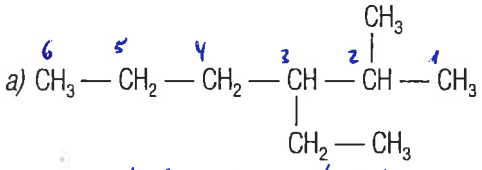
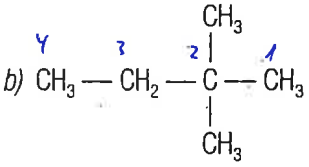
5 Nombra los siguientes alcanos:

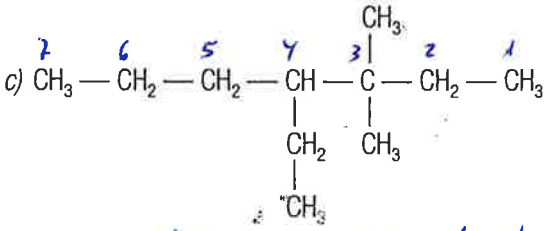
SOL (1)

a) 

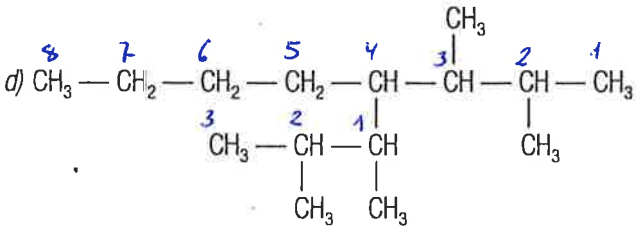
3-etil-2-metilhexano

b) 

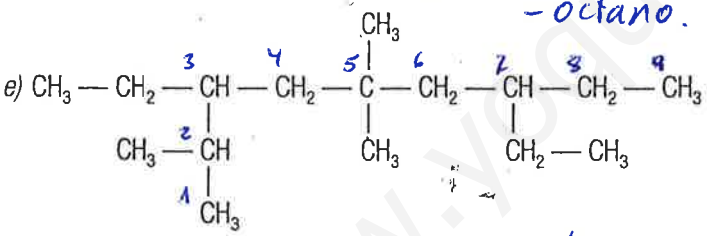
2,2-dimetilbutano

c) 

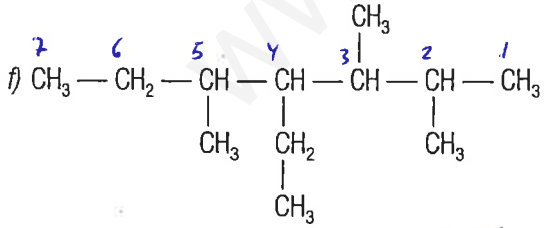
4-etil-3,3-dimetilheptano

d) 

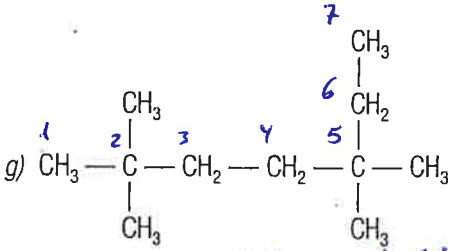
4-(1,2-dimetilpropil)-2,3-dimetil-octano.

e) 

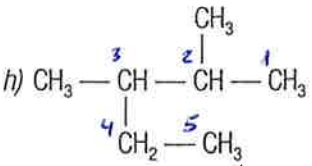
3,7-dietil-2,5,5-trimetilnonano

f) 

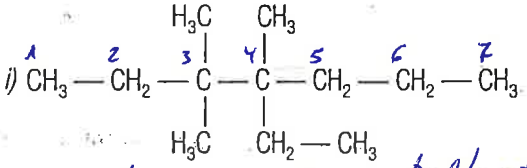
4-etil-2,3,5-trimetilheptano

g) 

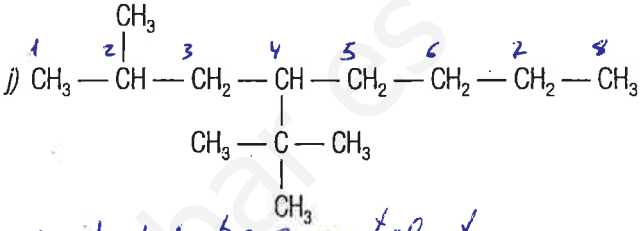
2,2,5,5-tetrametilheptano.

h) 

2,3-dimetilpentano.

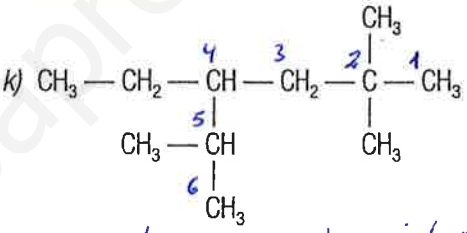
i) 

4-etil-3,3,4-trimetilheptano

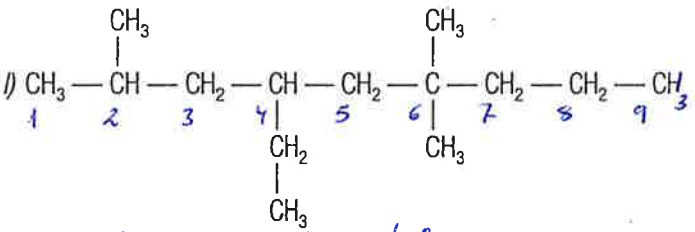
j) 

4-tert-butil-2-metiloctano

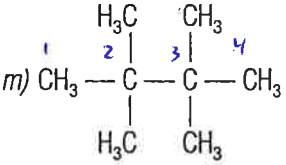
2-metil-4-(dietiletil)octano.

k) 

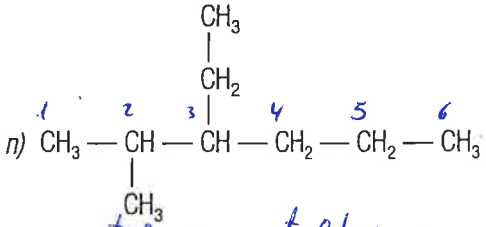
4-etil-2,2,5-trimetilhexano.

l) 

4-etil-2,6,6-trimetilnonano.

m) 

2,2,3,3-tetrametilbutano.

