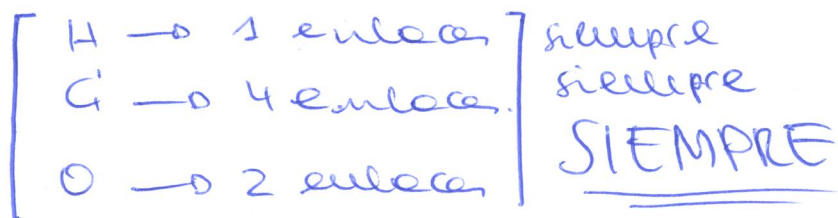
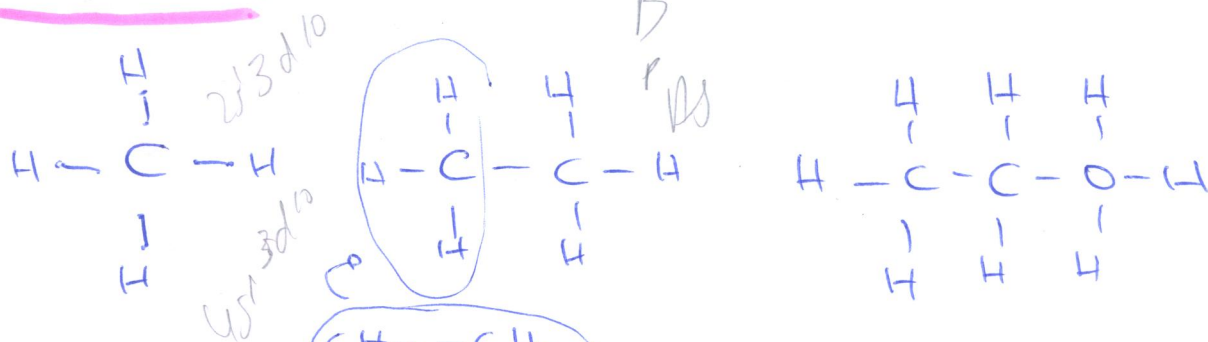


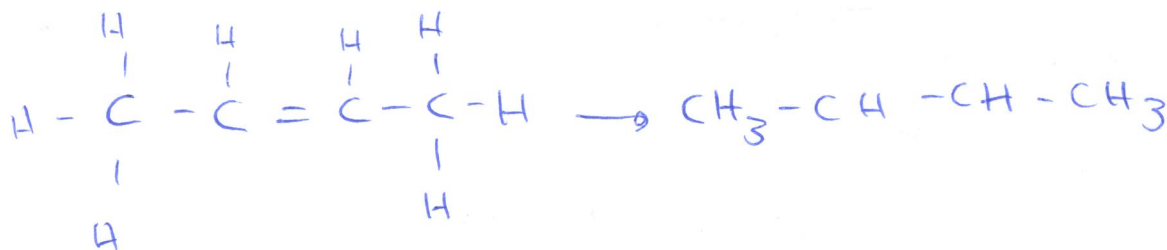
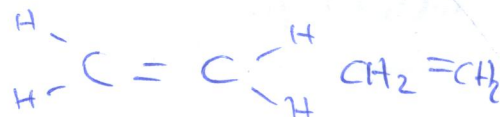
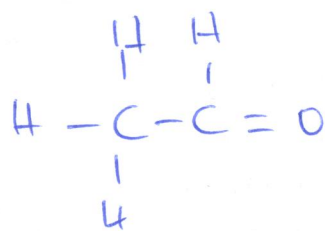
metano 1  
etano 2  
propano 3  
butano 4  
pentano 5  
hexano 6  
heptano 7



N  $\rightarrow$  3 y un par de e<sup>-</sup> libre



indica el número de enlaces, no el número de H.



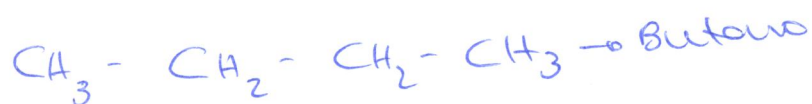
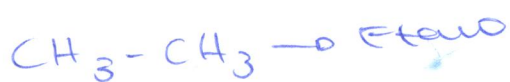
C-C ano

C=C eno

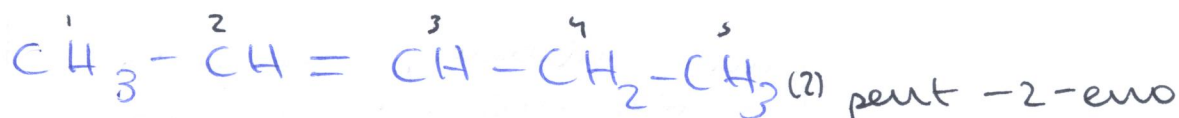
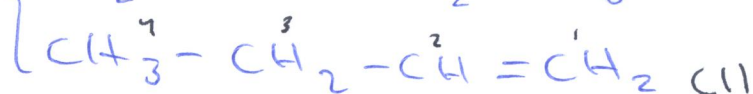
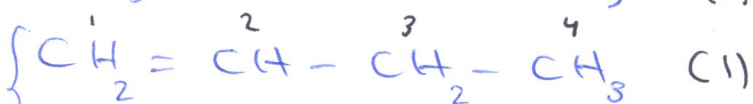
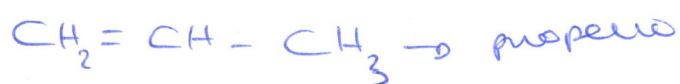
C $\equiv$ C ino

entre número y letra griega  
entre número y número (,)

siempre  
 siempre  
 SIEMPRE



20 eicosa



metano

etano

propano

butano

pentano

hexano

heptano

octano

nonano

decano

undecano

30 triacotano

identificadores:

se ponen desde

está el doble e. =

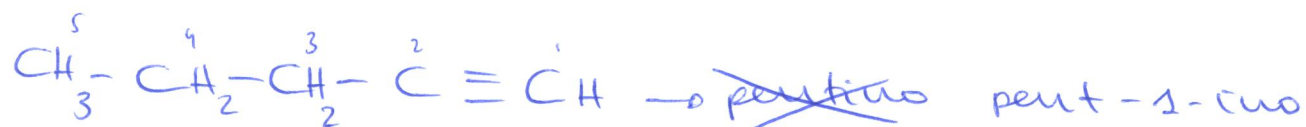
y desde el lado (izda/dcha)  
donde el localizador  
quede más bajo

