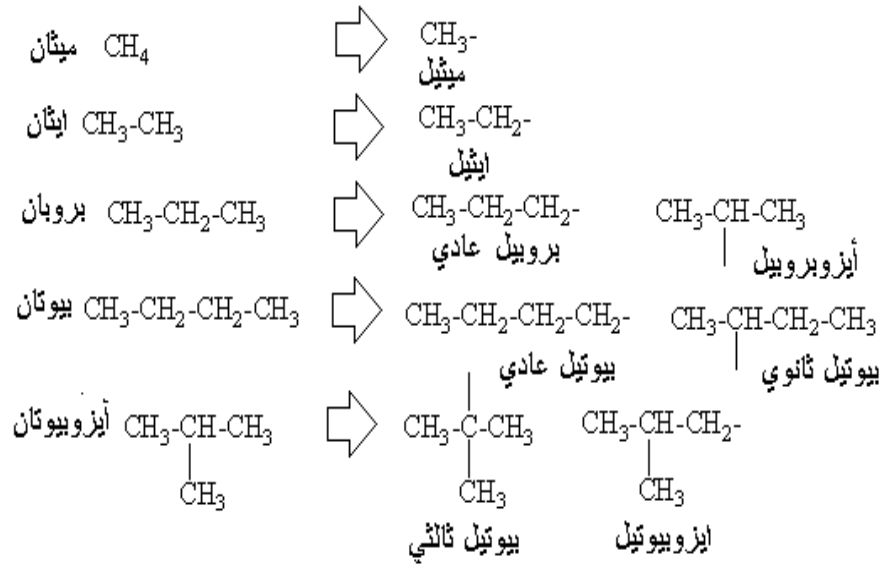
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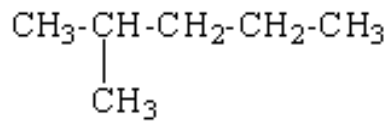
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(C₂H₅-)

(-CH₃)



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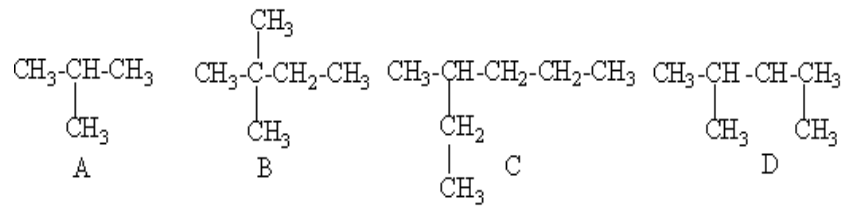
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2 (CH₃) .2

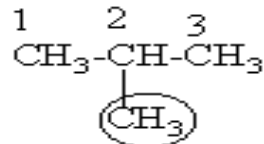
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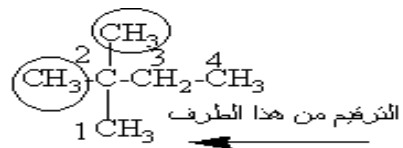
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: A



-2 (2)

: B



-2 2 (2)

(3)

: C



-3

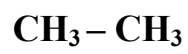
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(C-H)

(C-C)

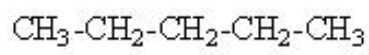
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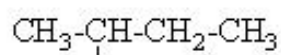
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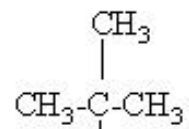
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36.1°C



CH₃
27.8°C



9.5°C

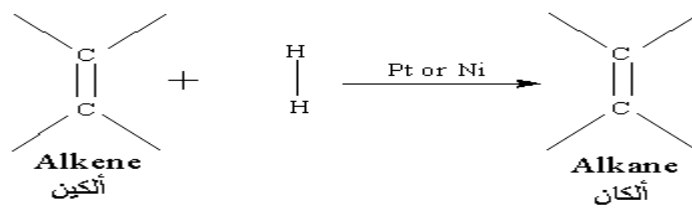
(H₂O)

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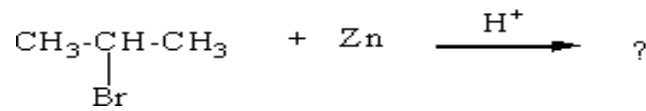
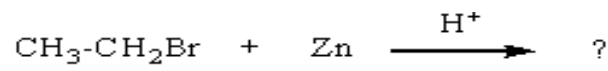
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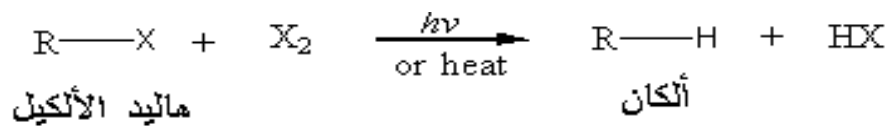