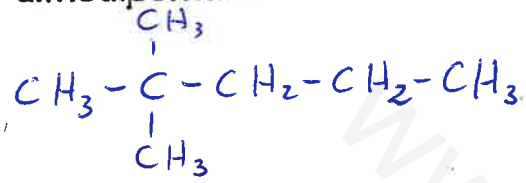
n) 

3-etil-2-metilhexano.

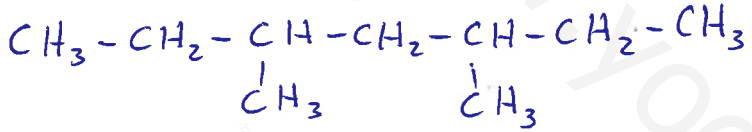
www.yoquieroaprobar.es

6 Formula los siguientes compuestos:

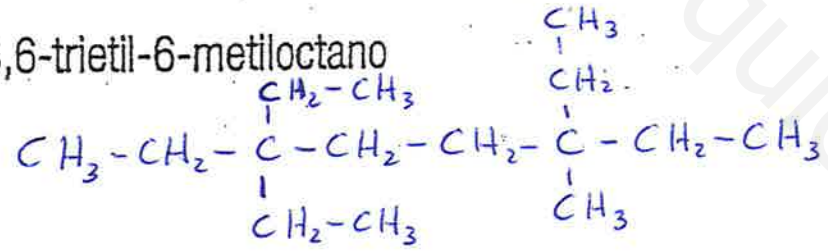
a) 2,2-dimetilpentano



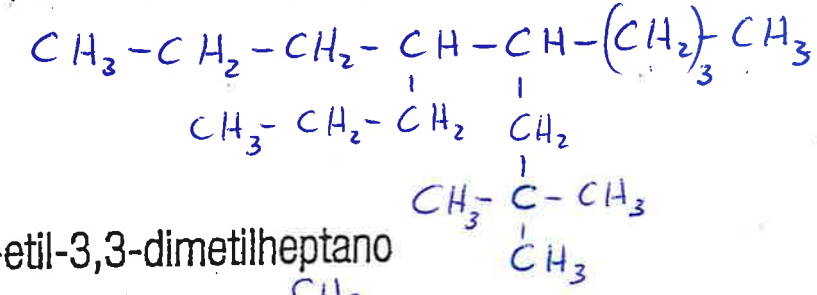
b) 3,5-dimetilheptano



c) 3,3,6-trietil-6-metiloctano

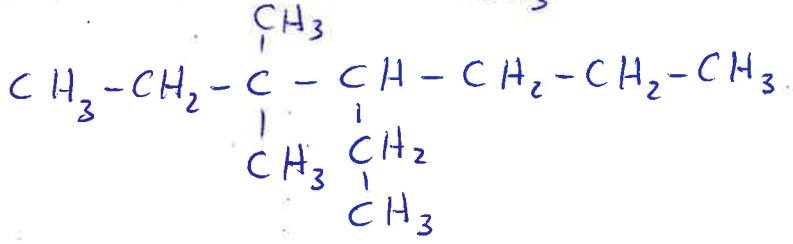


d) 5-(2,2-dimetilpropil)-4-propilnonano

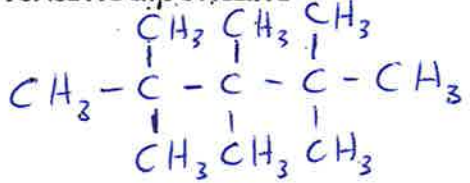


deberia invertirse al revés y quedaría 4-(2,2-dimetilpropil)-5-propilnonano.

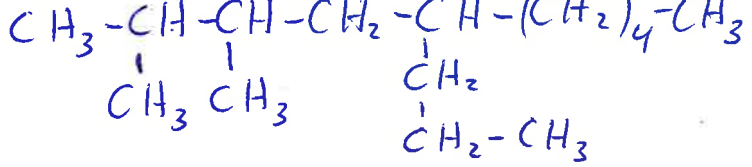
e) 4-etil-3,3-dimetilheptano



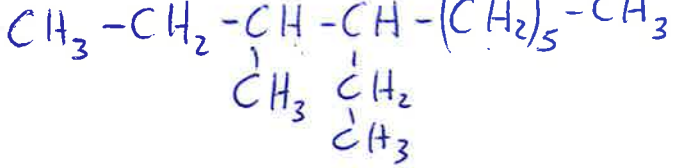
f) Hexametilpentano



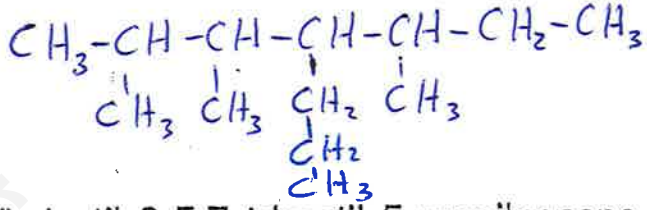
g) 2,3-dimetil-5-propildecano



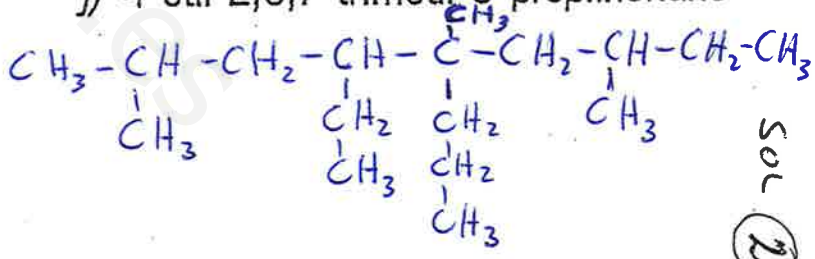
h) 4-etil-3-metildecano



i) 2,3,5-trimetil-4-propilheptano



j) 4-etil-2,5,7-trimetil-5-propilnonano



Sol (2)

www.yoquieroaprobar.es

7. Nombra los siguientes compuestos:

a) $CH_2=CH-CH_3$

propeno

b) $CH_3-\underset{\underset{CH_3}{|}}{CH}-CH_2-CH=CH_2$

4-metilprop-1-eno

c) $CH_2=CH-\underset{\underset{CH_3}{|}}{CH}-\underset{\underset{CH_2-CH_3}{|}}{CH}-CH_3$