but-2-eno

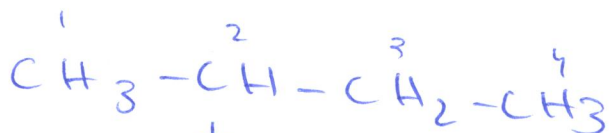
but-1-eno

but-1-eno

## ALQUINOS



## HIDROCARBUROS RAMIFICADOS



↓  
2-metilbutano

7/10/16



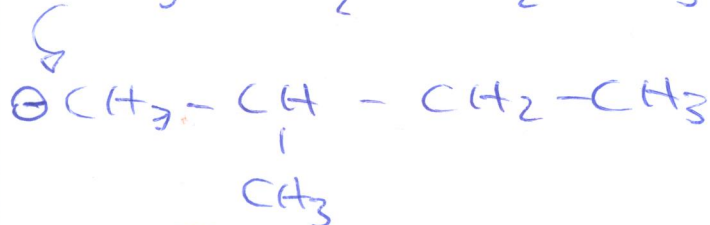
il / ila



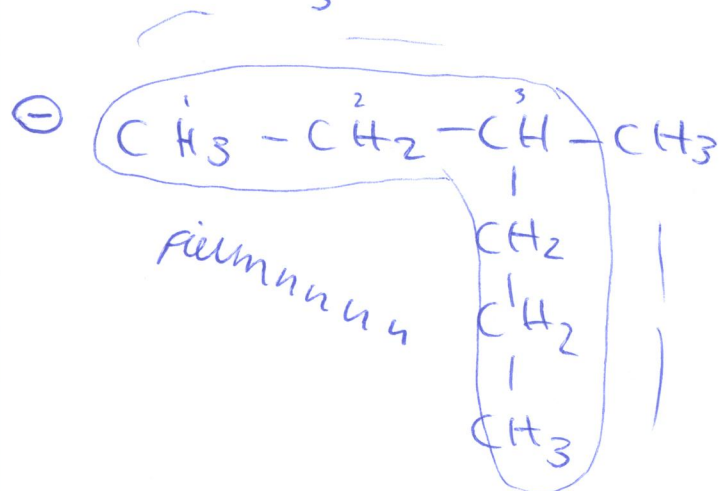
isopropil

metano  
etano  
propano  
butano  
pentano

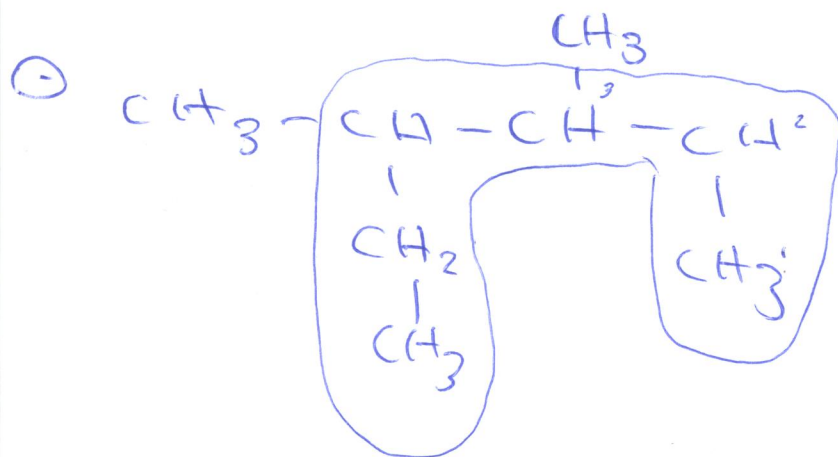
alcano -  
alqueno =  
alquino =



2-metilbutano



3-metilhexano

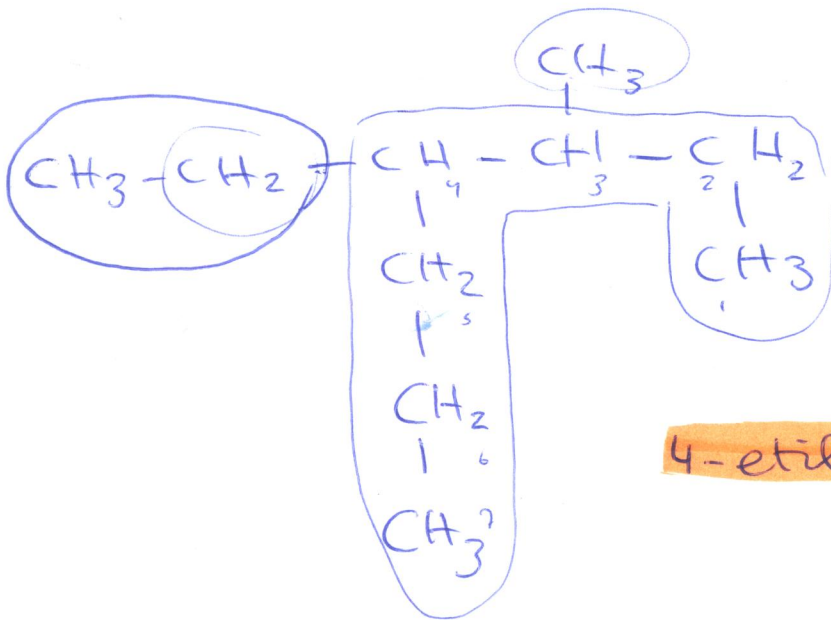


~~3,4-metilhexano~~

3,4-dimetilhexano

si hay 2 grupos  
funcionales di  
3-o tri  
4-o tetra  
etc





3-metilo  
4-etilo

se ponen por orden alfabético del grupo

4-etil - 3-metil heptano

double enlaces tienen preferencia sobre el triple

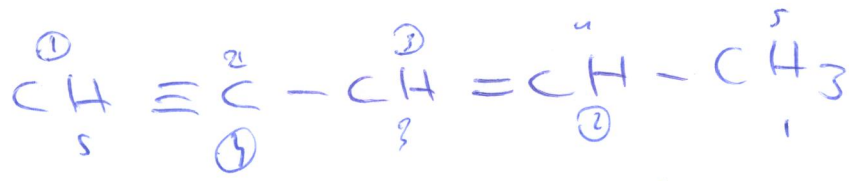
# HIDROCARBUNOS NOMBREADOS (ALQUENOS)



pent-2-eno



pent-1,3-dieno



3-en - pent - 1-ino  
pent-3-en-1-ino

⊕ localizados → preferencia doble e.  
≠ localizados →

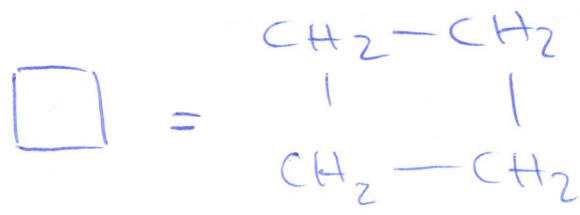
## CICLOS

⊕ pero con palabra "ciclo" delante

se pone el último de la preferencia



ciclobutano

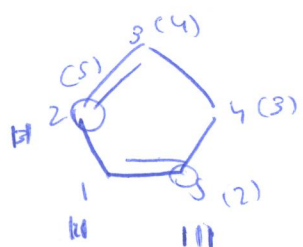


ciclopentano

alcanos -

alquenos =

alquinos =



ciclo pent-1,3-dieno

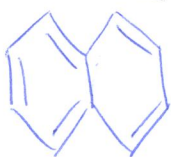
AROMÁTICOS | azúcares, alcoholes, alénoos, ácidos.

• BENCENO

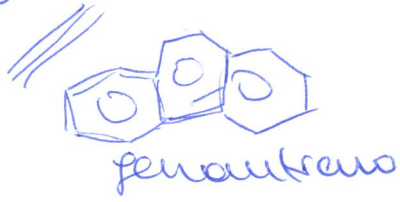
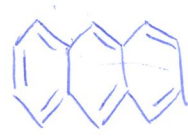


mayoría derivan del benceno.