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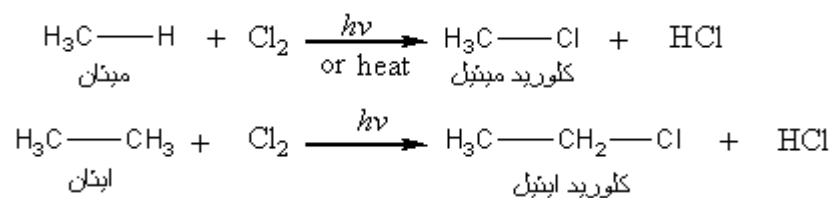
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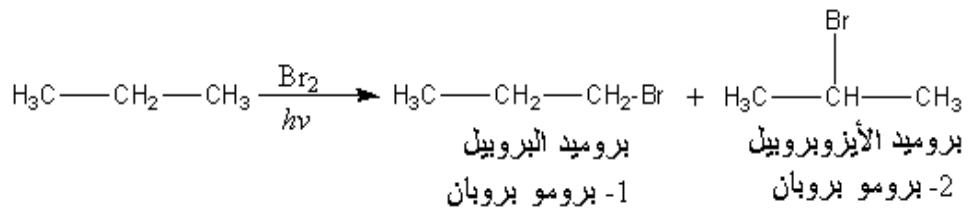
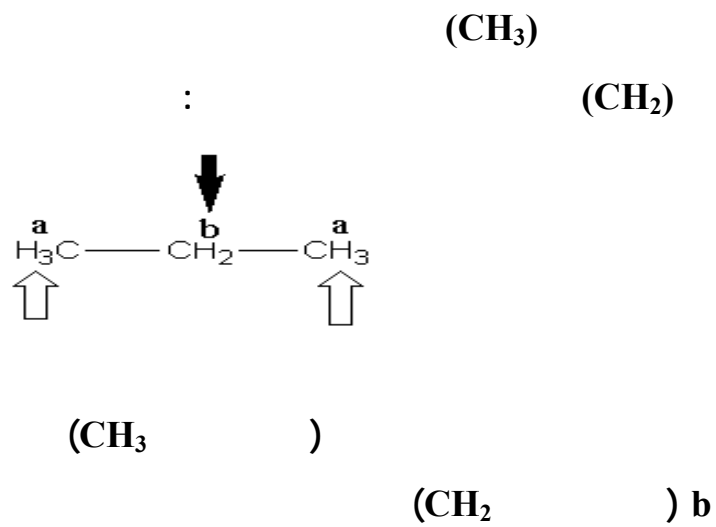
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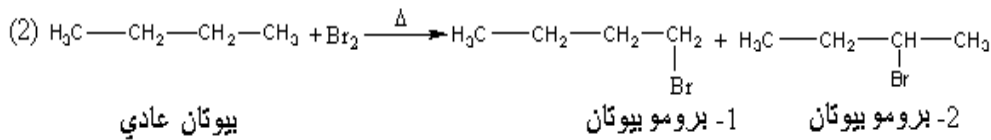
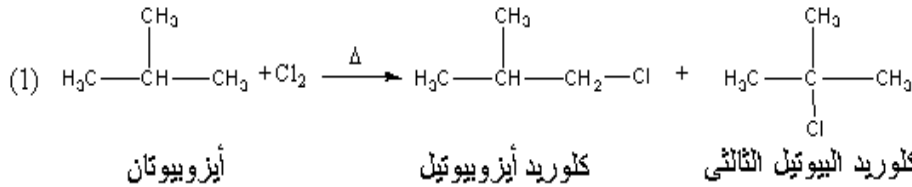
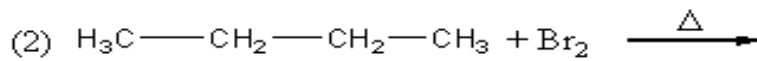
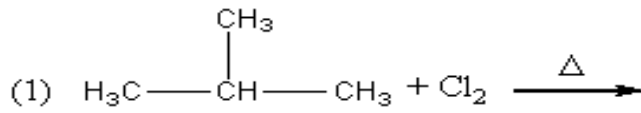
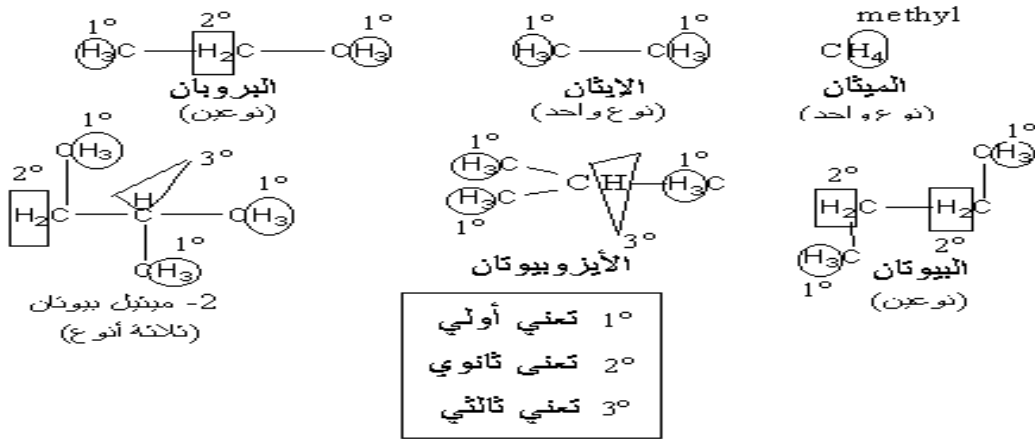
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(F₂, Cl₂, Br₂, I₂)Cl₂.F₂I₂Br₂

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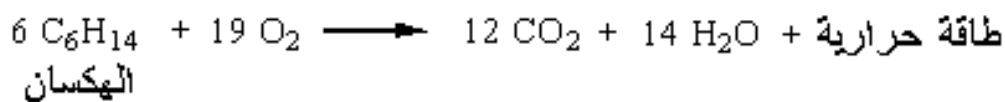


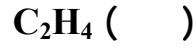


2. :

(H₂O)

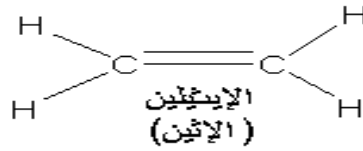
(CO₂)



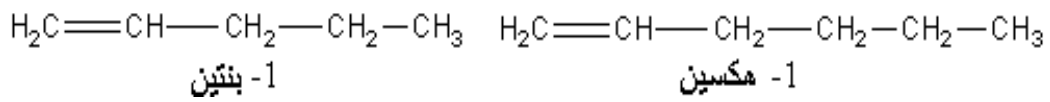
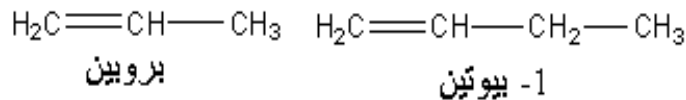


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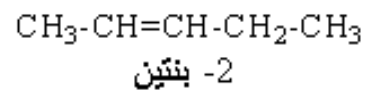
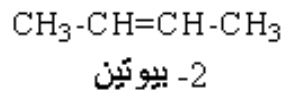
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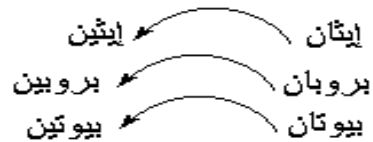
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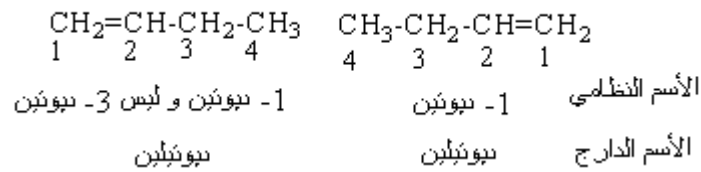
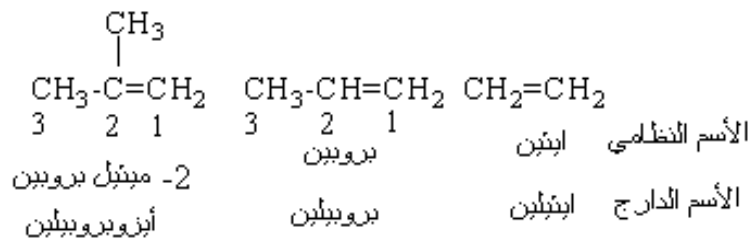
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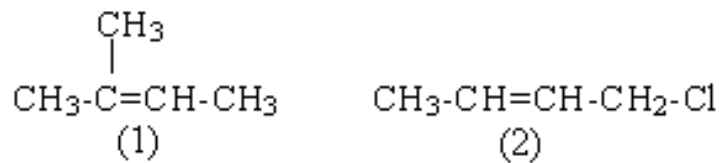
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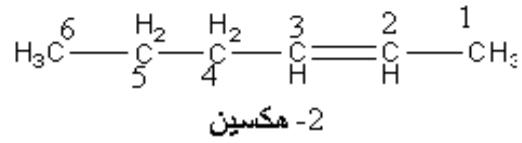
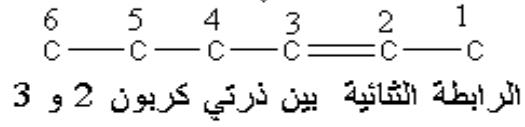
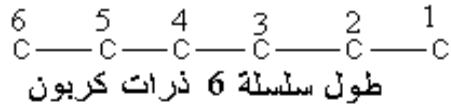
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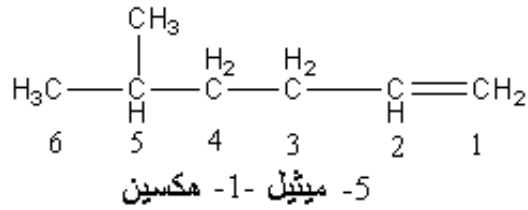
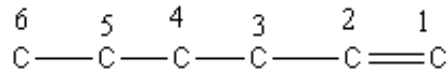
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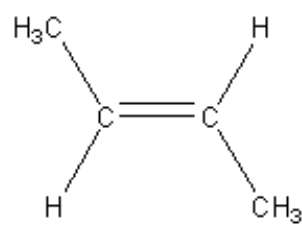
5 CH₃ ()

