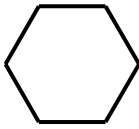
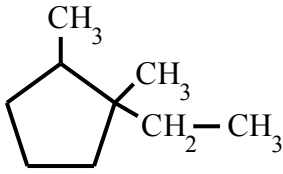
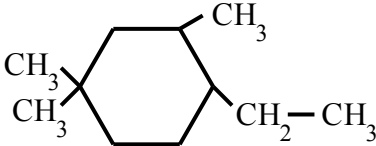
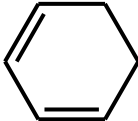
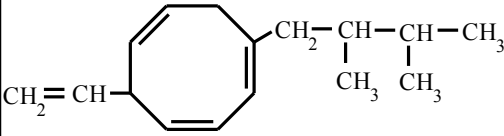
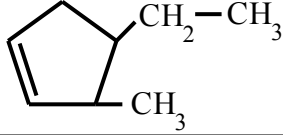
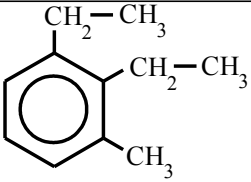
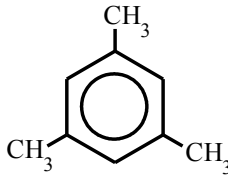
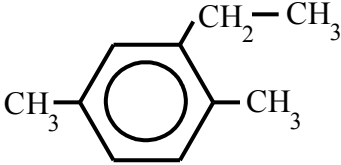
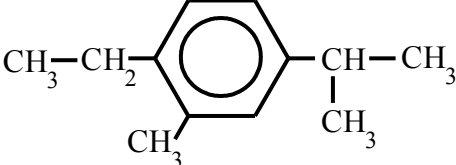
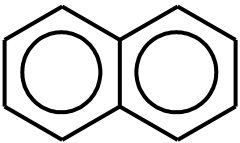
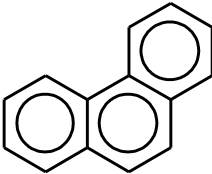
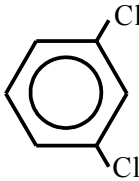
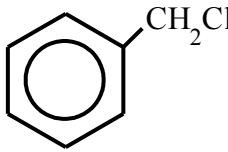
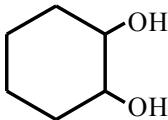
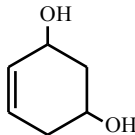
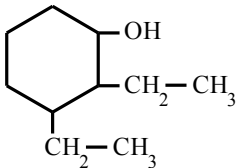
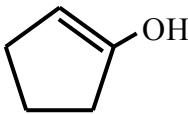
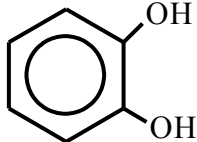
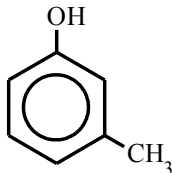
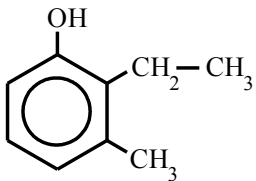
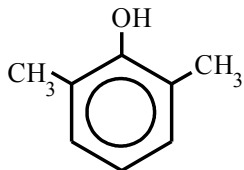
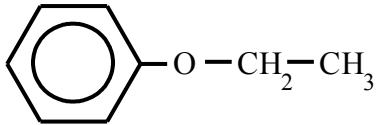
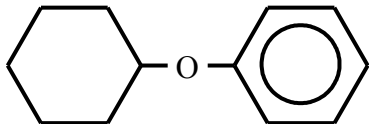

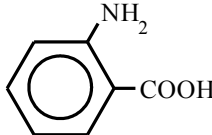
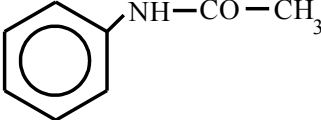
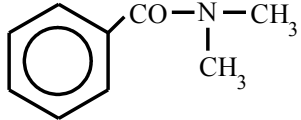
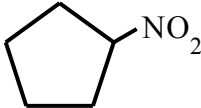


