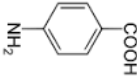
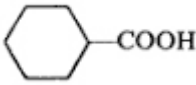
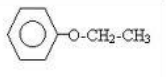
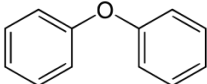
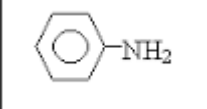
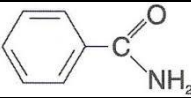


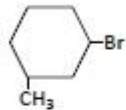


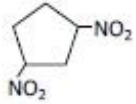
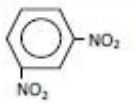
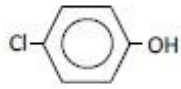
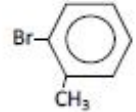
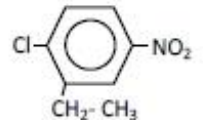
SOLUCIÓN A LOS EJERCICIOS DE FORMULACIÓN Y NOMENCLATURA DE QUÍMICA ORGÁNICA (1)

Nº	FÓRMULA	NOMBRE
1	$\text{CH}_3\text{CH}(\text{CH}_3)\text{CH}(\text{CH}_3)\text{CHCH}(\text{CH}_2\text{CH}_3)\text{CH}(\text{CH}_3)\text{CH}_2\text{CH}_3$	5-etil-2,3,6-trimetil-octano
2	$\text{CH}_2=\text{C}=\text{C}=\text{CH}_2$	Buta-1,2,3-trieno
3	$\text{CH}\equiv\text{CCH}(\text{CH}_2\text{CH}_3)\text{CH}_2\text{C}\equiv\text{CH}$	3-etil-hexa-1,5-dióno
4	$\text{CH}\equiv\text{CCH}_2\text{C}\equiv\text{CC}(\text{CH}_2\text{CH}_3)(\text{CH}_3)\text{CH}_2\text{CH}_3$	6-etil-6-metil-octa-1,4-dióno
5	$\text{CH}_2=\text{CHCH}(\text{CH}_3)\text{CH}_2\text{C}\equiv\text{CH}$	3-metil-hex-1-en-5-ino
6	$\text{CH}\equiv\text{CCH}=\text{C}(\text{CH}_3)\text{CH}(\text{CH}_3)\text{CH}=\text{CHCH}_3$	4,5-dimetil-octa-3,6-dien-1-ino
7	CHCl_3	Triclorometano o cloroformo
8	$\text{CH}_3\text{CHOHCH}=\text{CHCH}_3$	Pent-3-en-2-ol
9	$\text{HOCH}_2\text{CH}=\text{CHCH}_2\text{OH}$	But-2-eno-1,4-diol
10	$\text{CH}_3\text{CH}=\text{CHCHO}$	But-2-enal
11	$\text{CH}_3\text{CH}_2\text{C}(\text{CH}_3)_2\text{CHO}$	2,2-dimetil-butanal
12	$\text{CH}_3\text{CH}(\text{CH}_3)\text{COCH}_2\text{CH}_3$	2-metil-pentan-3-ona
13	$\text{CH}_3\text{CH}=\text{CHCOOH}$	Ácido but-2-enoico
14	$\text{HOOCCH}_2\text{COOH}$	Ácido propanodioico
15	$\text{CH}_3\text{COCH}_2\text{CH}_2\text{COOH}$	Ácido 4-oxo-pentanoico
16	$\text{CH}_3\text{CH}(\text{CH}_3)\text{COONa}$	2-metil-propanoato de sodio
17	$\text{CH}_3\text{CHOHCHOHCOOH}$	Ácido 2,3-dihidroxibutanoico
18	$\text{CH}_3\text{CH}_2\text{CHClCOOCH}_2\text{CH}_3$	2-cloro-butanoato de etilo
19	$\text{CH}_3\text{CH}(\text{CH}_3)\text{CONH}_2$	2-metil-propanamida