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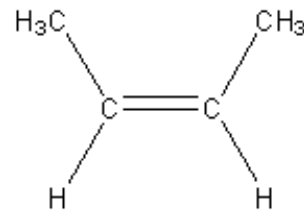
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trans-2-Butene

ترانس -2- بيوتين

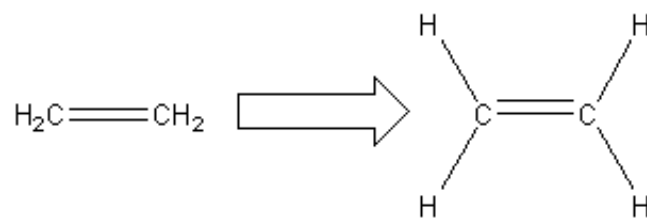


cis-2-Butene

سيس -2- بيوتين

(Cis)

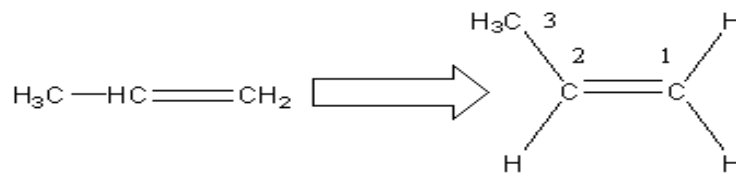
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لا يوجد تشابه هندسي في الإثيلين

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(H)



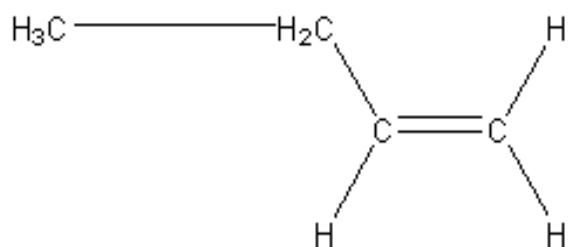
لا يوجد تشابه هندسي في البروبين

(1)

-1-



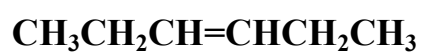
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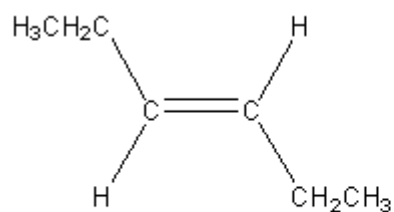
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-3 (/)

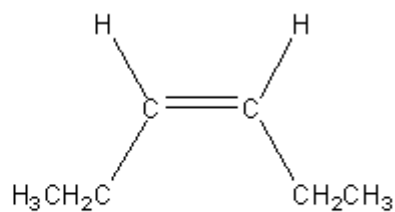


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trans-3-Hexene

ترانس 3-هكسين



cis-3-Hexene

سيسز 3-هكسين

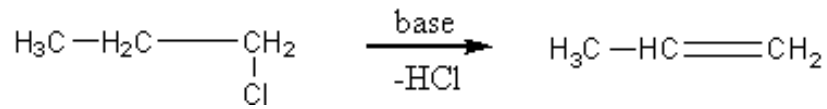
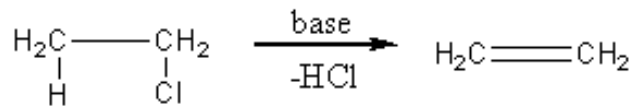
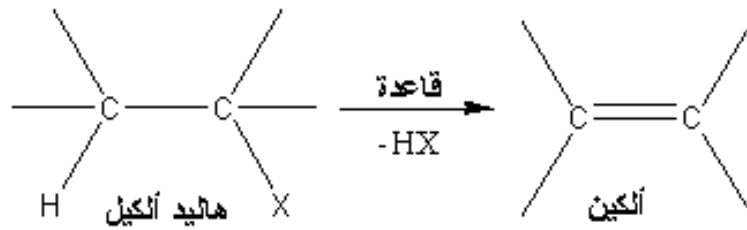
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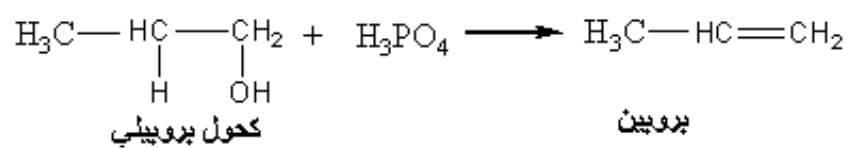
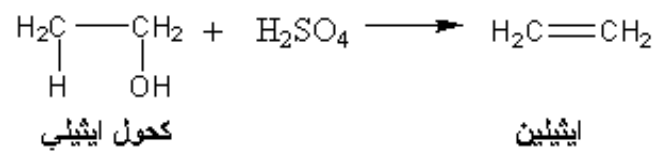
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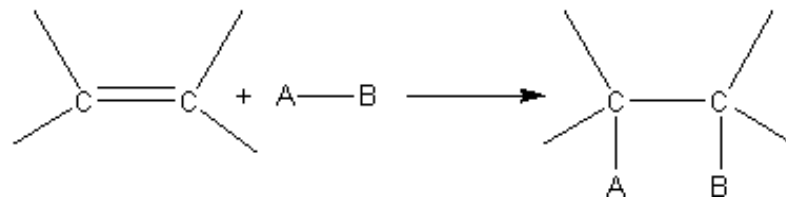
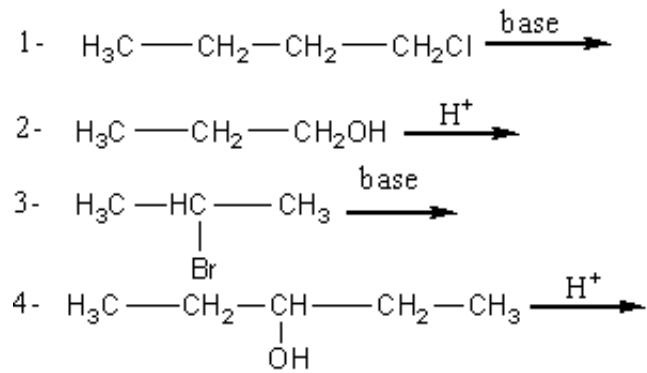
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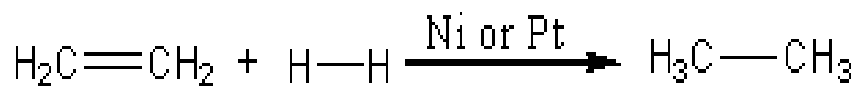
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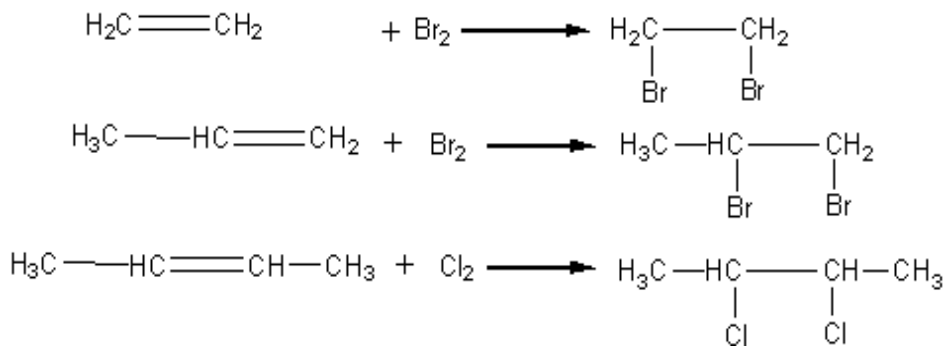