3-etil-4-metilpent-1-eno

d) $CH_3-\underset{\underset{H_3C}{|}}{\overset{\overset{CH_3}{|}}{C}}-\underset{\underset{CH_3}{|}}{CH}-CH=CH_2$

3,4,4-trimetilpent-1-eno

e) $CH_3-CH=CH-\underset{\underset{CH_2-CH_3}{|}}{CH}-CH-CH_3$

4-etil-5-metilhex-2-eno

f) $CH_3-CH=CH-CH_3$

2-buteno (but-2-eno)

g) $CH_3-CH_2-CH=CH-\underset{\underset{CH_3}{|}}{CH}-\underset{\underset{CH_3}{|}}{CH}-CH_3$

5,6-dimetilhept-3-eno

h) $CH_2=CH-\underset{\underset{CH_3}{|}}{CH}-\underset{\underset{CH_2-CH_3}{|}}{CH}-CH_2-\underset{\underset{CH_3}{|}}{CH}-CH_3$

4-etil-3,6-dimetilhept-1-eno

i) $CH_3-CH_2-CH_2-\underset{\underset{CH=CH_2}{|}}{CH}-\underset{\underset{CH_3}{|}}{CH}-CH_2-CH_3$

4-metil-3-propilhex-1-eno

j) $CH_3-\underset{\underset{CH_2-CH_3}{|}}{\overset{\overset{CH_3}{|}}{C}}=\underset{\underset{CH-CH_3}{|}}{C}-CH_2-CH_2-\underset{\underset{CH_3}{|}}{CH}-CH_3$

3,7-dimetil-4-(metiletil)oct-3-eno

isopropil

8 Formula los compuestos siguientes:

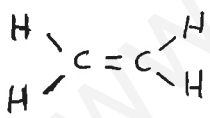
a) 2-penteno

$CH_3-CH-CH-CH_2-CH_3$

b) 1-buteno

$CH_2=CH-CH_2-CH_3$

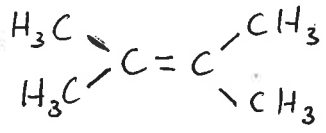
c) Eteno



d) 3,5-dimetil-2-hexeno

$CH_3-CH=\underset{\underset{CH_3}{|}}{C}-CH_2-\underset{\underset{CH_3}{|}}{CH}-CH_3$

e) 2,3-dimetil-2-buteno



f) 3-hepteno

$CH_3-CH_2-CH=CH-CH_2-CH_2-CH_3$

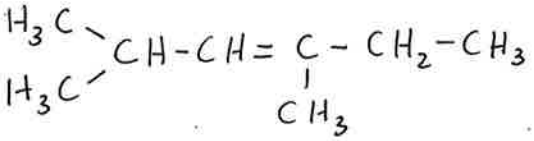
g) 2-hexeno

$CH_3-CH_2-CH_2-CH=CH-CH_3$

h) 3-deceno

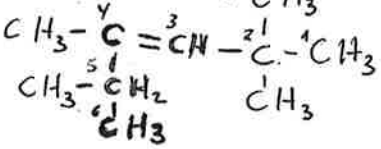
$CH_3-CH_2-CH=CH-(CH_2)_5-CH_3$

i) 2,4-dimetil-3-hexeno



j) 4,4-dimetil-2-(1-metiletil)-2-penteno
(Formula este compuesto y comprueba si está bien nombra
Si no es así escribe su nombre correcto).

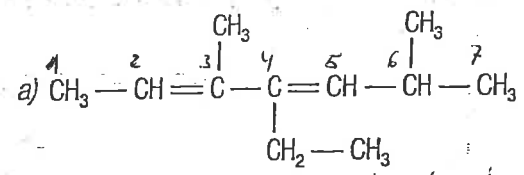
2,2,4,5-tetrametil-hex-3-eno



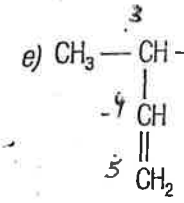
www.yoquieroaprobar.es

9 Nombra los siguientes compuestos:

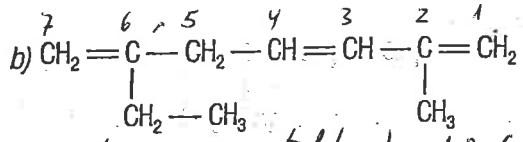
(4) SOL

a) 

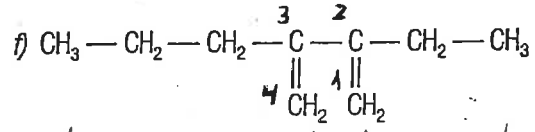
4-etil-3,6-dimetilhepta-2,4-dieno

e) 

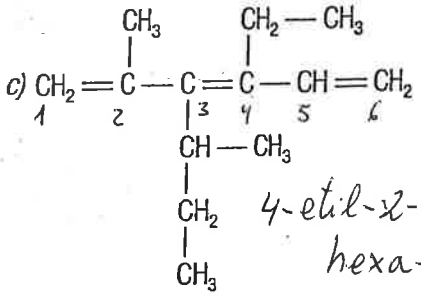
3-metil-1,4-pentadieno

b) 

6-etil-2-metilhepta-1,3,6-trieno

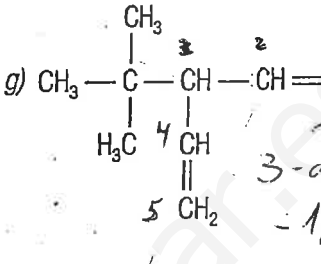
f) 

2-etil-3-propilbuta-1,3-dieno

c) 

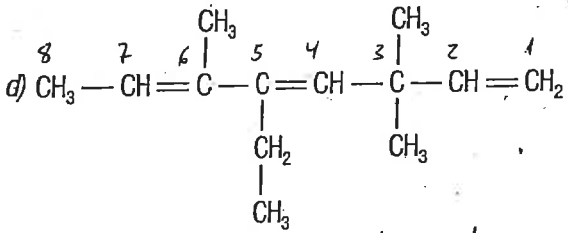
sec-butil

4-etil-2-metil-3-(1-metilpropil)hexa-1,3,5-trieno.