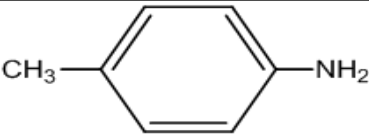
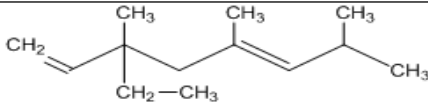
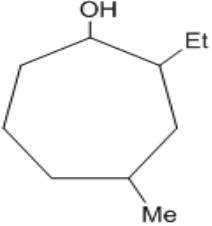
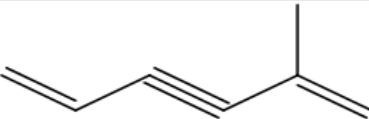
20	$\text{HCO-N(CH}_3)_2$	N,N-dimetilmetanamida
21	$\text{CH}_3\text{CH}_2\text{CH(NH}_2\text{)CH}_2\text{CH}_2\text{NH}_2$	Pentano-1,3-diamina
22	$\text{CH}_3\text{CH}_2\text{CH(NO}_2\text{)CH}_3$	2-nitrobutano
23	$\text{CH}_3\text{CH(CH}_3\text{)CH(CH}_3\text{)CH(CH}_3\text{)CH}_2\text{CH}_2\text{CH}_2\text{CH}_3$	2,3,4-trimetiloctano
24	$\text{CH}_2=\text{CHCH(CH}_2\text{CH}_3\text{)CH}_2\text{CH}=\text{CHCH}_3$	3-etil-hepta-1,5-dieno
25	$\text{CH}_3\text{CH}=\text{CHC(CH}_3\text{)(CH}_2\text{CH}_2\text{CH}_3\text{)CH}=\text{CHCH}=\text{CHCH}_3$	6-metil-6-propil-nona-2,4,7-trieno
26		Ácido p-aminobenzoico
27	$\text{CH}_3\text{CH}_2\text{CCl}_2\text{CH(CH}_2\text{CH}_3\text{)CH}_3$	2-etil-3,3-dicloropentano
28		Ácido ciclohexilmetanoico
29	$\text{CH}_2\text{OHCHOHCH}_2\text{OH}$	Propano-1,2,3-triol
30		Etil-fenil-éter
31	$\text{CH}_2=\text{C(CH}_3\text{)CHO}$	2-metil-prop-2-enal
32		Difenil-éter
33	$\text{CH}_3\text{CH}_2\text{C(CH}_3\text{)=CHCHO}$	3-metil-pent-2-enal
34	$\text{CH}_3\text{CH}=\text{CHCH(CH}_3\text{)COOH}$	Ácido 2-metil-pent-3-enoico
35		Bencenamina (anilina)
36	$\text{CH}_3\text{CHOHCH}_2\text{COOH}$	Ácido 3-hidroxi-butanoico
37	$\text{CH}_3\text{CH}_2\text{CH}_2\text{COOCH}_2\text{CH}_2\text{CH}_3$	Butanoato de propilo
38	$(\text{CH}_3)_3\text{N}$	Trimetilamina
39	$\text{H}_2\text{NCH}_2\text{CH}_2\text{CH}_2\text{CH}_2\text{NH}_2$	Butano-1,4-diamina
40		Benzamida
41	$\text{CH}_3\text{-(CH}_2\text{)}_6\text{-CONH}_2$	Octanamida
42	$\text{NO}_2\text{CH}_2\text{CH}_2\text{NO}_2$	1,2-dinitroetano

**SOLUCIÓN A LOS EJERCICIOS DE
FORMULACIÓN Y NOMENCLATURA DE QUÍMICA ORGÁNICA (2)**

FÓRMULA	NOMBRE	FÓRMULA	NOMBRE
$\begin{array}{c} \text{CH}_3\text{-CH}_2\text{-CH-CHI-CH}_2\text{-CH}_3 \\ \\ \text{CH}=\text{CH}_2 \end{array}$	3-etil-4-yodo-hex-1-eno	$\text{CHO-CH}_2\text{-C}\equiv\text{C-CH}_2\text{-CH}_3$	Hex-3-inal
	3-etil-but-3-en-2-ol	$\text{CH}_3\text{-CO-CH}_2\text{-CHI-CH}_3$	4-yodo-pentan-2-ona
$\begin{array}{c} \text{CH}_3\text{-CHOH-C}=\text{CH}_2 \\ \\ \text{CH}_2\text{-CH}_3 \end{array}$	2-etil-3-buten-2-ol	$\begin{array}{c} \text{CH}_3\text{-CH-CH}=\text{CH-CO-CH}_3 \\ \\ \text{CH}_2\text{-CH}_3 \end{array}$	5-metil-hept-3-en-2-ona
$\text{CH}_2\text{OH-CHCl-CHOH-CHCl}_2$	2,4,4-tricloro-butano-1,3-diol	$\begin{array}{c} \text{CH}_2=\text{CH-CH-COOH} \\ \\ \text{CH}_3 \end{array}$	Ácido 2-metil-but-3-enoico
$\text{CH}_3\text{-CH}_2\text{-CH}_2\text{-CH}_2\text{-O-CH}_2\text{-CH}_3$	Butil, etil éter	$\begin{array}{c} \text{CH}_3\text{-CH}_2\text{-CH-C}\equiv\text{C-COOH} \\ \\ \text{CH}_3 \end{array}$	Ácido 4-metil-hex-2-inoico
$\begin{array}{c} \text{CH}_2\text{Cl-CH}_2\text{-CH-CHO} \\ \\ \text{CH}_3 \end{array}$	4-cloro-2-metil-butanal	$\begin{array}{c} \text{CH}_3\text{-CH-CHCl-COO-CH}_2\text{-CH}_3 \\ \\ \text{CH}_3 \end{array}$	2-cloro-3-metil butanoato de etilo