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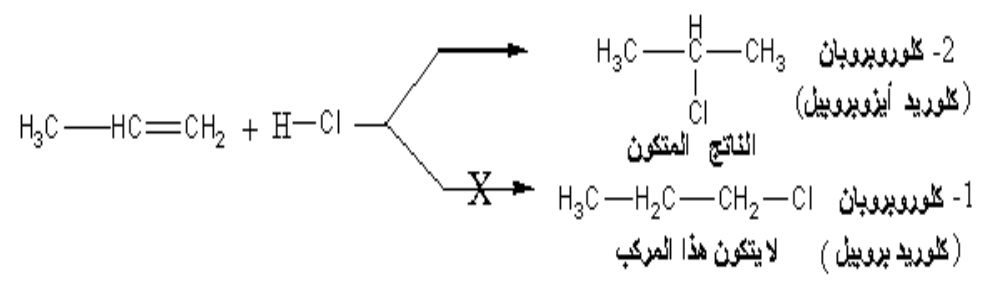
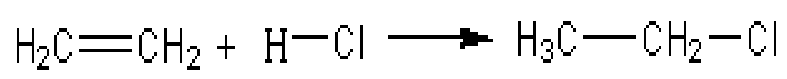


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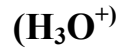
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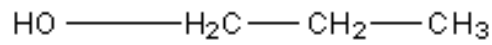
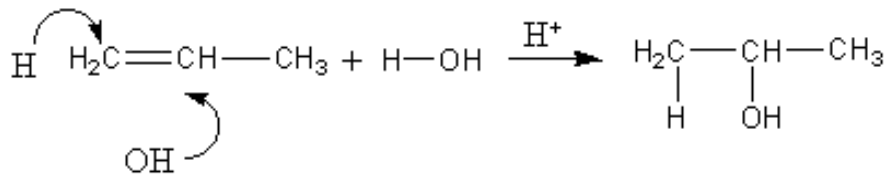
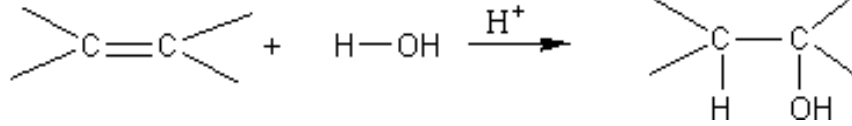
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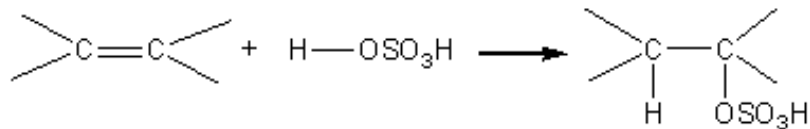
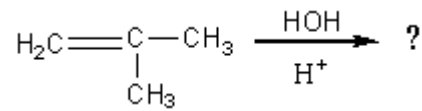
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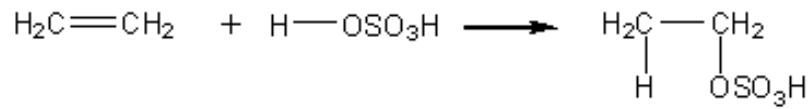
لا يتكون الكحول البروبيئي العادي



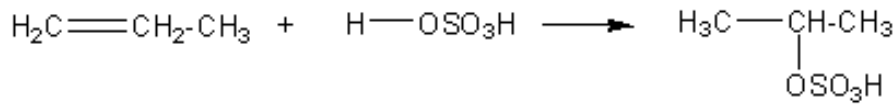
كبريتات الألكايل الهيدروجينية

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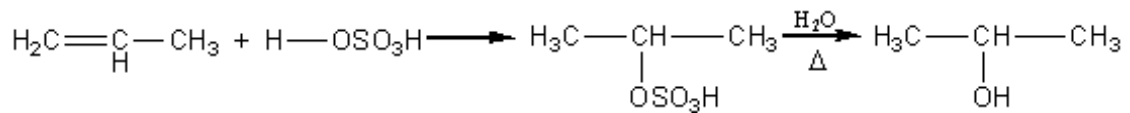
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كبريتات الأيثيل الهيدروجينية



كبريتات الأيزوبروبيل الهيدروجينية



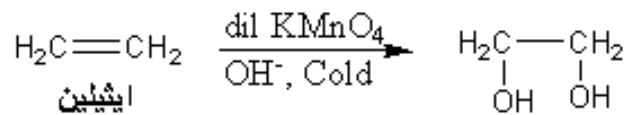
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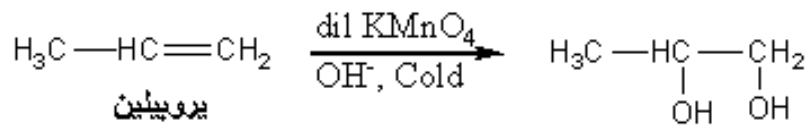
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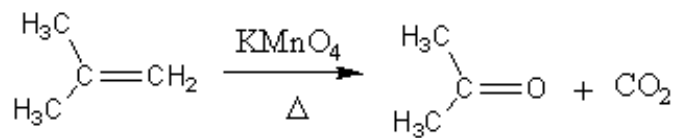
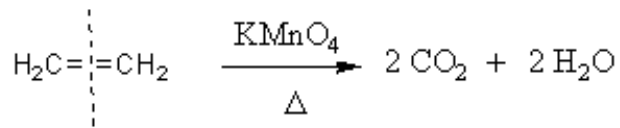
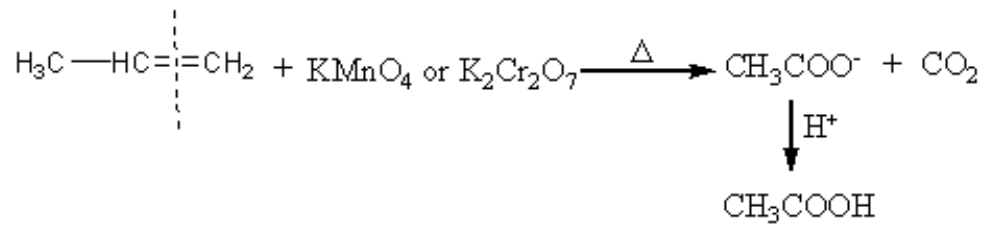
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بروبيلين