• NAFTALENO : dos bencenos unidos



• ANTRACENO

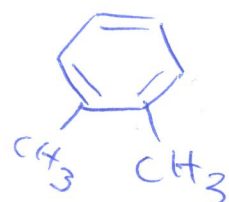


AROMÁTICOS RAMIFICADOS

metil + benceno

metilbenceno = tolueno (usado propio)

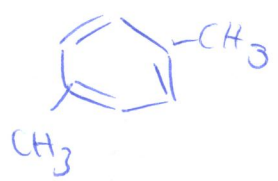
1,2 orto	-o
1,3 meta	-m
1,4 para	-p



1,2-dimetilbenceno/  
orto-dimetilbenceno/  
o-dimetilbenceno



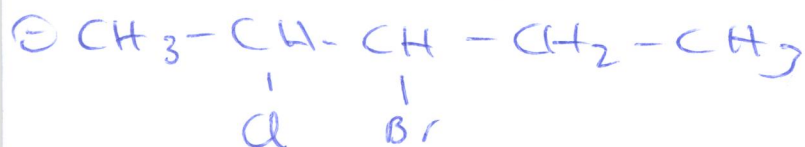
1,3-dimetilbenceno/  
meta-dimetilbenceno/  
m-dimetilbenceno



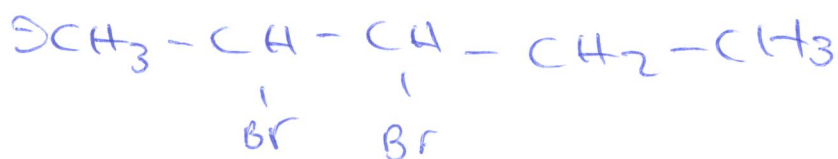
1,4-dimetilbenceno/  
para-dimetilbenceno/  
p-dimetilbenceno

DERIVADOS  
HALOGENADOS

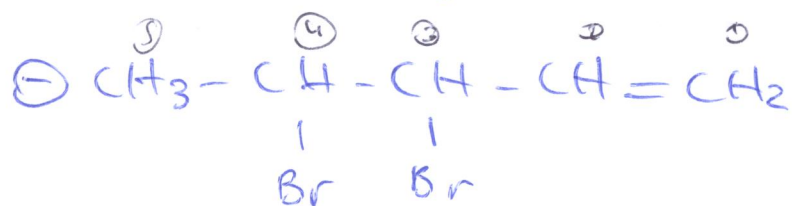
con elementos grupo (17)



3-bromo-2-cloropentano



2,3-dibromopentano



3,4-dibromopent-1-eno



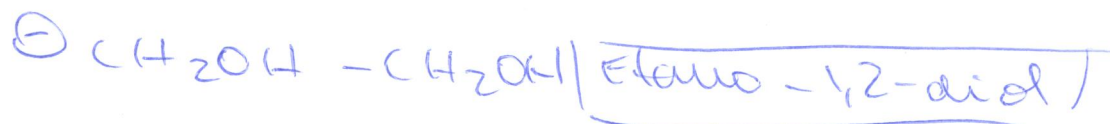
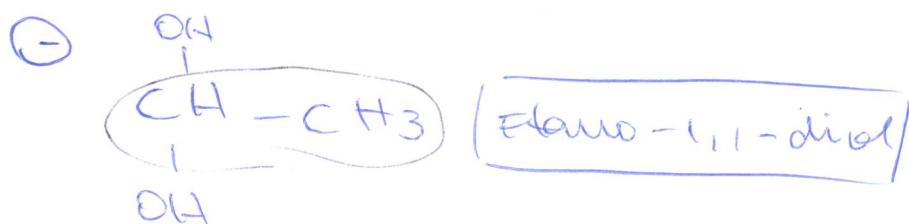
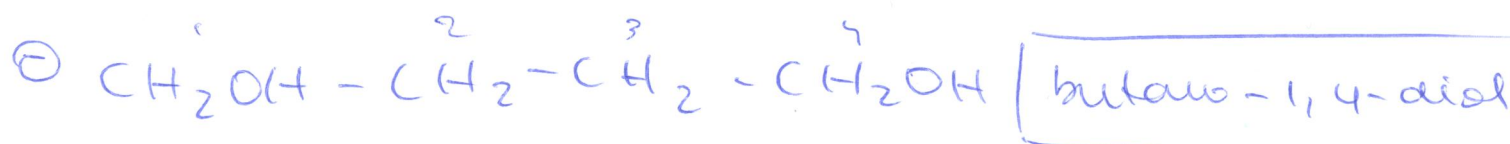
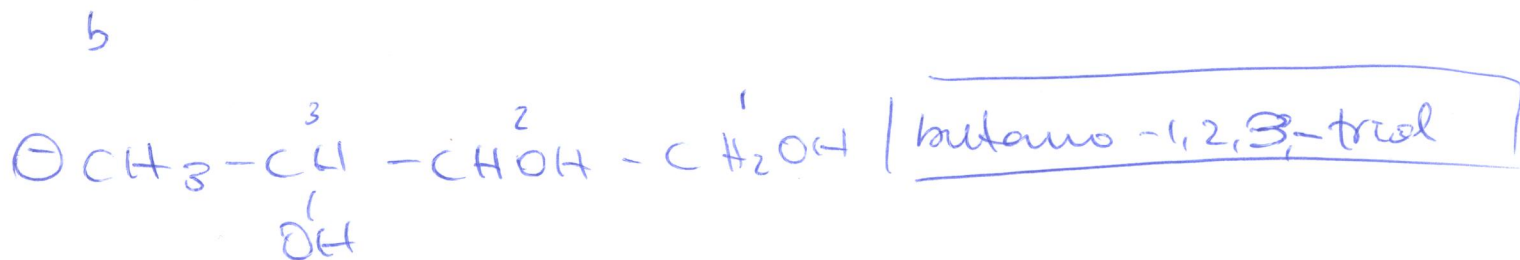
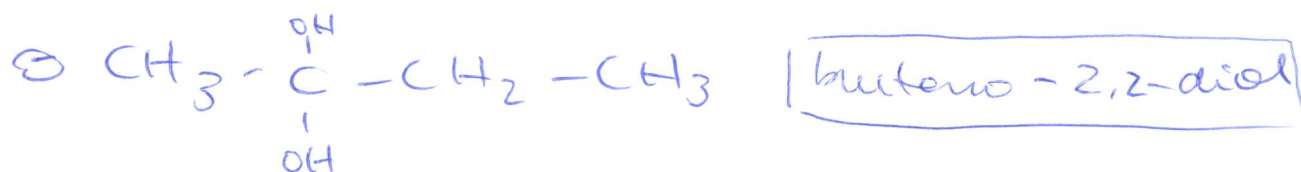
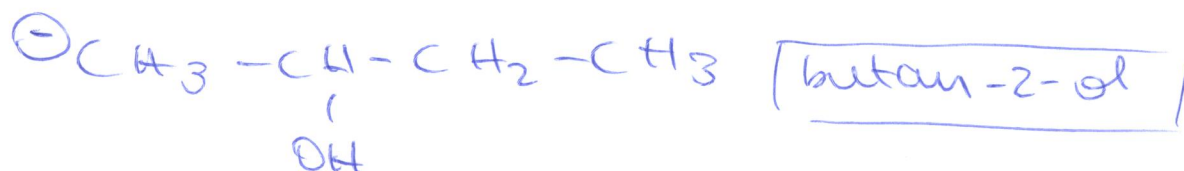
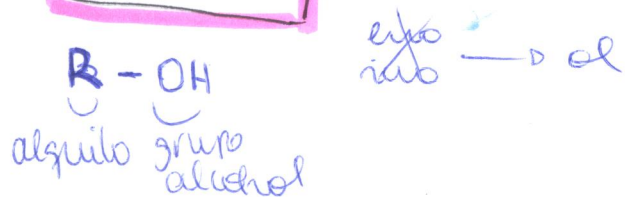
triclorometano