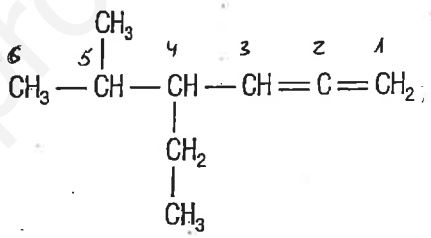
g) 

terbutil

3-dimetiletil-1,4-pentadieno

d) 

3,3,6-trimetil-5-etilocta-1,4,6-trieno.

h) 

4-etil-5-metilhexa-1,2-dieno

10 Formula los compuestos siguientes:

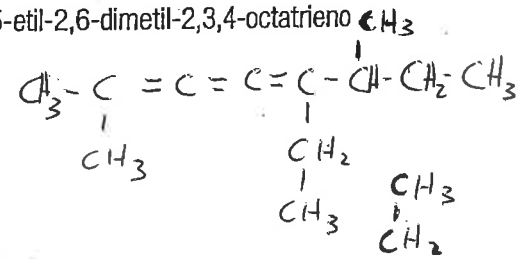
a) 1,3-pentadieno

$CH_2=CH-CH=CH-CH_3$

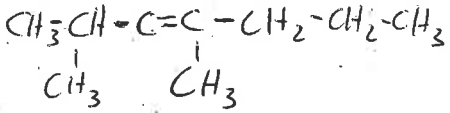
b) 1,3,5-heptatrieno

$CH_2=CH-CH=CH-CH=CH-CH_3$

c) 5-etil-2,6-dimetil-2,3,4-octatrieno



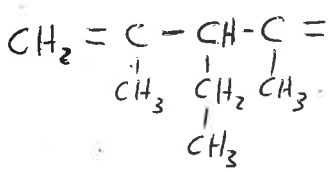
d) 3-etil-2,4-dimetil-3-hepteno



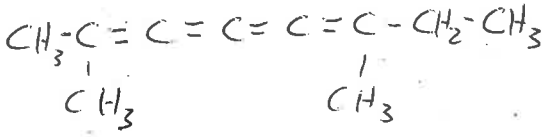
e) 2-hexeno

$CH_3-CH=CH-CH_2-CH_2-CH_3$

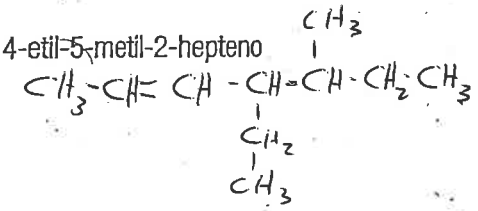
f) 3-etil-2,3-dimetil-1,4-pentadieno



g) 2,6-dimetil-2,3,4,5-octatetraeno

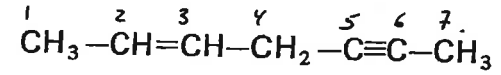


h) 4-etil-5-metil-2-hepteno

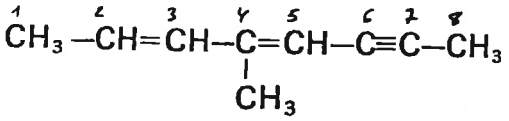


www.yoquieroaprobar.es

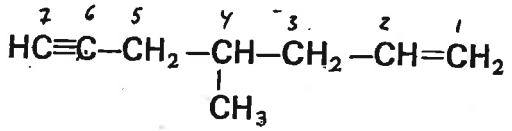
III-5



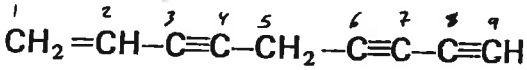
hept-2-en-5-ino



4-metilocta-2,4-dien-6-ino

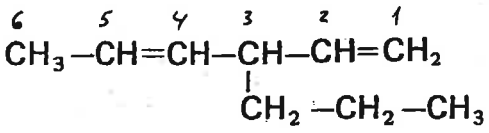


4-metilhept-1-en-6-ino

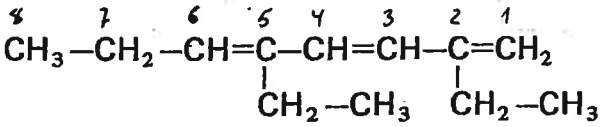


non-1-en-3,6,8-triino

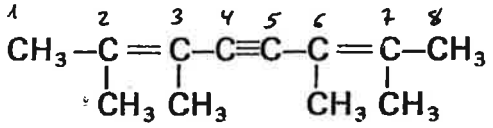
III-6



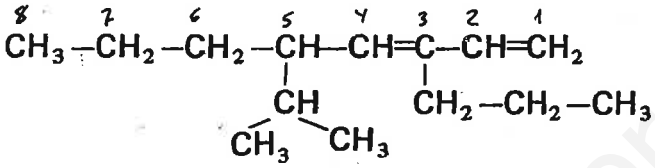
3-propilhexa-1,4-dieno



2,5-dietilocta-1,3,5-trieno

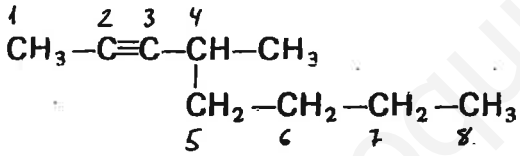


2,3,6,7-tetrametilocta-2,6-dien-4-ino

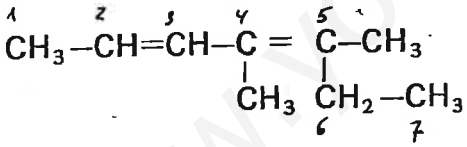


5-(metiletil)-3-propilocta-1,3-dieno

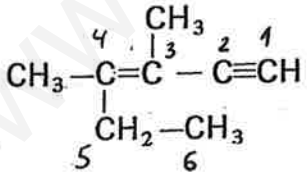
"isopropil