بروبيلين جليكول

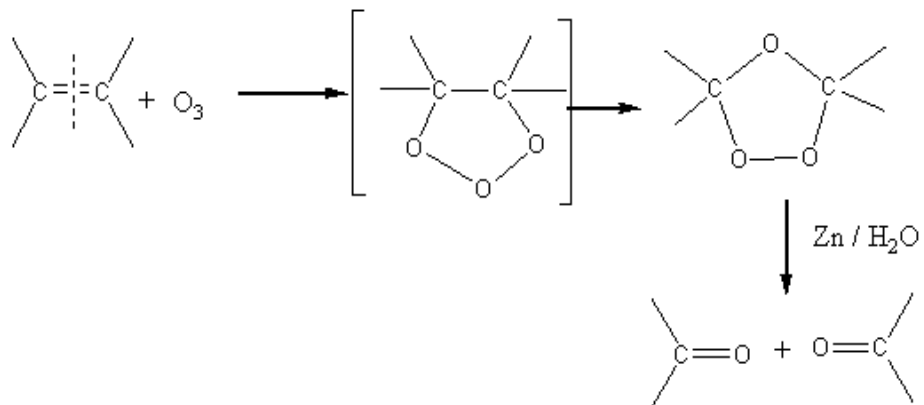
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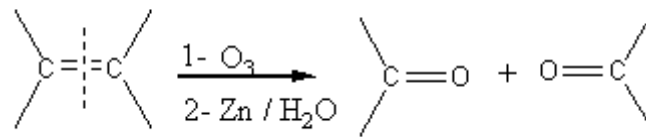


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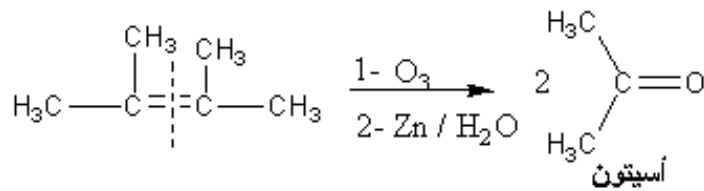
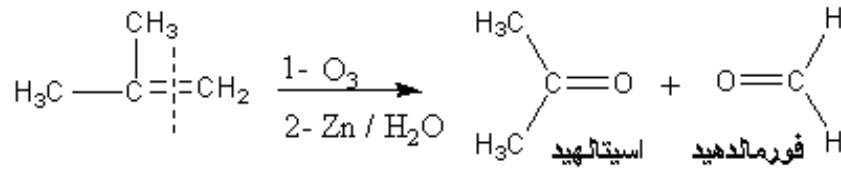
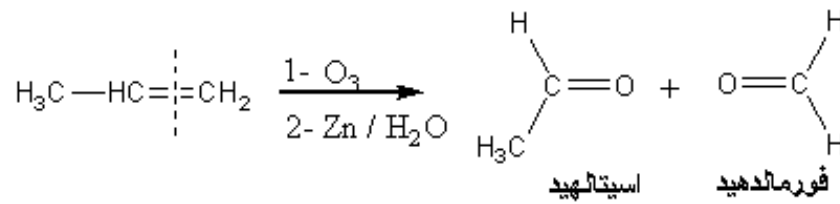
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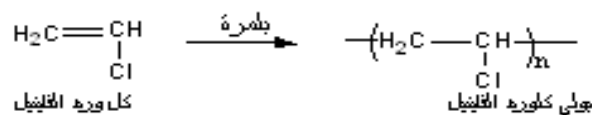
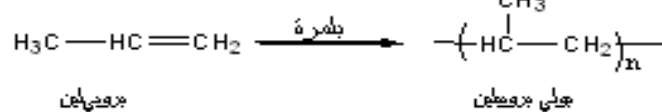
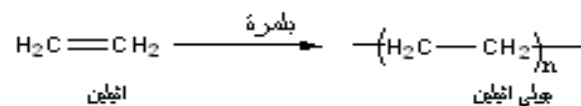


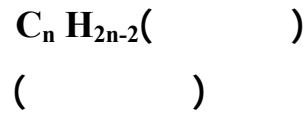


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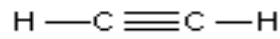


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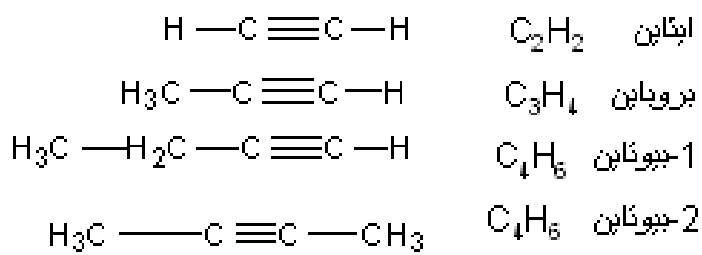


الاسيتيلين
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الاسم الصيغة الجزيئية الصيغة البنائية



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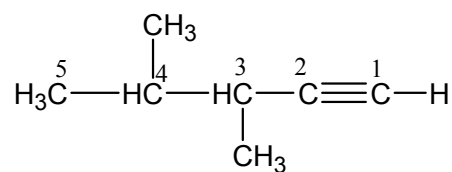
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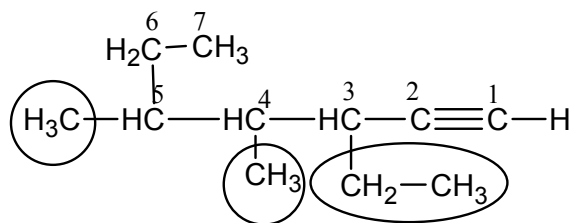
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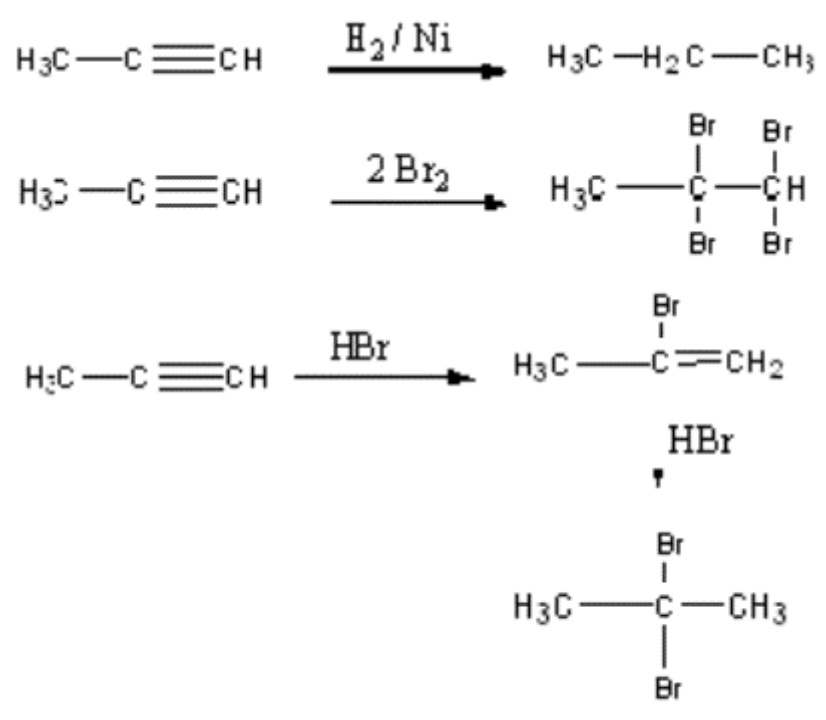
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- 1- $\text{H}_3\text{C}-\text{HC}(\text{Cl})-\text{H}_2\text{C}-\text{C}\equiv\text{C}-\text{H}$
- 2- $\text{H}_3\text{C}-\text{HC}(\text{Br})-\text{HC}(\text{CH}_3)-\text{C}\equiv\text{C}-\text{CH}_2(\text{Br})$
- 3- $\text{HC}\equiv\text{C}-\text{CH}_2-\text{CH}(\text{CH}_3)-\text{CH}_2(\text{Cl})$