tricloruro de metilo

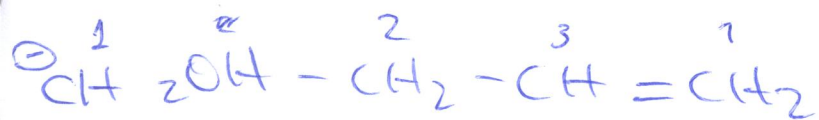
# GRUPOS FUNCIONALES

alcohols  
etere

## ALCOHOLS





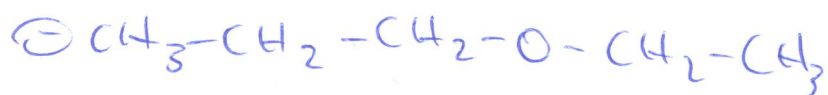
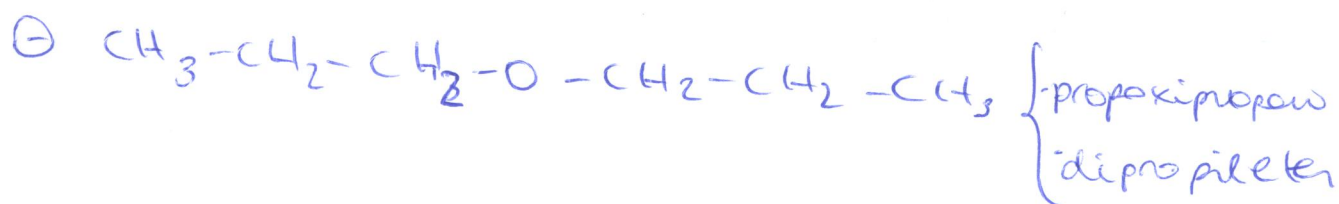
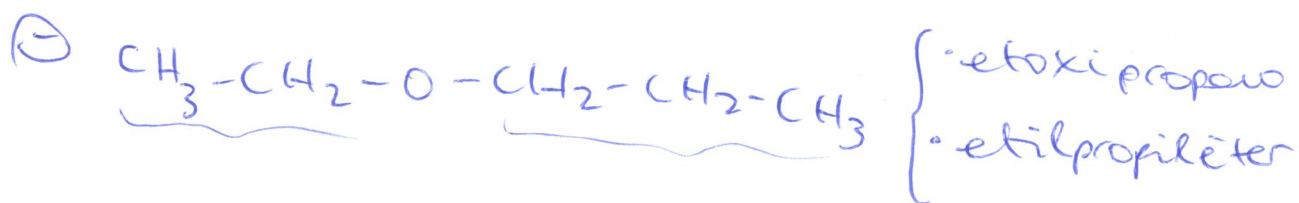
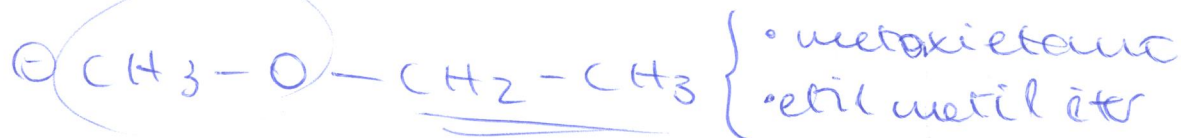


but - 3-en - 1-ol

ultima el  
de + preferența

## ETERES

oxi / eter  
sau  
etj.



$\left\{ \begin{array}{l} \text{etoxipropen} \\ \text{etilpropil eter} \end{array} \right. \rightarrow \text{last + larga}$   
sau  
ultima

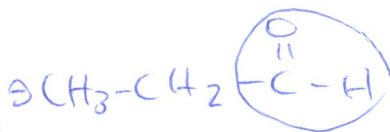


ALDEHÍDOS



(siempre en extremo)

-al



propanal



KETONAS

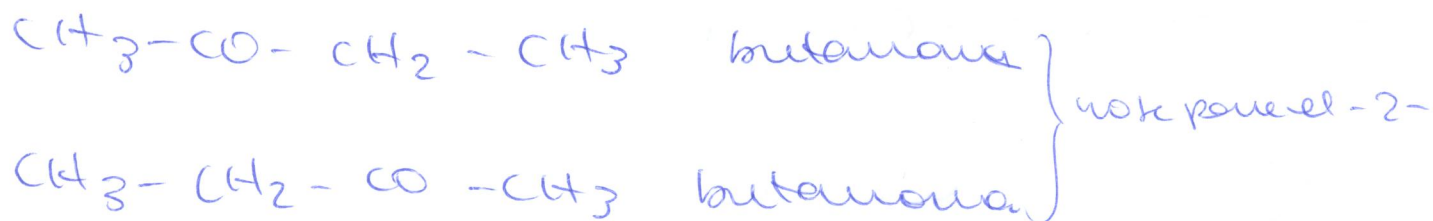


(siempre en medio)

-ona



propanona



no se puede -2-

ÁCIDOS CARBOXTÍlicos



preferencia  
alcohol  
alco

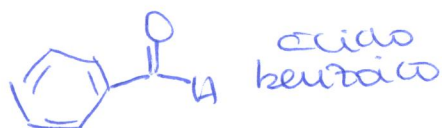
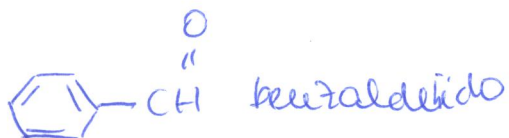
Ácido ..... anti oico  
exo oico  
iso oico

Carbono del ácido (C-1)  
aceita.

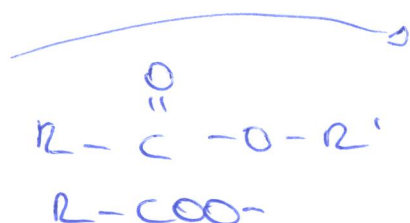


COOH - CH<sub>2</sub> - CH<sub>2</sub> - COOH → ácido butanodioico

COOH - CH = CH - COOH → ácido butenoico



## ÉSTERES



metano  
etano  
propano  
etc

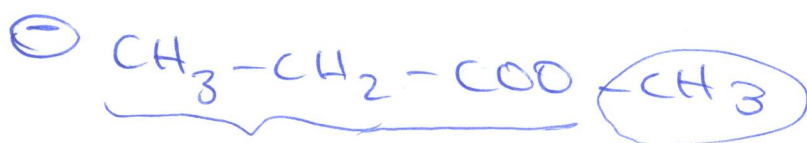
-ato de



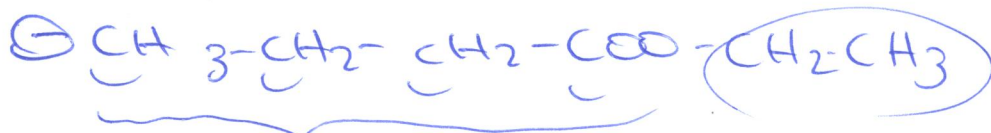
metilo  
etilo  
propilo  
butilo  
pentilo  
etc



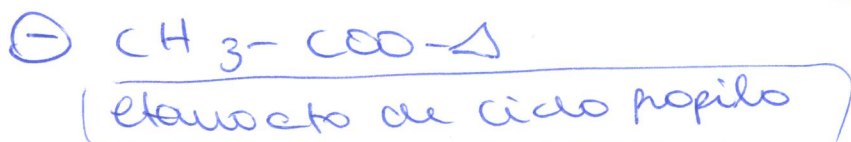
etanoato de etilo



~~metanoato~~ propanoato de metilo



butanoato de etilo





éster de isopropilo

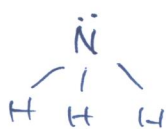
COMPUESTOS  
NITROGENADOS

- aminas
- amidos
- nitrilos
- nitroderivados

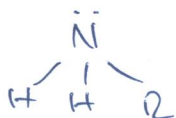
AMINAS

$\text{NH}_3$  electrones no compartidos

forma de nombrar la amina depende de si es primaria, secundaria o terciaria.  $\approx$  éter  
s. principal - amina  
s. funcional - amina.