FÓRMULA	NOMBRE	FÓRMULA	NOMBRE
$\text{CH}_3\text{-COO-CH}_2\text{-CH}_2\text{-CH}_3$	Etanoato de propilo	$\begin{array}{c} \text{CH}_2\text{-CH-CN} \\ \\ \text{CH}_2\text{-CH}_3 \end{array}$	2-etil-3-yodopropanonitrilo
$\text{CH}_3\text{-CH}_2\text{-CH}_2\text{-CH}_2\text{-NH-CH}_3$	Butil, metil amina		1,3-dinitrociclopentano
$\text{CH}_3\text{-CHCl-CONH}_2$	2-cloro propanamida		Metadinitrobenceno
$\begin{array}{c} \text{CH}_3\text{-CH-CONH-CH}_2\text{-CH}_2\text{-CH}_2\text{-CH}_3 \\ \\ \text{CH}_3 \end{array}$	N-butil metil propanamida		Paraclorofenol
$\begin{array}{c} \text{H-CONH-CH}_3 \\ \\ \text{CH}_2\text{-CH}_3 \end{array}$	N-etil, N-metil metanamida		Ortobromotolueno
CN-CHCl-CH=CH_2	2-cloro-but-3-enonitrilo		1-cloro-2-etil-4-nitrobenceno

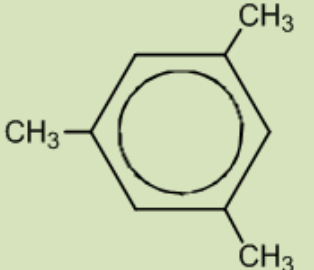
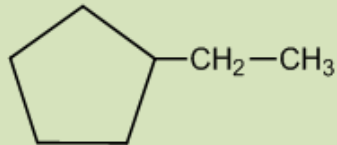
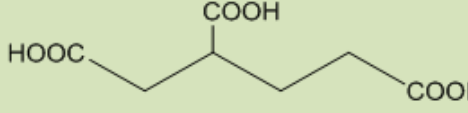
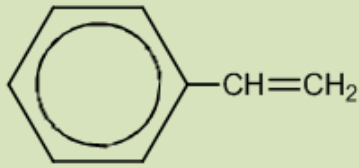
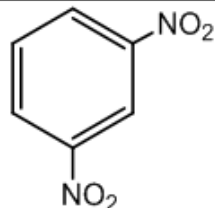
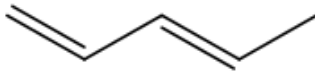
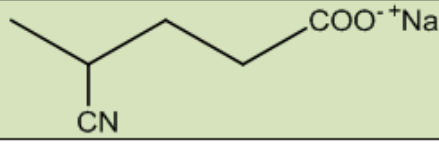
COMPUESTOS ORGÁNICOS 1