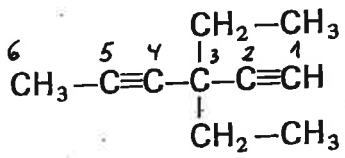
4-metiloct-2-ino



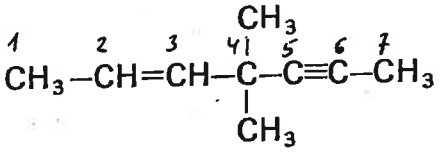
4,5-dimetilhepta-2,4-dieno



3,4-dimetilhex-3-en-1-ino



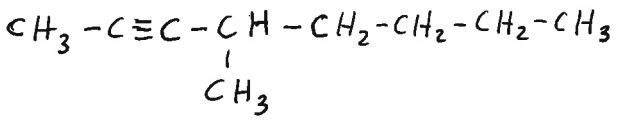
3,3-dietilhexa-1,4-diino



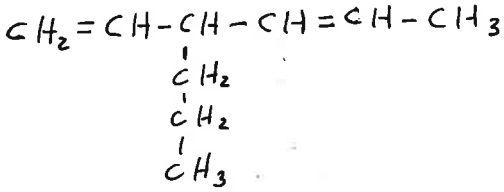
4,4-dimetilhept-2-en-5-ino

www.yoquieroaprobar.es

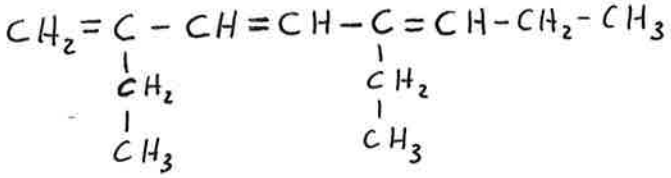
1) 4-metiloct-2-ino
(4-metil-2-octino)



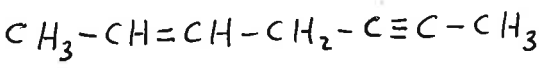
2) 3-propilhexa-1,4-dieno
(3-propil-1,4-hexadieno)



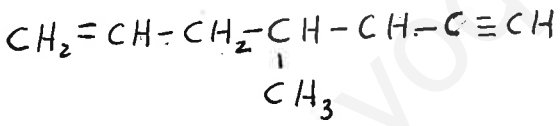
3) 2,5-dietilocta-1,3,5-trieno
(2,5-dietil-1,3,5-octatrieno)



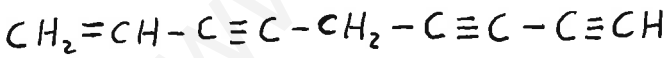
4) hept-2-en-5-ino
(2-hepten-5-ino)



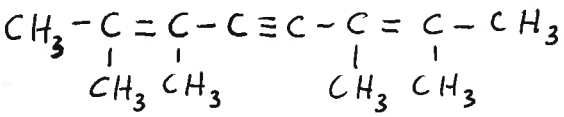
5) 4-metilhept-1-en-6-ino
(4-metil-1-hepten-6-ino)



6) non-1-en-3,6,8-triino
(1-nonen-3,6,8-triino)

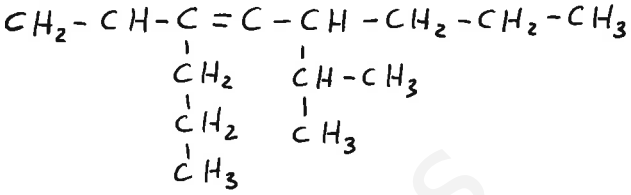


7) 2,3,6,7-tetrametilocta-2,6-dien-4-ino
(2,3,6,7-tetrametil-2,6-octadien-4-ino)

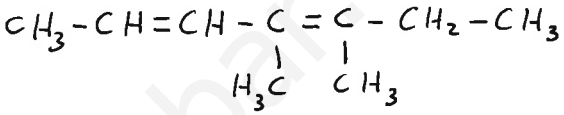


metiletil

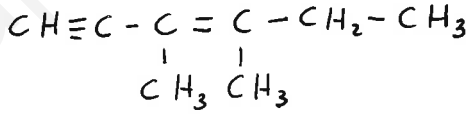
8) 5-isopropil-3-propilocta-1,3-dieno
(5-isopropil-3-propil-1,3-octadieno)



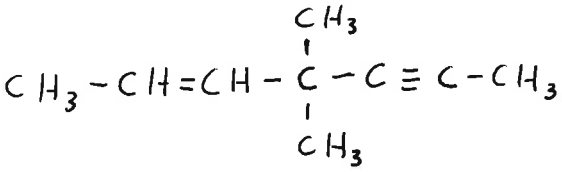
9) 4,5-dimetilhepta-2,4-dieno
(4,5-dimetil-2,4-heptadieno)



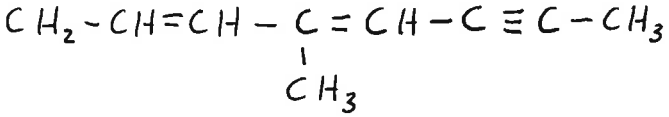
10) 3,4-dimetilhex-3-en-1-ino
(3,4-dimetil-3-hexen-1-ino)



11) 4,4-dimetilhept-2-en-5-ino
(4,4-dimetil-2-hepten-5-ino)

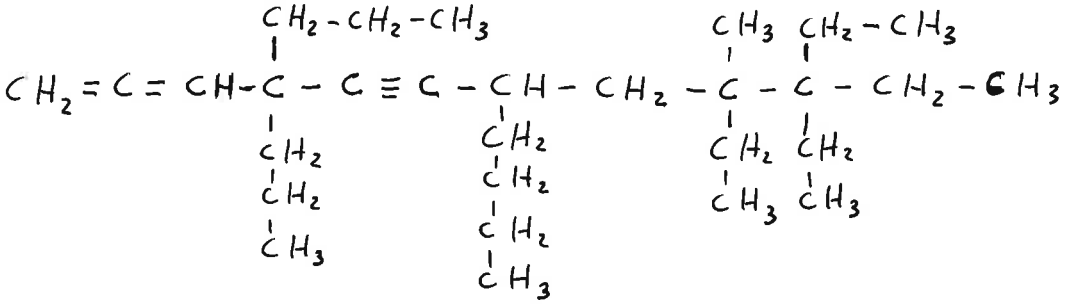


12) 4-metilocta-2,4-dien-6-ino
(4-metil-2,4-octadien-6-ino)



13)