ác. 3-aminobutanoico



AMINA PRIMARIA

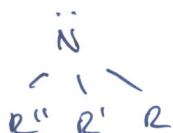


metanamina

AMINA SECUNDARIA  $\text{R} - \text{NH} - \text{R}'$   
(como éteres pero con N de localización)



N-etilmetilamina (\*)



AMINA TERCIARIA



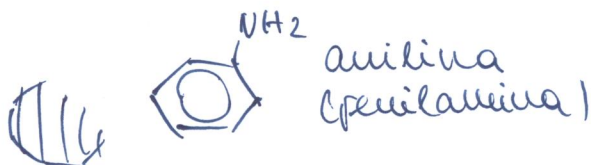
N-etil-N-metilpropilamina

N-etil-N-metilpropanamina

N,N-etilmetilpropanamina

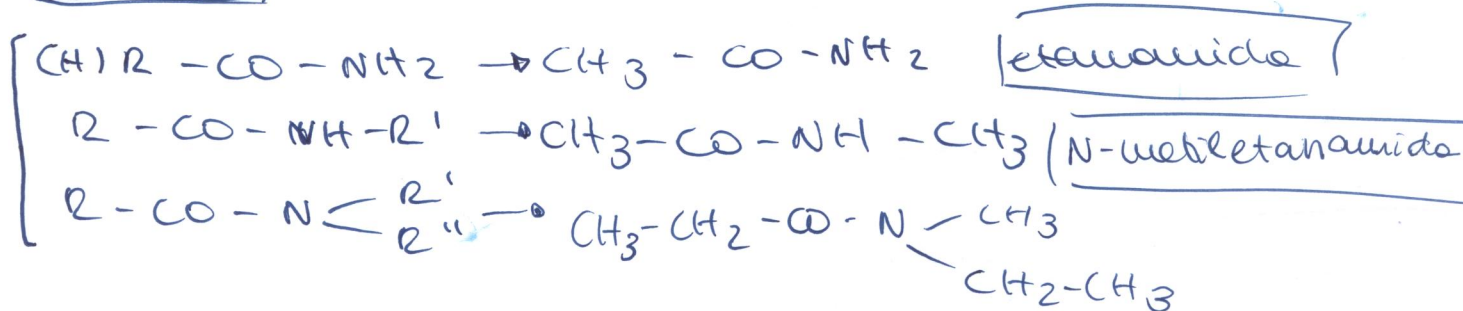
N,N-etilmetilpropilamina

(\*) / N-metiletanamina



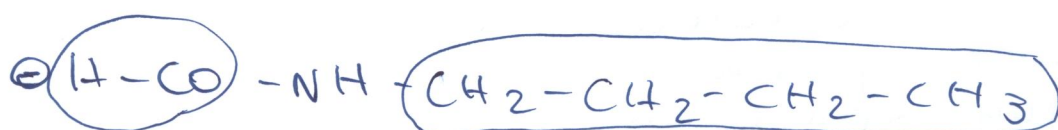


AMIDAS (CONH)  $\left\{ \begin{array}{l} \text{cadena principal} \rightarrow \text{lo mides} \\ \text{al N} \end{array} \right.$

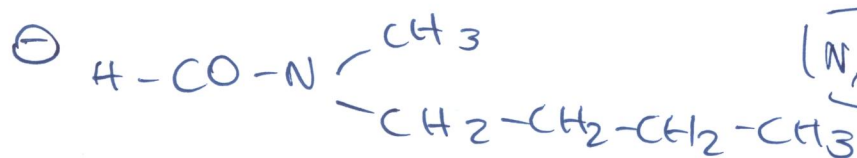


N,N-etilmetilpropanamida

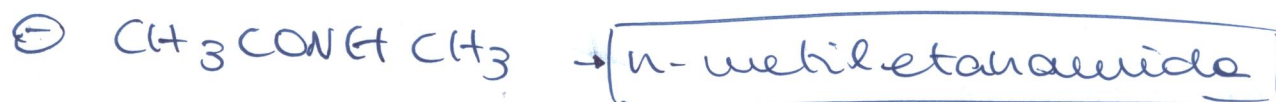
N-etil-N-metilpropanamida



N-butilmetanamida



N,N-butilmetilmetanamida

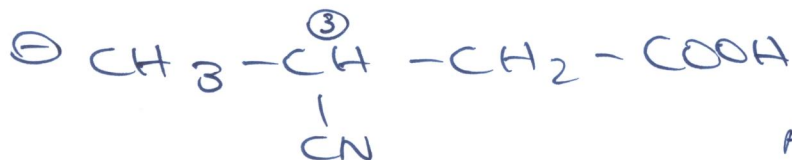
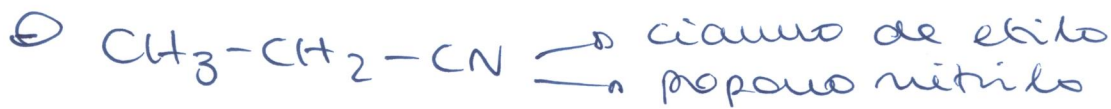
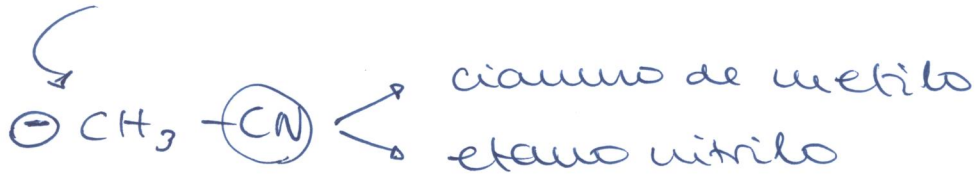


## NITRILAS / GRUPO CIANOS

2 formas de nombrar.



ciano  $\rightarrow$  carbono n obvio  
nitrilo  $\rightarrow$  C & nitrilo



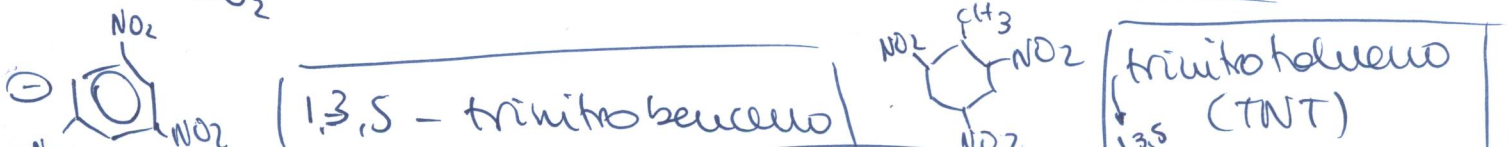
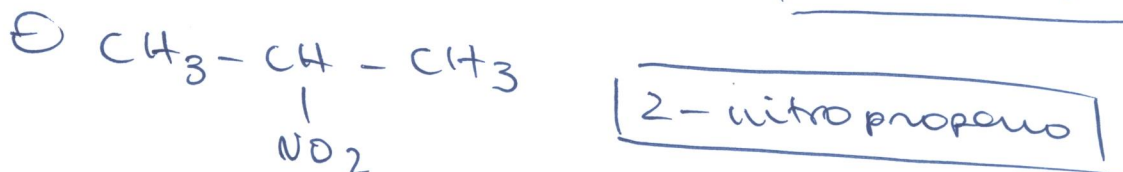
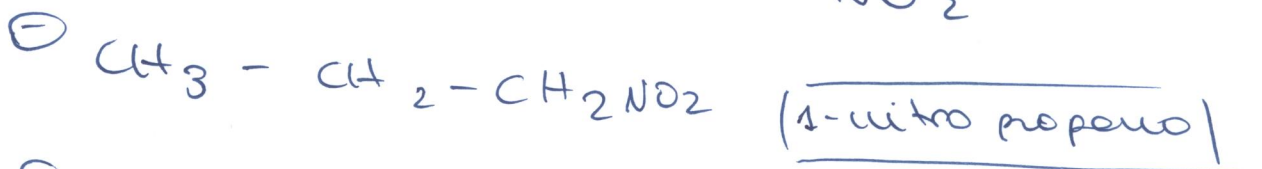
Ácido. 3- cianobutanoico