Nombre	Fórmula	Nombre	Fórmula
4-metilanilina		2,3-dimetilbut-2-eno	$\begin{array}{c} \text{CH}_3-\text{C}=\text{C}-\text{CH}_3 \\ \quad \\ \text{CH}_3 \quad \text{CH}_3 \end{array}$
N-metilacetamida	$\text{CH}_3-\text{CO}-\text{NH}-\text{CH}_3$	3-isopropilpent-1-en-4-ino	$\begin{array}{c} \text{CH}_3-\text{CH}-\text{CH}-\text{C}\equiv\text{CH} \\ \quad \\ \text{CH}_3 \quad \text{CH}=\text{CH}_2 \end{array}$
3-etil-3,5,7-trimetilocta-1,5-dieno		Prop-2-ol	$\begin{array}{c} \text{CH}_3-\text{CH}-\text{CH}_3 \\ \\ \text{OH} \end{array}$
2-etil-4-metilcicloheptanol		Butano-1,2,3-triol	$\text{CH}_2\text{OH}-\text{CHOH}-\text{CHOH}-\text{CH}_3$
3-yodopentanal	$\begin{array}{c} \text{CH}_3-\text{CH}_2-\text{CH}-\text{CH}_2-\text{CHO} \\ \\ \text{I} \end{array}$	Propanodial	$\text{OHC}-\text{CH}_2-\text{CHO}$
2-metilhexa-1,5-dien-3-ino		Butanodiona	$\begin{array}{c} \text{O} \quad \quad \text{O} \\ \quad \quad \\ \text{CH}_3-\text{C}-\text{C}-\text{CH}_3 \end{array}$
3-metilbutan-2-ona	$\begin{array}{c} \text{O} \\ \\ \text{CH}_3-\text{CH}-\text{C}-\text{CH}_3 \\ \\ \text{CH}_3 \end{array}$	Ácido 2,3-dioxopropanoico	$\begin{array}{c} \text{O} \quad \quad \text{O} \\ \quad \quad \\ \text{H}-\text{C}-\text{C}-\text{C}-\text{OH} \\ \\ \text{O} \end{array}$
N-metiletilamina	$\text{CH}_3-\text{NH}-\text{CH}_2-\text{CH}_3$	Hidroxiacetato de potasio	$\text{CH}_2\text{OH}-\text{COO}^-\text{K}$
3-metilpentano-2,4-diona	$\begin{array}{c} \text{O} \quad \quad \text{O} \\ \quad \quad \\ \text{CH}_3-\text{CO}-\text{CH}-\text{CO}-\text{CH}_3 \\ \\ \text{CH}_3 \end{array}$	Propanodien 1,3-diol	$\text{OH}-\text{CH}=\text{C}=\text{CH}-\text{OH}$

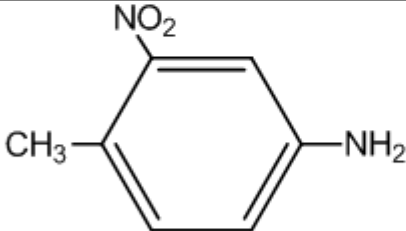
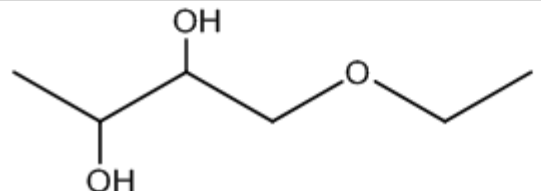
COMPUESTOS ORGÁNICOS 2

Nombre	Fórmula	Nombre	Fórmula
Ácido 3-carboximetil-2-metilpent-2-enodioico	$\begin{array}{c} \text{CH}_3 \\ \\ \text{HOOC}-\text{CH}-\text{CH}-\text{CH}_2-\text{COOH} \\ \\ \text{CH}_2-\text{COOH} \end{array}$	2-metilprop-1-eno	$\begin{array}{c} \text{CH}_3-\text{C}=\text{CH}_2 \\ \\ \text{CH}_3 \end{array}$
4-amino-5-metilheptan-2-ol	$\begin{array}{c} \text{CH}_3 \qquad \qquad \text{OH} \\ \qquad \qquad \qquad \\ \text{CH}_3-\text{CH}_2-\text{CH}-\text{CH}-\text{CH}_2-\text{CH}-\text{CH}_3 \\ \\ \text{NH}_2 \end{array}$	2-formilacetato de plata	$\text{CHO}-\text{COO}^- + \text{Ag}$
2,3-dimetil-but-1-eno	$\begin{array}{c} \text{CH}_3 \\ \\ \text{CH}_2=\text{C}-\text{CH}-\text{CH}_3 \\ \\ \text{CH}_3 \end{array}$	Etanoato de etilo	$\begin{array}{c} \text{O} \\ \\ \text{CH}_3-\text{C}-\text{O}-\text{CH}_2-\text{CH}_3 \end{array}$
3-etil-2,3-dimetilpenta-1,4-dieno		Etanodinitrilo	$\text{N}\equiv\text{C}-\text{C}\equiv\text{N}$
3-metilpentanodiona	$\begin{array}{c} \text{O} \qquad \qquad \text{O} \\ \qquad \qquad \\ \text{CH}_3-\text{C}-\text{CH}-\text{C}-\text{CH}_3 \\ \\ \text{CH}_3 \end{array}$	Ácido 2-ciano-2-metilpropanoico	$\begin{array}{c} \text{CH}_3 \\ \\ \text{CH}_3-\text{C}-\text{COOH} \\ \\ \text{CN} \end{array}$
3-etil-6,6-dimetilheptano-2,4-diol		Propanoato de ciclopropilo	$\text{CH}_3-\text{CH}_2-\text{COO}-\triangle$
2-etil-5-metilhex-4-enal		3-metilbutanoato de etilo	$\begin{array}{c} \text{CH}_3-\text{CH}-\text{CH}_2-\text{COO}-\text{CH}_2-\text{CH}_3 \\ \\ \text{CH}_3 \end{array}$
Ácido 3-oxopentanoico	$\text{CH}_3-\text{CH}_2-\text{C}(=\text{O})-\text{CH}_2-\text{COOH}$	Trimetilamina	$\begin{array}{c} \text{CH}_3 \\ \\ \text{CH}_3-\text{N}-\text{CH}_3 \end{array}$