7-butil-9,10,10-trietil-9-metil-4,4-dipropildodeca-1,2-dien-5-ino
(7-butil-9,10,10-trietil-9-metil-4,4-dipropil-1,2-dodecadien-5-ino)



www.yoquieroaprobar.es

Escribe el nombre de los siguientes compuestos

CH_3OH también H_3COH

metanol

$CH_3-CHOH-CH_2-CH_3$

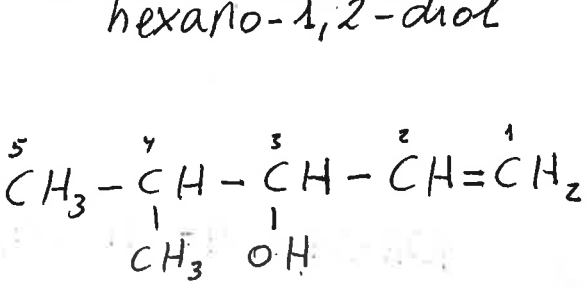
butan-2-ol

$CH_2OH-CHOH-(CH_2)_3-CH_3$

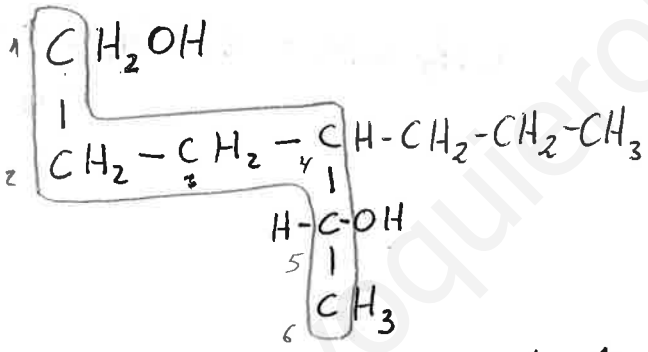
hexano-1,2-diol

$CH_2OH-CH=CH_2$

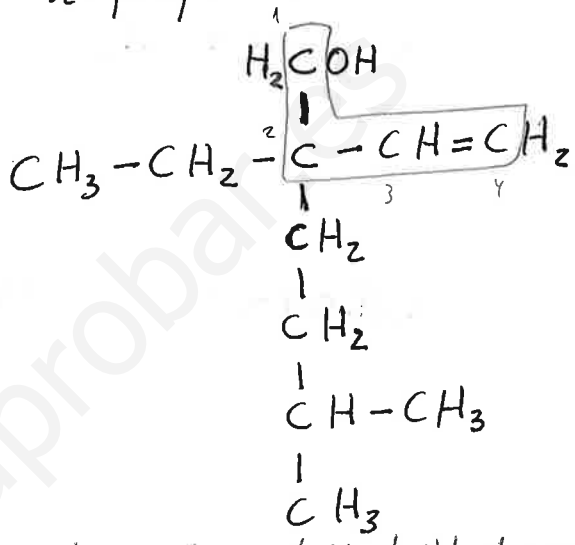
2-propen-1-ol



4-metilpent-1-en-3-ol

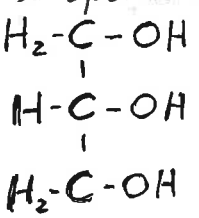


4-propilhexano-1,5-diol

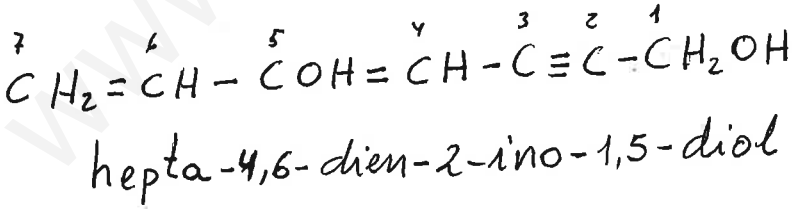


2-etil-2-(3-metilbutil)but-3-en-1-ol

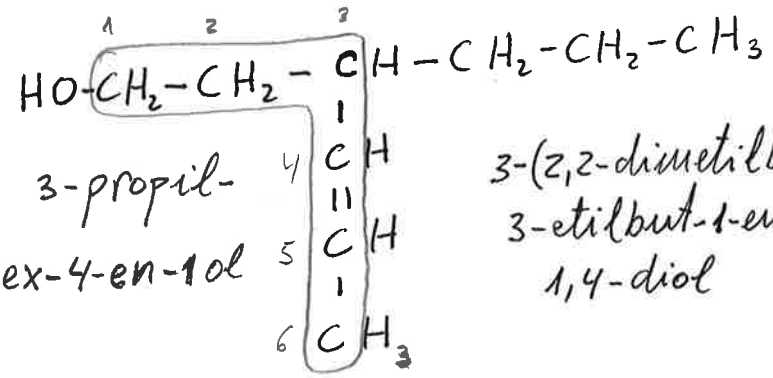
isopentil



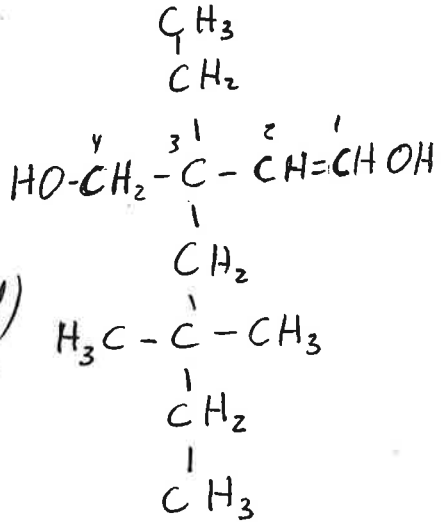
propanotriol (glicerina)



hepta-4,6-dien-2-ino-1,5-diol



3-propil-hex-4-en-1ol



3-(2,2-dimetilbutil)-3-etilbut-1-eno-1,4-diol

www.yoquieroaprobar.es

Formula los siguientes compuestos (SOLUCIÓN) (8) SOL

Etanol

CH_3-CH_2OH

Etanodiol

$HO-CH_2-CH_2-OH$

2-propanol

$CH_3-CHOH-CH_3$

butan-1-ol

$CH_3-CH_2-CH_2-CH_2OH$

pentano-1,4-diol

$CH_2OH-CH_2-CH_2-CHOH-CH_3$

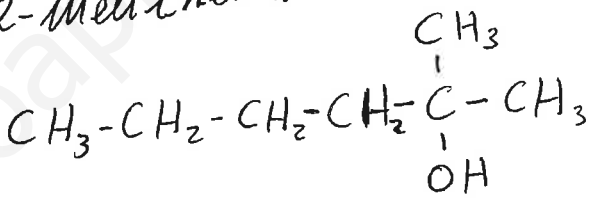
2-buten-1-ol (but-2-en-1-ol)