~~NITRO~~

## NITRO DERIVADO GRUPO NITRO

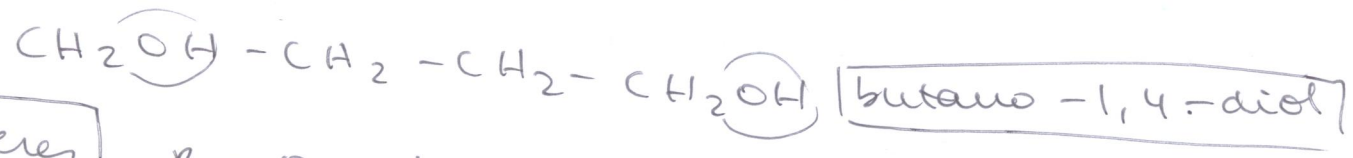
siempre es secundario;  
siempre se llama -nitro



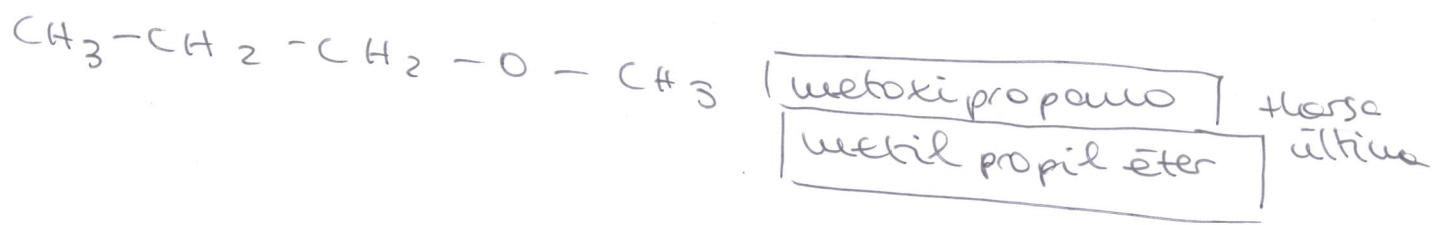
$R-OH$ ✓	ALCOHOLÉS	-ol / hidroxí
$R-O-R'$	ÉTERES	( ) ( ) éter + larga última
$R-CHO$	ALDEHÍDOS	-al / oxo
$R-CO-R$	CETONAS	-ona / <sup>substituyentes</sup> oxo
$R-COOH$	AC. CARBOXÍLICOS	ácido ... oico
$R-COO$ ✓	ÉSTERES	... ato de ...
$-NH$	AMINAS	(N-) ... amina / <sup>substituy.</sup> amino
$CONH$	AMIDAS	(N-) ... amida
$CN-$	NITRULOS	cianuro de ... (C' se dice)
$-NO_2$	NITRO	... nitrilo (C' se cuenta)
		nitró .....

- 1,2 orto / -o
- 1,3 meta / -m
- 1,4 para / -p

alcoholes  $R-OH$  ol / hidroxí.

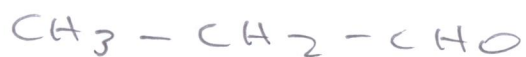


éteres  $R-O-R'$  oxi / éter



aldeídos EXTREMO

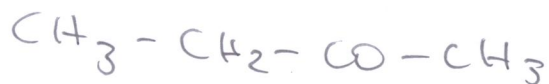
-CHO -al/oxo



propanal

cetona ENMEIO

-CO- -ona/oxo

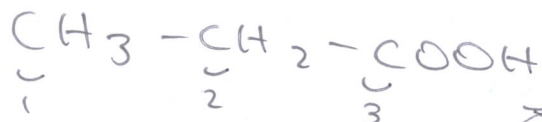


Butanona

ác. carboxílico

(PREFERÊNCIA  
MÁXIMA)

-COOH ác. .... oico



ácido propanoico

Ésteres

-COO

metano  
propano  
etc. -ato de metilo  
propilo  
etc. ilo.



2º membran:

1º

2º

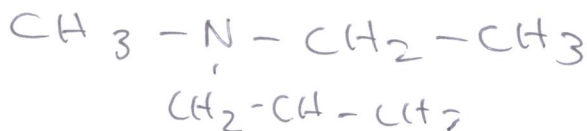
estanoato de ciclopropilo

Aminas

$\text{NH}_x$

N- .... il .... amida

orden alfabético. 1º substituy. (R-)

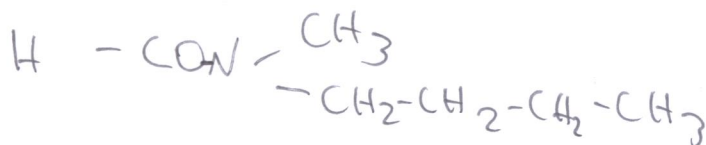


N-etil-N-metilpropanamina

Amidas

CONH

codense pinc → la unida d



N,N-butilmetilamida



**NITRILAS**



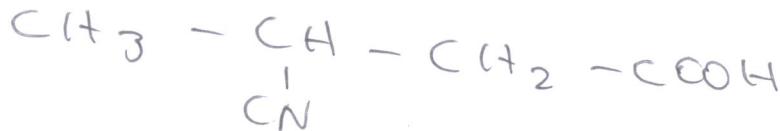
cianuro → C se obvia

nitrilo → N se cuenta

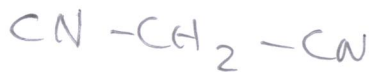


cianuro de metilo

etano nitrilo



ácido-3-ciano butanoico



dicianuro de metilo

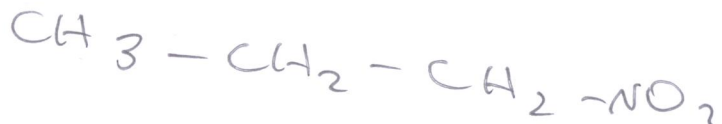
propano de di nitrilo

**NITRO**

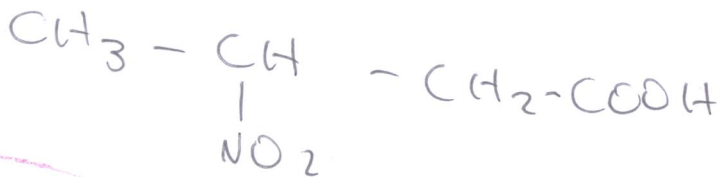


siempre se cuenta

siempre -nitro



1-nitro butano



ácido-3-nitro butanoico

-OH - alcohol ✓

-O éter ✓

-COOH ácido ✓

-COO éster ✓

-CO cetona ✓

-CHO aldeído ✓

-NH amina ✓

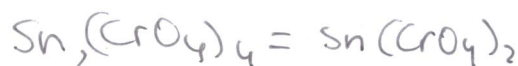
-CONH amida ✓

-CN nitrilo

-NO<sub>2</sub> nitro

Nombre: JuliaApellidos: Abad Alredondo

1. Cromato de estaño (IV)



2. Fluoruro de vanadio (III)

3. p-Nitrofenol4.  $\text{Na}(\text{H}_2\text{PO}_4)$ 

dihidrogenofosfato de sodio

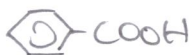
5.  $\text{Ti}_2\text{O}_3$ 

tróxido de titanio

6. Nitrato de cobre (II)



7. Hidróxido de cesio

8. Acido benzoico9.  $\text{Bi}_2\text{O}_3$ 

tróxido de bismuto

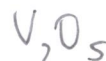
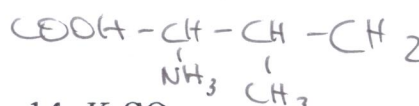
10.  $(\text{NH}_4)_2\text{S}$ 

sulfuro de diamonio

11.  $\text{CH}_3\text{NH}_2$ 

metanamina

12. Óxido de vanadio (V)