COMPUESTOS ORGÁNICOS 3

Nombre	Fórmula	Nombre	Fórmula
1,3,5-trimetilbenceno		2-metilbut-2-en-1-ol	$\begin{array}{c} \text{CH}_3 \\ \\ \text{CH}_2-\text{C}=\text{CH}-\text{CH}_3 \\ \\ \text{OH} \end{array}$
dietiléter	$\text{CH}_3-\text{CH}_2-\text{O}-\text{CH}_2-\text{CH}_3$	3-hidroxiutanona	$\begin{array}{c} \text{CH}_3-\text{C}-\text{CH}-\text{CH}_3 \\ \quad \\ \text{O} \quad \text{OH} \end{array}$
etilciclopentano		Ácido butano-1,2,4-tricarboxílico	
isobutanoato de metilo	$\begin{array}{c} \text{CH}_3-\text{CH}-\text{COO}-\text{CH}_3 \\ \\ \text{CH}_3 \end{array}$	3-metilbut-2-enonitrilo	$\text{CH}_2=\text{CH}-\underset{\text{CH}_3}{\text{CH}}-\text{CN}$
estireno		1,3-dinitrobenceno	
2-metilbutan-1-ol	$\begin{array}{c} \text{CH}_3-\text{CH}_2-\text{CH}-\text{CH}_2\text{OH} \\ \\ \text{CH}_3 \end{array}$	N,N-dimetil-1-propanamina	$\begin{array}{c} \text{CH}_3-\text{N}-\text{CH}_2-\text{CH}_2-\text{CH}_3 \\ \\ \text{CH}_3 \end{array}$
penta-1,3-dieno		4-cianopentanoato de sodio	
N-clorometilpropanamida	$\text{CH}_3-\text{CH}_2-\overset{\text{O}}{\parallel}{\text{C}}-\text{NH}-\text{CH}_2-\text{Cl}$	2-bromo-3-nitrobutanal	$\begin{array}{c} \text{Br} \\ \\ \text{CH}_3-\text{CH}-\text{CH}-\text{CHO} \\ \\ \text{NO}_2 \end{array}$

COMPUESTOS ORGÁNICOS 4

Fórmula semidesarrollada	Grupo funcional principal	Nombre
$\begin{array}{c} \text{Cl} \\ \\ \text{CH}_3-\text{C}=\text{C}-\text{CH}_3 \\ \\ \text{Cl} \end{array}$	Halógeno	2,3-diclorobut-2-eno
$\text{CH}_2=\text{CH}-\text{CH}_2-\text{CHO}$	Aldehído	but-3-enal
$\begin{array}{c} \text{Br} \\ \\ \text{CH}_3-\text{C}-\text{OH} \\ \\ \text{CH}_3 \end{array}$	Alcohol	2-bromopropan-2-ol
	Amina	4-metil-3-nitroanilina
$\text{CH}_3-\text{CH}_2-\text{CO}-\text{NH}-\begin{array}{c} \text{CH}_3 \\ \\ \text{CH} \\ \\ \text{CH}_3 \end{array}$	Amida	N-isopropilpropanamida
	Alcohol	1-etoxibutano-2,3-diol