$HO-CH_2-CH=CH-CH_3$

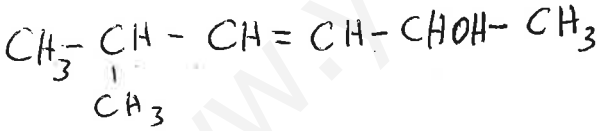
metanol

CH_3OH

2-metilhexan-2-ol

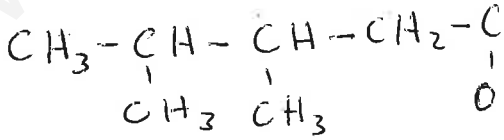


5-metilhex-3-en-2-ol

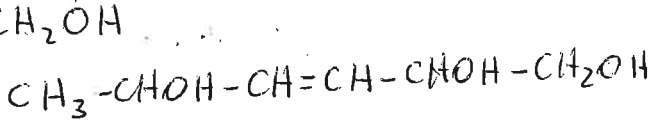


6,6-dimetilhept-4-in-2-ol

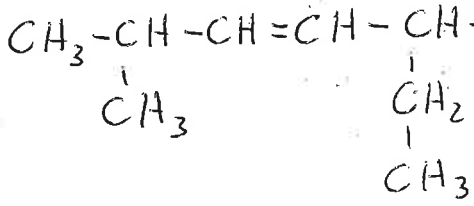
3,4-dimetilhexano-1,3-diol



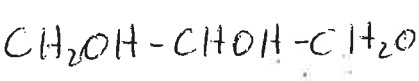
hex-3-eno-1,2,5-triol



2-etil-4-metilhex-3-en-1-ol



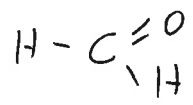
1,2,3-propanotriol
(glicerina o glicerol)



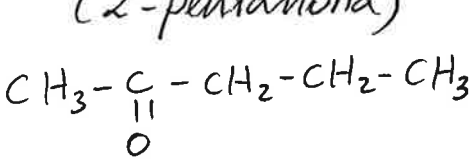
www.yoquieroaprobar.es

Escribe la fórmula de los siguientes compuestos. (9) SOL

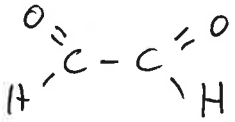
metanal



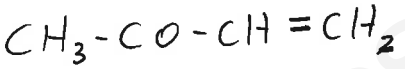
pentan-2-ona
(2-pentanona)