13. Ácido 2-amino-3-metilbutanoico14.  $\text{K}_2\text{SO}_3$ 

sulfito de potasio

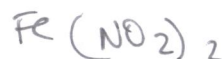
15.  $\text{Hg}(\text{OH})_2$ 

dihidróxido de mercurio

16.  $\text{CH}_3\text{CH}_2\text{CHO}$ 

propanal

17. Nitrito de hierro (II)



18. Peróxido de cobre (II)

19.  $\text{CH}_3\text{COOCH}_2\text{CH}_3$ 

acetato de etilo

20. Cianuro de metilo o etanonitrilo21.  $\text{PtI}_2$  diioduro de platino22.  $\text{CH}_2=\text{CHCH}=\text{CH}_2$ 

but-1,3-eno

23. Ácido perclórico



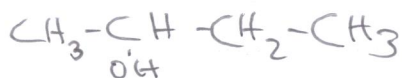
24.  $\text{NH}_4\text{HCO}_3$

hidrogeno carbonato de amonio

25. 2-fenil-1-nitro-3-pentino



26. 2-Butanol



27.  $\text{Li}_2\text{SO}_4$

sulfato de dilitio

28.  $\text{Cl}_3\text{CH}$

triclorometano

29.  $\text{CH}_3\text{CHBr}_2$

1-dibromoetano

30. Hidruro de berilio



31. Ácido propenoico



32.  $\text{N}_2\text{O}_3$

tróxido de dinitrógeno

33.  $\text{Ca}(\text{BrO}_3)_2$

bis (trioxido bromato) de calcio  
bromato de calcio

34.  $\text{CH}_3\text{OCH}_3$

metanol

35. Permanganato de cobalto (II)



36. Ácido bórico



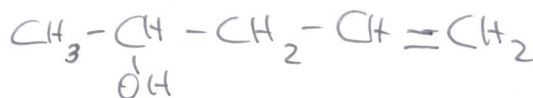
37.  $(\text{CH}_3)_3\text{N}$

1,1,1-trimetilmetanamina

38. Seleniuro de hidrógeno



39. 4-Pentén-2-ol



40.  $\text{OsO}_4$

tetroxido de osmio

41.  $(\text{CH}_3)_2\text{CH} - \text{CO} - \text{CH}_3$

1,2-dimetilpropanona

42. Dióxido de titanio



43. Benzoato de etilo



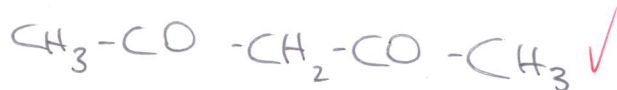
44. N-metil propanamida



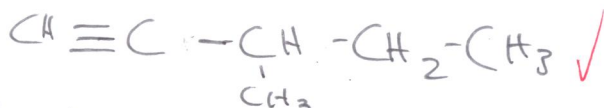


Nombre: Julia Abad Arredondo 1º BACH - A

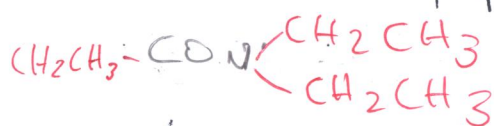
1. Pentano-2,4-diona



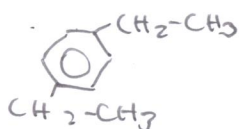
2. 3-metilpent-1-ino



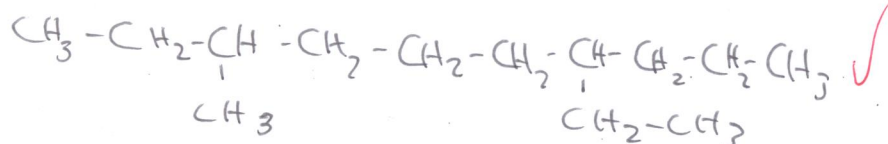
3. N,N-dietilpropanamida



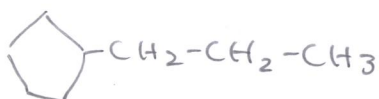
4. p-etiltolueno (p-etilmetil benceno)



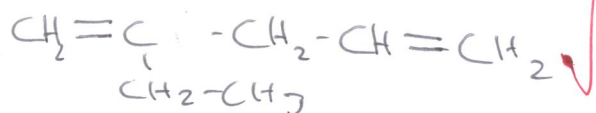
5. 7-etil-3-metildecano



6. propil ciclopentano



7. 2-etilpent-1,4-dieno



8. but-1-en-3-ino



9.  $\text{CH}_3-\text{CH}_2-\underset{\text{CH}}{\text{CH}}-\text{CH}_2-\text{CH}_2-\text{CH}_3$

3-etilhexano  
hex-1-eno

10. Oct-3-en-1,7-dieno



11.

ciclohexeno  $\checkmark$

12.  $\text{CH}_3-\text{CHOH}-\text{CH}_2-\text{CH}_3$

butan-2-ol  
ol

13.  $\text{CH}_2\text{OH}-\text{CHOH}-\text{CH}_2\text{OH}$

propano-1,2,3-triol  $\checkmark$

14.  $\text{CH}_2=\text{CH}-\text{COOH}$

propenoico  
ácido prop-2-enoico  $\times$

15.  $\text{CH}_3-\overset{\text{O}}{\underset{\text{O}}{\text{C}}}-\underset{\text{NH}}{\text{CH}}-\text{CH}_2-\text{CH}_2-\text{CH}_3$

3-nitropent-2-ona  
n-propil etanamida

16. 1,2,4-trimetilbenceno  
~~1,2,4-trimetiltolueno~~

17.  $\text{CH}_2=\text{CH}-\text{C}\equiv\text{CH}$

but-1-eno-3-ino

18.  $\text{CH}_3-\text{CH}_2-\text{NH}-\triangle$

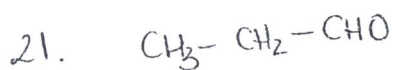
2,2-ciclopentanitroetano

19.  $\text{CH}_3-\text{CH}_2-\text{CH}_2-\text{O}-\text{CH}_3$

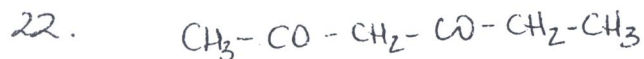
metoxipropano  
metil propil éter

20.

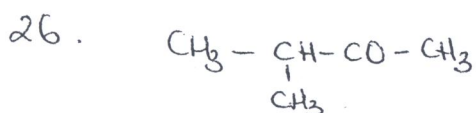
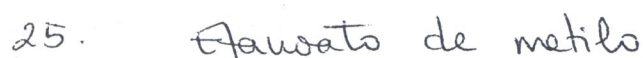
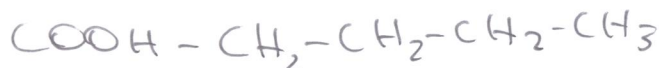
benzenol



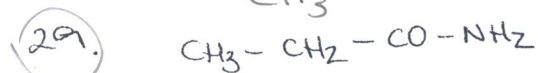
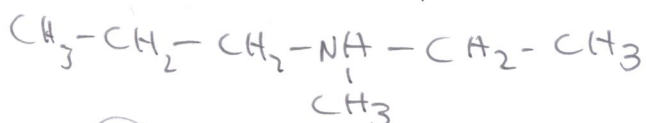
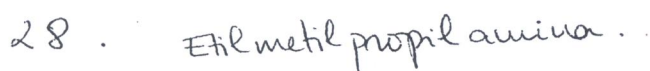
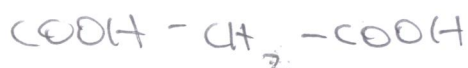
propanal



hex-2,4-dione



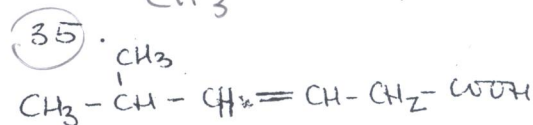
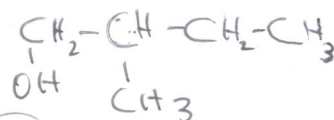
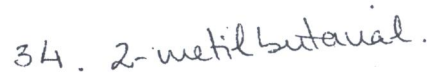
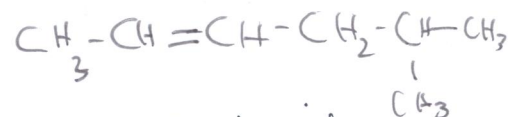
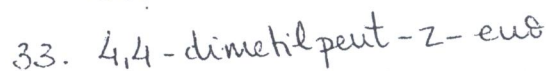
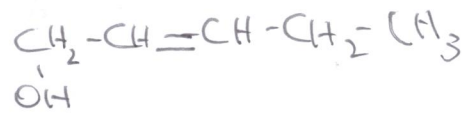
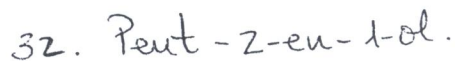
3-metilbutanona