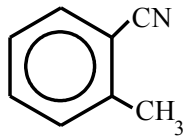
EXERCICIOS DE FORMULACIÓN ORGÁNICA:

1.	$\begin{array}{c} \text{CH}_3 - \text{CH} - \text{CH}_3 \\ \\ \text{CH}_3 \end{array}$	2.	$\begin{array}{c} \text{CH}_3 - \text{CH} - \text{CH}_2 - \text{CH}_3 \\ \\ \text{CH}_3 \end{array}$
3.	$\begin{array}{c} \text{CH}_3 \\ \\ \text{CH}_3 - \text{C} - \text{CH}_3 \\ \\ \text{CH}_3 \end{array}$	4.	$\begin{array}{c} \text{CH}_3 - \text{CH} - \text{CH}_2 - \text{CH}_2 - \text{CH}_3 \\ \\ \text{CH}_3 \end{array}$
5.	$\begin{array}{c} \text{CH}_3 - \text{CH} - \text{CH} - \text{CH}_3 \\ \quad \\ \text{CH}_3 \quad \text{CH}_3 \end{array}$	6.	$\begin{array}{c} \text{CH}_3 - \text{CH} - \text{CH}_2 - \text{CH}_2 - \text{CH}_3 \\ \\ \text{CH}_2 - \text{CH}_3 \end{array}$
7.	$\begin{array}{c} \text{CH}_2 - \text{CH}_3 \\ \\ \text{CH}_3 - \text{CH} - \text{CH} - \text{CH}_2 - \text{CH} - \text{CH}_3 \\ \quad \\ \text{CH}_3 \quad \text{CH}_2 - \text{CH}_2 - \text{CH}_3 \end{array}$	8.	$\begin{array}{c} \text{CH}_3 \quad \text{CH}_2 - \text{CH}_3 \\ \quad \\ \text{CH}_3 - \text{C} - \text{CH}_2 - \text{C} - \text{CH}_2 - \text{CH}_3 \\ \quad \\ \text{CH}_3 \quad \text{CH}_3 \end{array}$
9.	$\begin{array}{c} \text{CH}_3 \\ \\ \text{CH}_3 - \text{C} - \text{CH}_2 - \text{CH} - \text{CH}_3 \\ \quad \\ \text{CH}_3 \quad \text{CH}_3 \end{array}$	10.	$\begin{array}{c} \text{CH}_3 \quad \text{CH}_2 - \text{CH}_3 \\ \quad \\ \text{CH}_3 - \text{C} - (\text{CH}_2)_4 - \text{C} - \text{CH}_3 \\ \quad \\ \text{CH}_3 \quad \text{CH}_3 \end{array}$
11.	$\text{CH}_3 - \text{CH}_2 - \text{CH} = \text{CH}_2$	12.	$\text{CH}_3 - \text{CH} = \text{CH} - \text{CH}_2 - \text{CH}_3$
13.	$\text{CH}_2 = \text{CH} - \text{CH} = \text{CH}_2$	14.	$\text{CH}_2 = \text{CH} - \text{CH} = \text{CH} - \text{CH} = \text{CH}_2$
15.	$\begin{array}{c} \text{CH}_2 = \text{CH} - \text{CH}_2 - \text{CH} - \text{CH}_3 \\ \\ \text{CH}_3 \end{array}$	16.	$\begin{array}{c} \text{CH}_3 - \text{CH} - \text{CH} = \text{CH} - \text{C} = \text{CH}_2 \\ \quad \\ \text{CH}_2 - \text{CH}_3 \quad \text{CH}_3 \end{array}$
17.	$\begin{array}{c} \text{CH}_3 \\ \\ \text{CH}_3 - \text{C} - \text{CH} = \text{CH} - \text{C} = \text{CH}_2 \\ \quad \\ \text{CH}_3 \quad \text{CH}_2 - \text{CH}_3 \end{array}$	18.	$\begin{array}{c} \text{CH}_2 = \text{CH} - \text{CH} - \text{CH} = \text{CH} - \text{CH}_3 \\ \\ \text{CH}_2 - \text{CH}_2 - \text{CH}_3 \end{array}$
19.	$\text{CH} \equiv \text{C} - \text{CH}_2 - \text{CH}_2 - \text{CH}_3$	20.	$\begin{array}{c} \text{CH}_3 - \text{C} \equiv \text{C} - \text{CH} - \text{CH}_2 - \text{CH}_3 \\ \\ \text{CH}_3 \end{array}$
21.	$\begin{array}{c} \text{CH}_2 - \text{CH}_2 - \text{CH}_3 \\ \\ \text{CH} \equiv \text{C} - \text{CH} - \text{C} \equiv \text{C} - \text{CH} - \text{CH}_3 \\ \\ \text{CH}_3 \end{array}$	22.	$\begin{array}{c} \text{CH}_3 \\ \\ \text{CH}_3 - \text{CH} - \text{CH}_2 - \text{C} - \text{CH}_3 \\ \quad \\ \text{C} \equiv \text{CH} \quad \text{CH}_3 \end{array}$
23.	$\begin{array}{c} \text{CH} \equiv \text{C} - \text{CH} - \text{CH}_2 - \text{CH}_3 \\ \\ \text{CH}_2 - \text{C} \equiv \text{CH} \end{array}$	24.	$\begin{array}{c} \text{CH}_3 - \text{CH} - \text{C} \equiv \text{C} - \text{C} \equiv \text{C} \\ \quad \\ \text{CH}_2 - \text{CH}_3 \quad \text{CH}_3 - \text{CH} - \text{CH}_3 \end{array}$