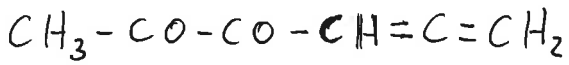
etanodial



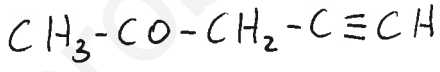
butenona



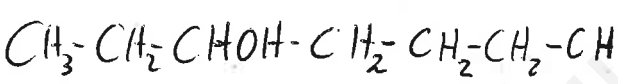
hexa-4,5-dien-2,3-diona



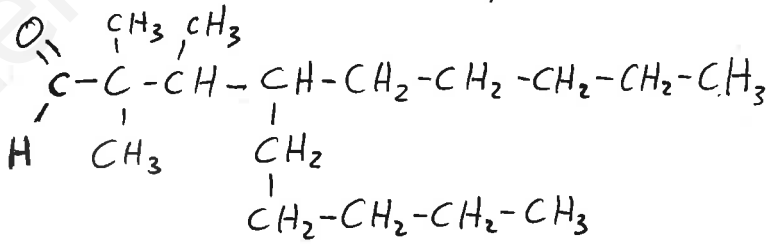
pent-4-in-2-ona



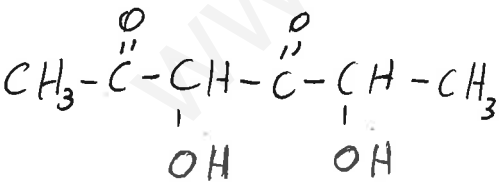
3-hidroxiheptanal



2,2,3-trimetil-4-pentilnonanal

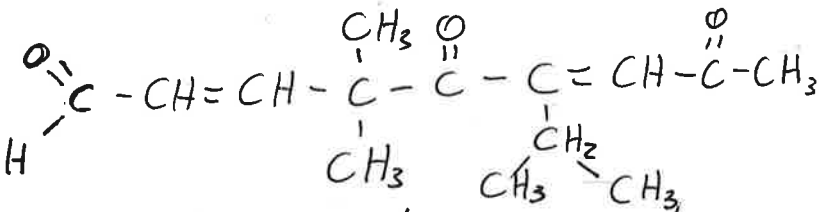


3,5-dihidroxi-2,4-hexanodiona

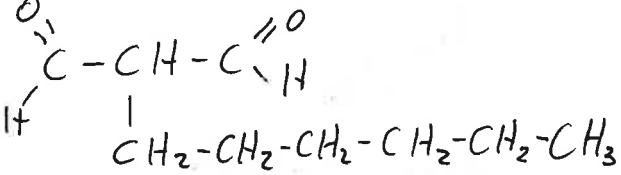


4,4-dimetil-6(metiletil)-5,8-dioxononа-2,6-dienal

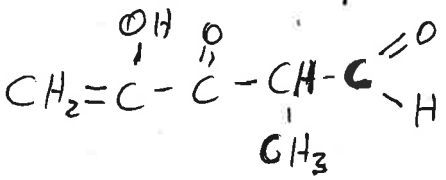
isopropil



hexilpropanodial

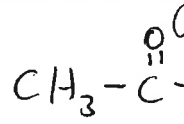


4-hidroxi-2-metil-3-oxopent-4-enal



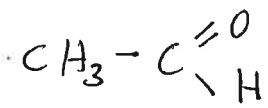
www.yoquieroaprobar.es

Nombra los siguientes compuestos (10) SOL



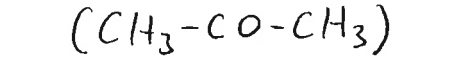
$(CH_3-CO-CH_3)$

propanona



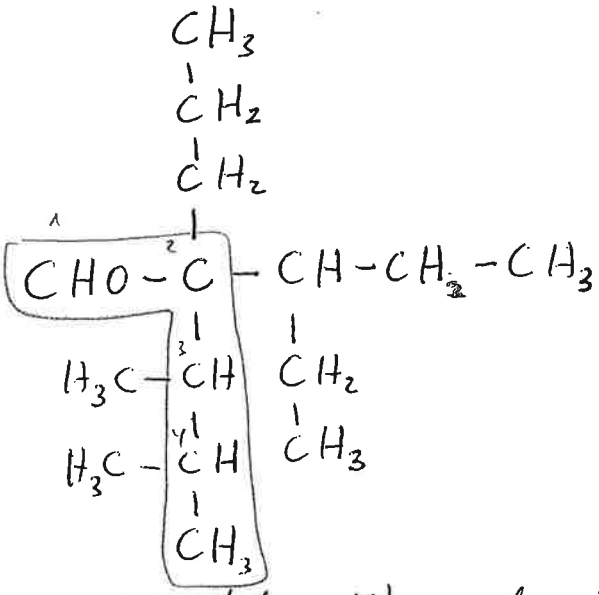
(CH_3-CHO)

etanal

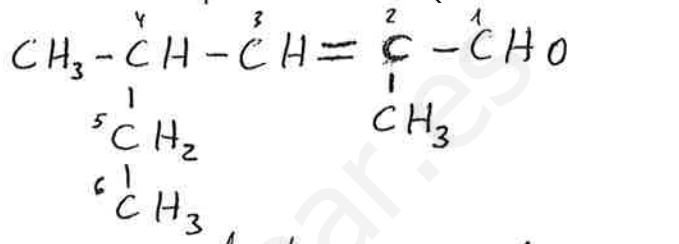


butanona

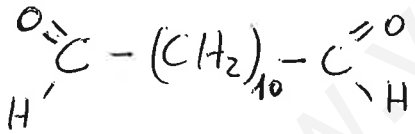
1-pentanol (pentan-1-ol)



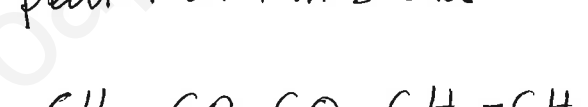
2-(1-etilpropil)-3,4-dimetil 2-propilpentanal.



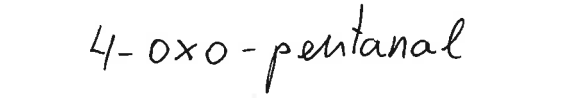
2,4-dimetilhex-2-enal



Dodecanodial



pent-1-en-4-in-3-ona

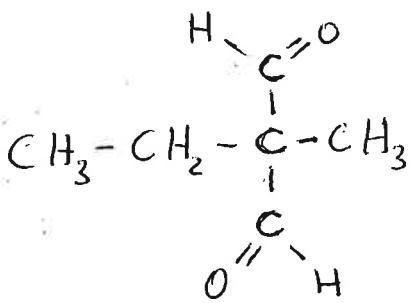


4-oxo-pentanal

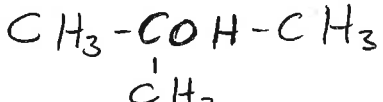
2,3-pentanodiona

3-hidroxi-5-metil-4-oxo hexa-2-enal

3-hidroxipent-4-enal



etil-metil-propanodial



metilpropan-2-ol

www.yoquieroaprobar.es

Escribe las fórmulas de los siguientes compuestos (11) Sol.

1) ácido metanoico (ácido fórmico)

$HCOOH$

2) ácido etanoico (acético)

$CH_3-C(=O)-OH$

3) ácido 3-metilbutanoico

$CH_3-CH(CH_3)-CH_2-C(=O)-OH$

4) ácido propenoico.

$CH_2=CH-COOH$

5) ácido hexanodioico (ácido adipídico)

$HO-C(=O)-(CH_2)_4-C(=O)-OH$

6) ácido 2-hidroxipropanoico (ácido láctico)

$CH_3-CHOH-COOH$

7) ácido 3-hidroxi-2-propilpentanodioico

$HO-C(=O)-CH(CH_2-CH_2-CH_3)-CH(OH)-CH_2-C(=O)-OH$

8) ácido 5,7-dioxohept-2-enoico

$H-C(=O)-CH_2-C(=O)-CH_2-CH=CH-C(=O)-OH$

9) propanamina

$CH_3-CH_2-CH_2-NH_2$

10) N-metilbutanamina

$CH_3-CH_2-CH_2-CH_2-NH-CH_3$

11) 2,N-dimetilpentanamina

$CH_3-CH_2-CH_2-CH(CH_3)-CH_2-NH-CH_3$

12) ácido 3-aminoheptanoico.

$CH_3-(CH_2)_3-CH(NH_2)-CH_2-COOH$

www.yoquieroaprobar.es

Escribe los nombres de los siguientes compuestos. (12) SOL.

13) $CH_3-(CH_2)_{12}-COOH$

ácido tetradecanoico

14) $HOOC-COOH$

ácido etanodioico
(ácido oxálico)

15) $CH_2=CH-CH_2-COOH$

ácido but-3-enoico

16) $CHO-CH_2-CO-CH_2OH$

4-hidroxi-3-oxobutanal.

17) $CH_3-CH_2-C(CH_2CH_3)(COOH)=C(COOH)-COOH$

ácido 2,3-dietilbut-2-enodioico

18) $HOOC-CH_2-CHO$

ácido 3-oxopropanoico.

19) $HOOC-CH=C(CH_3)-CH_2-CH_2-C(CH_3)=CH-CHO$

(olor a limón)

3,6-dimetilocta-2,6-dienodial

20) H_3CNH_2

metanamina

21) $CH_3-(CH_2)_7-CH=CH-(CH_2)_7-COOH$

(ácido oleico)

ácido octadec-9-enoico

22) $CH_3-CH_2-CH_2NH-CH_2-CH_3$

N-etilpropanamina

23) $CH_3-CH_2-N(CH_3)-CH_3$

N,N-dimetiletanamina

24) $CH_3-CH(NH_2)-CH_2-CH_3$

$CH_3-CH_2-CH(NH_2)-CH_3$

1-metilpropanamina

25) H_2NCH_2-COOH

ácido amino etanoico.

www.yoquieroaprobar.es