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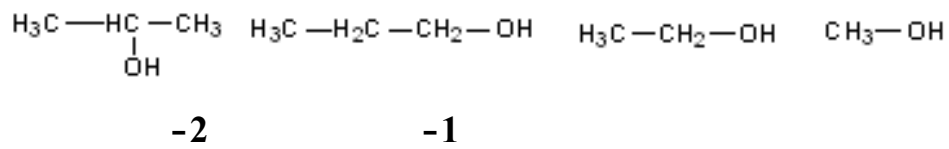


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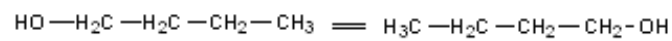
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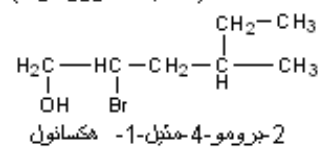
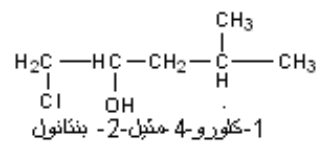
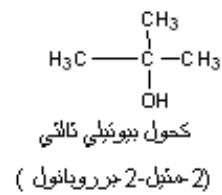
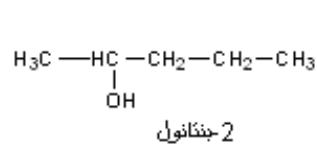
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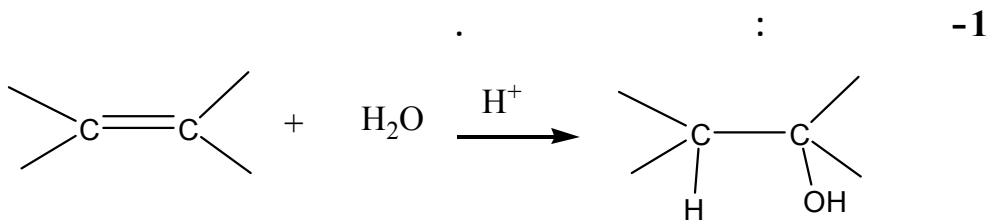
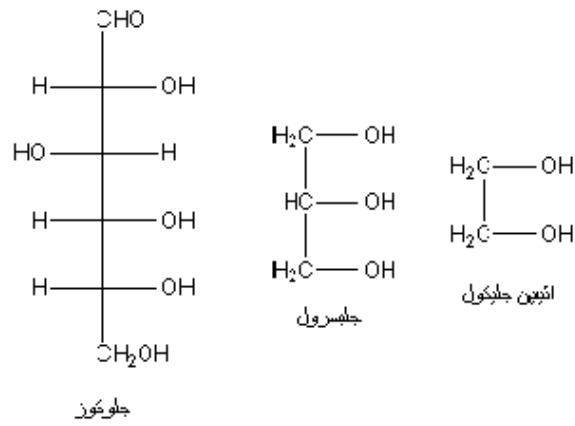


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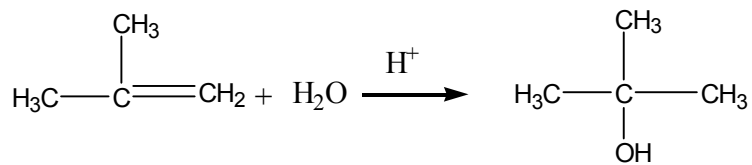
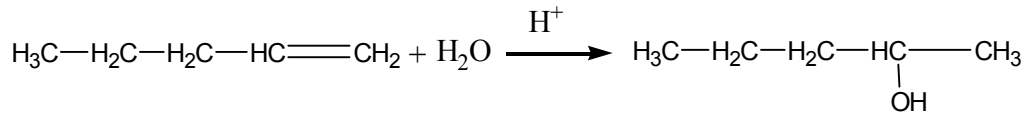
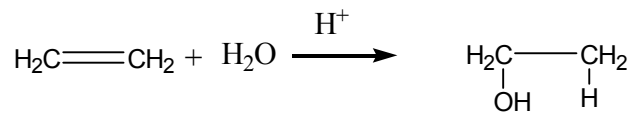


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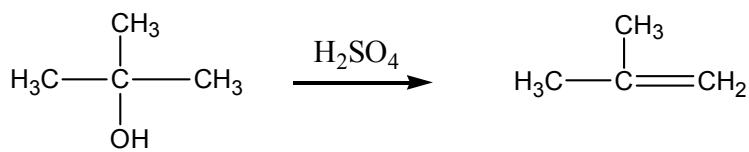
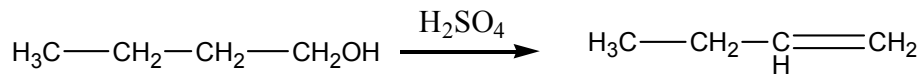
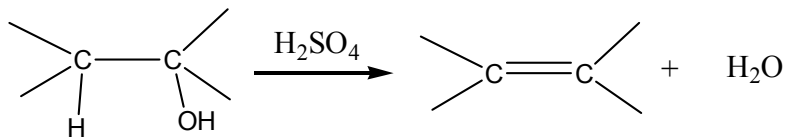
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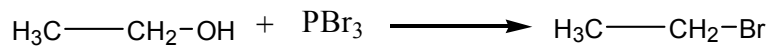
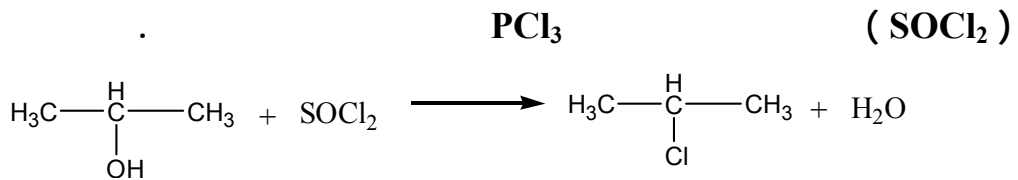
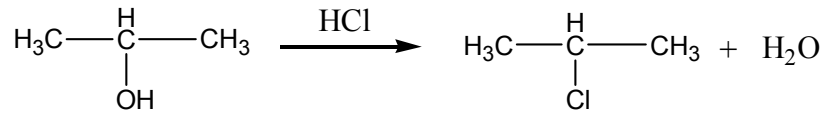
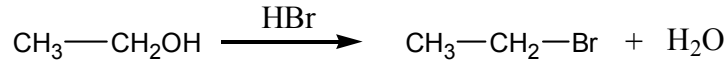
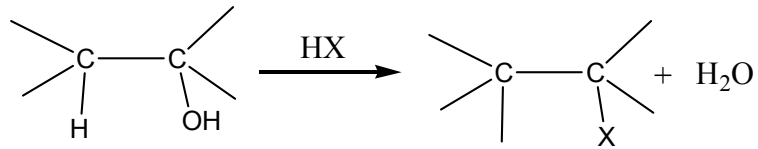
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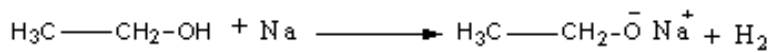
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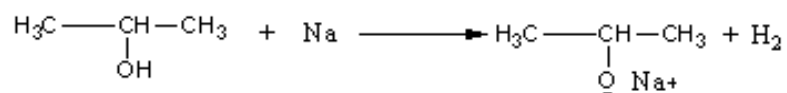