25.	$\text{CH}_2=\text{CH}-\text{C}\equiv\text{CH}$	26.	$\text{CH}\equiv\text{C}-\text{CH}=\text{CH}-\text{CH}=\text{CH}_2$
27.	$\text{CH}_2=\text{CH}-\underset{\text{CH}_3}{\text{CH}}-\text{CH}_2-\text{C}\equiv\text{CH}$	28.	$\text{CH}\equiv\text{C}-\text{CH}=\text{CH}-\text{CH}_3$
29.		30.	
31.		32.	
33.		34.	
35.		36.	
37.		38.	
39.		40.	
41.	$\text{CH}_2\text{Cl}-\text{CH}_2-\text{CH}_2-\text{CH}_3$	42.	$\text{Cl}_2\text{C}=\text{CCl}_2$
43.	CH_3F	44.	CHCl_3
45.	$\text{CH}_3-\text{CH}=\text{CH}-\text{CH}_2\text{Br}$	46.	$\text{CH}_3-\text{CH}_2-\text{CH}=\text{CCl}-\text{CH}_3$
47.		48.	
49.	CF_2Cl_2	50.	$\text{CH}_3-\text{CHBr}-\text{CH}_3$

51.	$\text{CH}_3\text{---CHOH---CHOH---CH}_3$	52.	$\text{CH}_3\text{---CH=CH---CH}_2\text{OH}$
53.	$\text{CH}_3\text{---CH=CH---CHOH---CH}_3$	54.	$\text{CH}\equiv\text{C---CH=CH---CH}_2\text{---CH}_2\text{OH}$
55.	$\text{CH}_2\text{OH---CHOH---CH}_2\text{OH}$	56.	$\text{CH}_2\text{OH---CH---CH}_2\text{---CHOH---CH}_3$ CH_3
57.		58.	
59.		60.	
61.		62.	
63.		64.	
65.	$\text{CH}_3\text{---CH}_2\text{---O---CH}_2\text{---CH}_3$	66.	$\text{CH}_3\text{---CH---O---CH}_2\text{---CH}_3$ CH_3
67.		68.	$\text{CH}_3\text{---O---CH=CH}_2$
69.		70.	$\text{CH}_3\text{---CH---O---CH=CH---CH}_3$ CH_3
71.	$\text{CH}_3\text{---CH}_2\text{---CHO}$	72.	$\text{CH}_2\text{=CH---CHO}$
73.	$\text{CH}_3\text{---CH---CHO}$ CH_3	74.	$\text{CH}_3\text{---CH}_2\text{---C---CHO}$ CH_3
75.	$\text{CH}_3\text{---C}\equiv\text{C---CH}_2\text{---CH}_2\text{---CHO}$	76.	$\text{OHC---CH}_2\text{---CH=CH---CHO}$