~~nitropropano~~



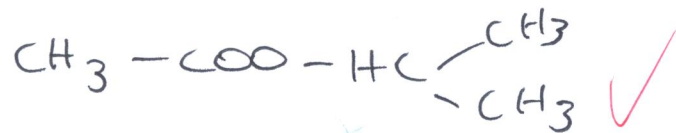
butanodial



ácido-4-metil-3-enoico

# EJERCICIO

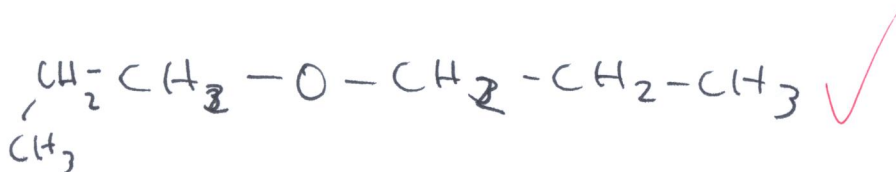
① clorato de isopropilo (ES/EN)



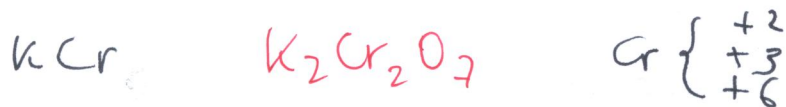
② ácido clorhídrico



③ dipropiléter



④ dicromato de potasio



⑤ N-metil formamida

quiero decir  
que tiene 1  
átomo carbono



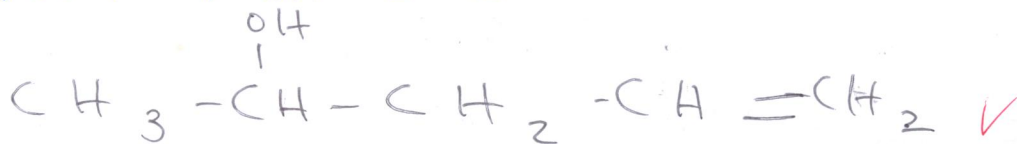
metanamida



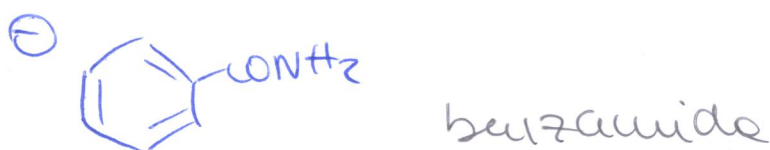
⑥  $\text{Cd}(\text{OH})_2$

hidróxido de cadmio

⊖ pent-4-en-2-ol

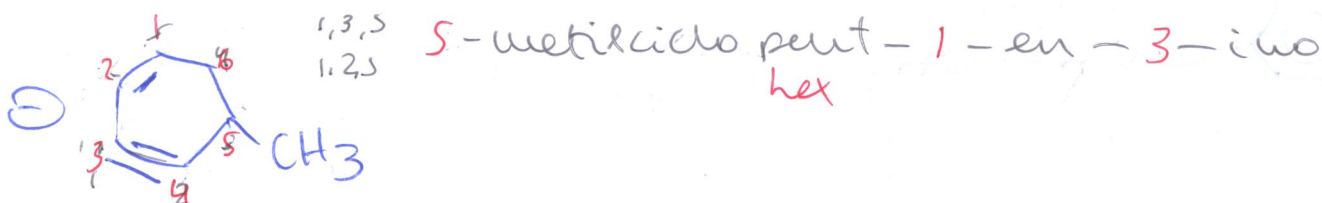


⊖ oxato de hierro (II)



✓

⊖ nitrato de amonio



mismo localiz → = representación  
de este  
grupo

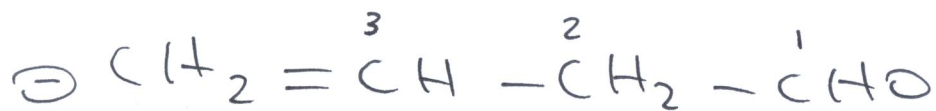
≠ localiz

⊖ permanganato de plata

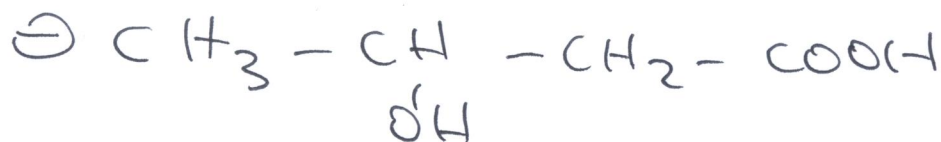




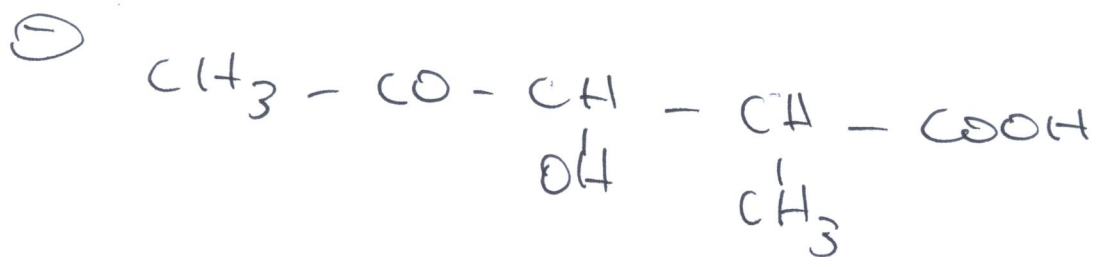
# + EJERSVIO



but - 3-enal

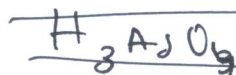
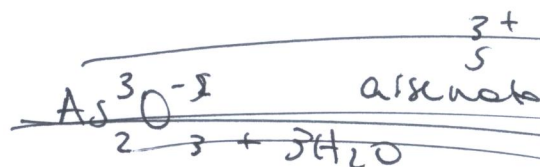


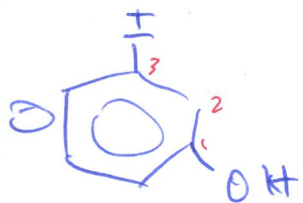
acido 3-hydroxi butanico



acido. 3-hidroxi-2-metil-4-oxopentanico

acido boric  
acido arsenic



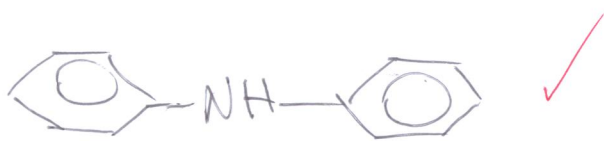


3-hydroxy-phenol

benzeno + OH

FENOL

⊖ Diphenil amine



⊖ 2-metil butanoato de tercbutilo

-C -C