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NaOH



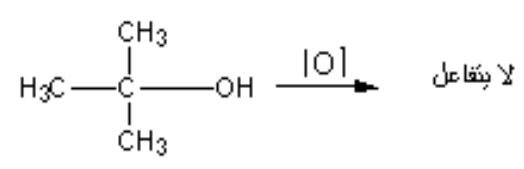
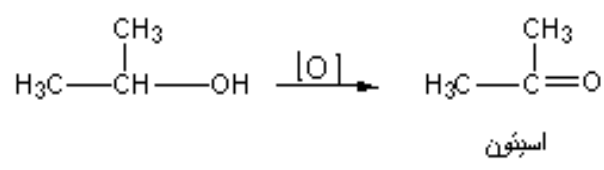
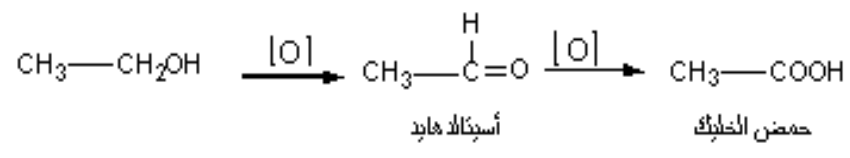
إيثوكسيد الصوديوم



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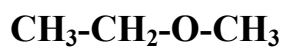
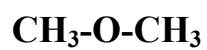


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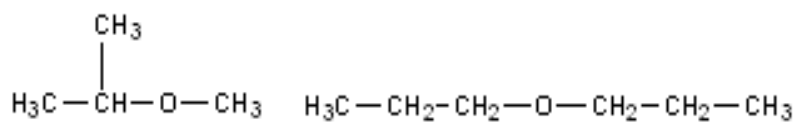
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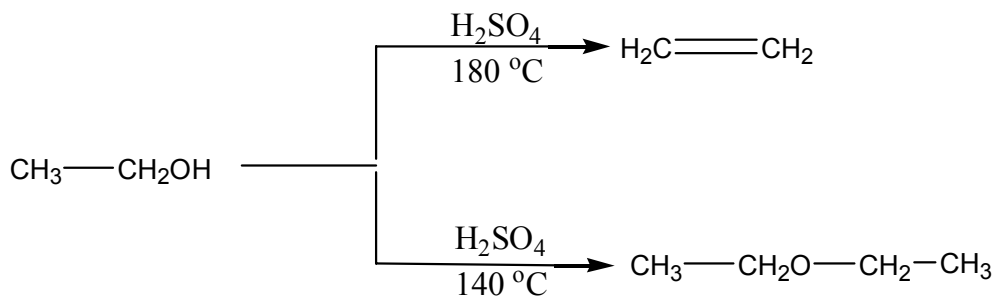
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اثير ميتايل ايزوپروپايل

اثير ثنائي پروپايل عادي

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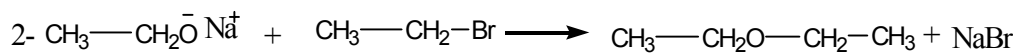
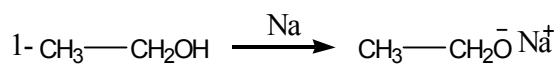


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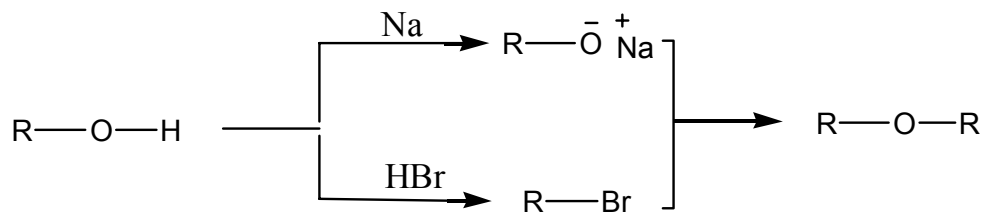
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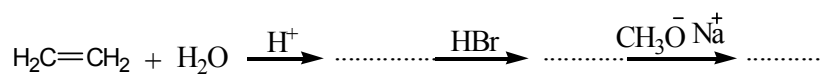


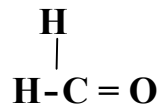
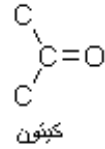
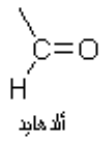
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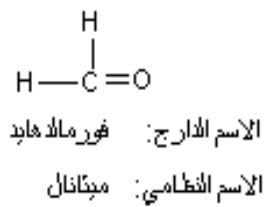
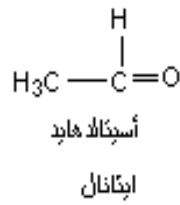
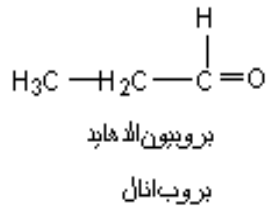
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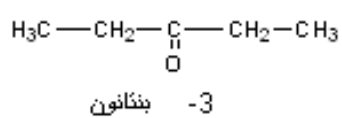
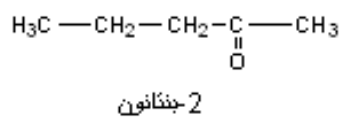
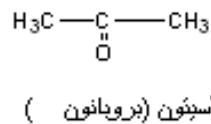
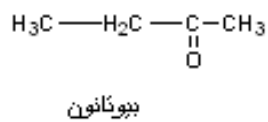
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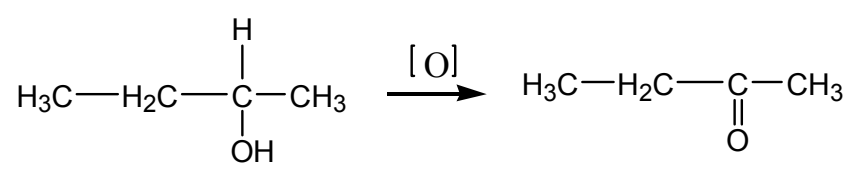
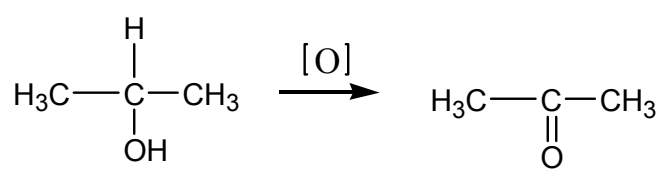
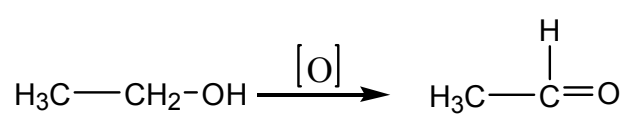
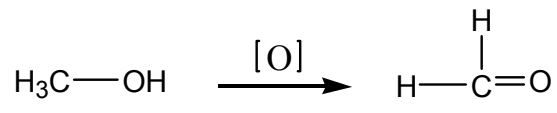