77.	$\text{CH}_3\text{-CH}_2\text{-CO-CH}_2\text{-CH}_3$	78.	$\text{CH}_3\text{-CH}_2\text{-CO-CH(CH}_3\text{)-CH}_3$
79.	$\text{CH}_3\text{-CH}_2\text{-CH(CH}_2\text{-CH}_3\text{)-CO-CH}_3$	80.	$\text{CH}_2\text{=CH-CH}_2\text{-CO-CH}_3$
81.	$\text{CH}_3\text{-CO-CH}_2\text{-CH(CH}_3\text{)-CO-CH}_3$	82.	$\text{OHC-CH}_2\text{-CO-CH(CH}_2\text{-CH}_3\text{)-CHO}$
83.	$\text{CH}_3\text{-CH}_2\text{-CH}_2\text{-COOH}$	84.	$\text{CH}_3\text{-CH=CH-COOH}$
85.	$\text{CH}_3\text{-CH=CH-CH(CH}_3\text{)-COOH}$	86.	$\text{HOOC-CH}_2\text{-CH}_2\text{-COOH}$
87.		88.	$\text{HOOC-CH}_2\text{-C(OH)(COOH)-CH}_2\text{-COOH}$
89.	$\text{CH}_3\text{-COO-CH}_3$	90.	$\text{C}_6\text{H}_5\text{-COO-CH}_3$
91.	$\text{CH}_3\text{-CHOH-COOH}$	92.	$\text{CH}_3\text{-CO-CH}_2\text{-CH}_2\text{-COOH}$
93.	$\text{CH}_3\text{-CH}_2\text{-NH}_2$	94.	$\text{CH}_3\text{-CH}_2\text{-CH}_2\text{-NH-CH}_2\text{-CH}_3$
95.	$\text{CH}_3\text{-CH}_2\text{-CH}_2\text{-N(CH}_3\text{)-CH}_2\text{-CH}_3$	96.	$\text{NH}_2\text{-CH}_2\text{-CH}_2\text{OH}$
97.	$\text{CH}_3\text{-CH}_2\text{-CH(NH}_2\text{)-COOH}$	98.	
99.	$\text{CH}_3\text{-CH}_2\text{-CO-NH}_2$	100.	
101.		102.	$\text{CH}_3\text{-CO-N(CH}_3\text{)-CO-CH}_3$
103.	$\text{CH}_3\text{-CH(CH}_3\text{)-NO}_2$	104.	$\text{CH}_3\text{-CH=CH-NO}_2$
105.	$\text{CH}_3\text{-CH(NO}_2\text{)-CH}_2\text{-CH}_3$	106.	

107.	$\text{CH}_3-\text{CH}_2-\text{CH}_2-\text{CN}$	108.	$\text{CH}_2=\text{CH}-\text{CN}$
109.	$\begin{array}{c} \text{CH}_3-\text{CH}_2-\text{CH}-\text{CN} \\ \\ \text{CH}_2-\text{CH}_3 \end{array}$	110.	