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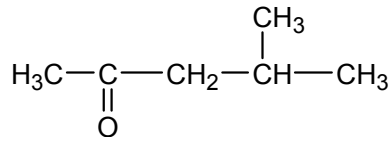
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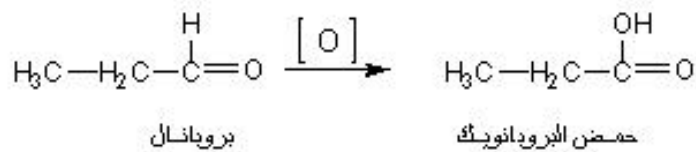
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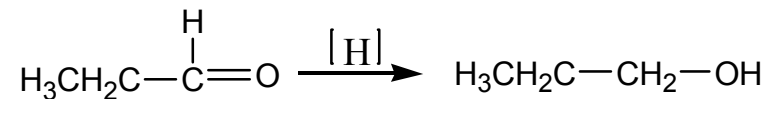
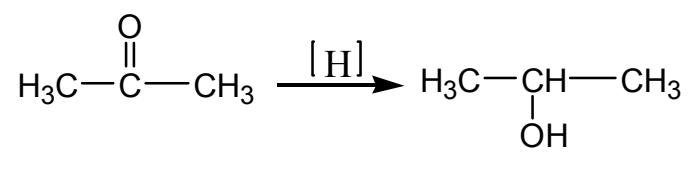
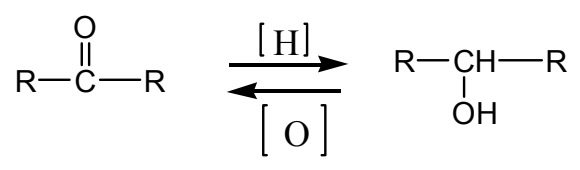
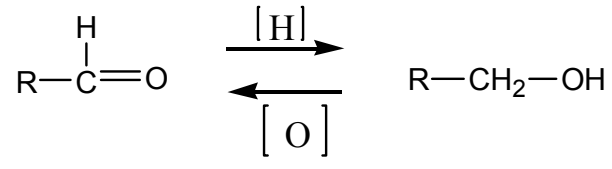
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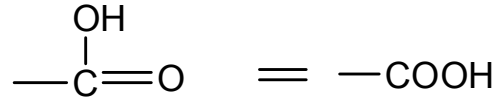
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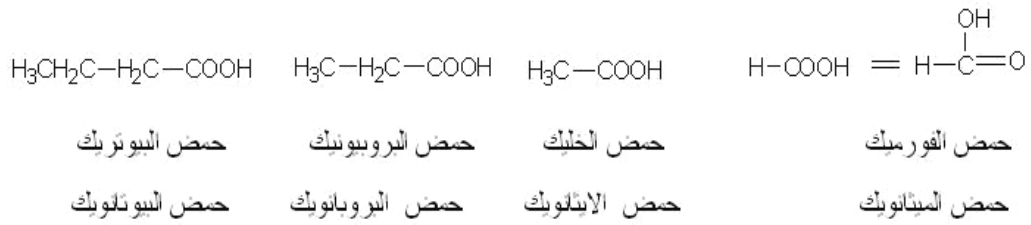


R-COOH :

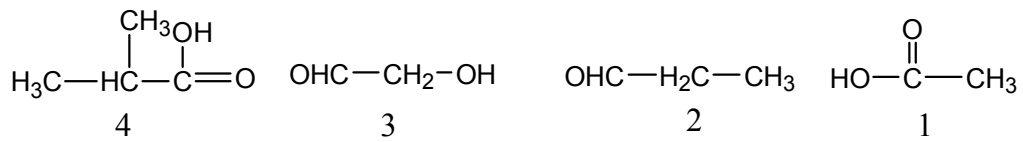
(C-COOH)



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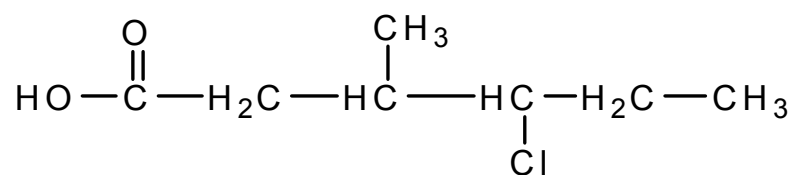
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4) C₅H₁₀O₂

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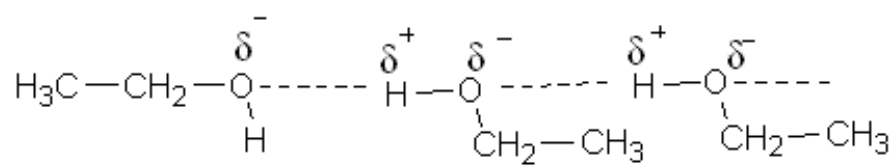
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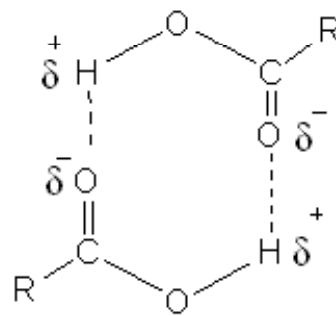
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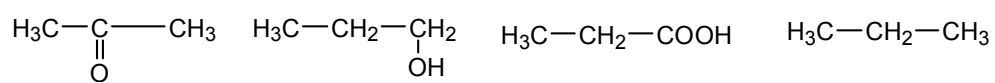


الرابطة الهيدروجينية في الكحولات



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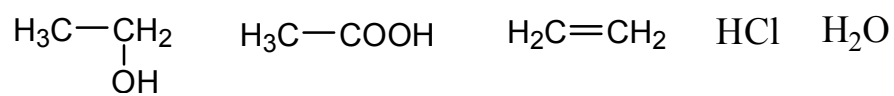
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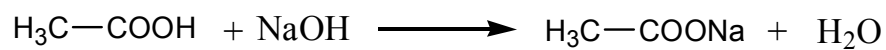


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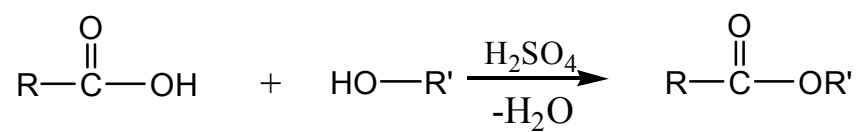


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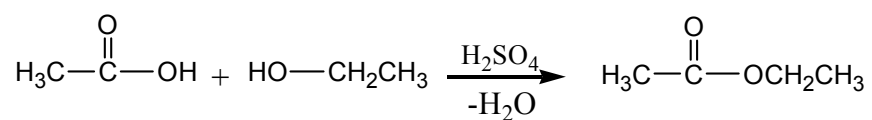


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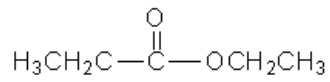


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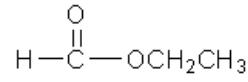
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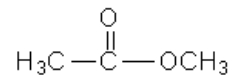
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استر بروبانوات الايثيل



استر فورمات الايثيل



استر خلات الميثيل

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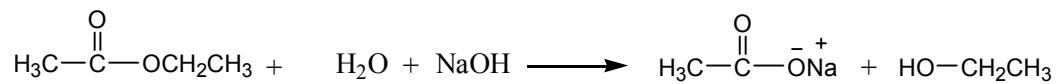
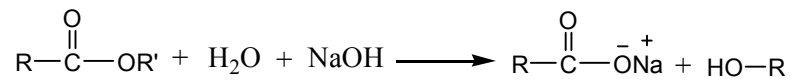
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(KOH NaOH)

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