1.	Metilpropano	2.	2-metilbutano o isopentano
3.	2,2-dimetilpropano o neopentano	4.	2-metilpentano o isohexano
5.	2,3-dimetilbutano	6.	3-metilhexano
7.	5-isopropil-3-metiloctano	8.	4-etil-2,2,4-trimetilhexano
9.	2,2,4-trimetilpentano	10.	2,2,7,7-tetrametilnonano
11.	1-buteno o but-1-eno	12.	2-penteno o pent-2-eno
13.	1,3-butadieno o but-1,3-dieno	14.	1,3,5-hexatrieno o hexa-1,3,5-trieno
15.	4-metil-1-penteno o 4-metilpent-1-eno	16.	2,5-dimetil-1,3-heptadieno o 2,5-dimetilhepta-1,3-dieno
17.	2-etil-5,5-dimetil-1,3-hexadieno o 2-etil-5,5-dimetilhexa-1,3-dieno	18.	3-propil-1,4-hexadieno o 3-propilhexa-1,4-dieno
19.	1-pentino o pent-1-ino	20.	4-metil-2-hexino o 4-metilhex-2-ino
21.	6-metil-3-propil-1,4-heptadieno o 6-metil-3-propilhepta-1,4-dieno	22.	3,5,5,-trimetil-1-hexino o 3,5,5,-trimetilhex-1-ino
23.	3-etil-1,5-hexadieno o 3-etilhexa-1,5-dieno	24.	2,7-dimetil-3,5-nonadieno o 2,7-dimetilnona-3,5-dieno
25.	1-buten-3-ino o but-1-en-3-ino	26.	1,3-hexadien-5-ino o hexa-1,3-dien-5-ino
27.	3-metil-1-hexen-5-ino o 3-metilhex-1-en-5-ino	28.	3-penten-1-ino o pent-3-en-1-ino
29.	Ciclohexano	30.	1-etil-1,2-dimetil-ciclopentano
31.	4-etil-1,1,3-trimetil-ciclohexano	32.	1,3-ciclohexadieno o ciclohexa-1,3-dieno
33.	1-(2,3-dimetilbutil)-5-vinil-1,3,6-ciclooctatrieno	34.	4-etil-3-metilciclopenteno
35.	1,2-dietil-3-metilbenceno	36.	1,3,5-trimetilbenceno
37.	2-etil-1,4-dimetilbenceno	38.	1-etil-4-isopropil-2-metilbenceno
39.	Naftaleno	40.	Fenantreno
41.	1-clorobutano	42.	Tetracloroetileno o percloroeteno
43.	Fluorometano	44.	Triclorometano o cloroformo
45.	1-bromo-2-buteno	46.	2-cloro-2-penteno
47.	1,3-diclorobenceno ou m-diclorobenceno	48.	Clorometilbenceno
49.	Diclorodifluormetano	50.	2-bromopropano
51.	2,3-butanodiol o butano-2,3-diol	52.	2-buten-1-ol o but-2-en-1-ol
53.	3-penten-2-ol o pent-3-en-2-ol	54.	3-hexen-5-in-1-ol o hex-3-en-5-in-1-ol
55.	1,2,3-propanotriol o propano-1,2,3-triol o glicerol	56.	2-metil-1,4-pentanodiol o 2-metilpentano-1,4-diol
57.	1,2-ciclohexanodiol o ciclohexano-1,2-diol	58.	4-ciclohexen-1,3-diol o ciclohex-4-en-1,3-diol

59.	2,3-dietilciclohexanol	60.	1-ciclopentenol o ciclopent-1-enol
61.	1,2-bencenodiol o benceno-1,2-diol	62.	3-metilfenol
63.	2-etil-3-metil-hidroxibenceno	64.	2,6-dimetil-hidroxibenceno
65.	Dietil éter o etoxietano	66.	Etil isopropil éter o 2-etoxipropano
67.	Etoxibenceno	68.	Metoxieteno
69.	Ciclohexil fenil éter	70.	isopropil 1-propenil éter
71.	Propanal	72.	Propenal
73.	Metilpropanal	74.	2,2-dimetilbutanal
75.	4-hexinal	76.	2-pentendial
77.	Dietilcetona o 3-pentanona	78.	2-metil-3-pentanona
79.	3-etil-2-pentanona	80.	4-penten-2-ona o pent-4-en-2-ona
81.	3-metil-2,5-hexanodiona o 3-metilhexano-2,5-diona	82.	2-etil-3-oxo-pentanodial
83.	Ácido butanoico	84.	Ácido 2-butenóico
85.	Ácido 2-metil-3-pentenoico	86.	Ácido butanodíoico
87.	Ácido 1,4-bencenodicarboxílico o ácido p-bencenodicarboxílico	88.	Ác. 2-hidroxi-1,2,3-propano-tricarboxílico ou ác. cítrico
89.	Etanoato de metilo	90.	Benzoato de metilo
91.	Ácido 2-hidroxiopropanoico ou ácido láctico	92.	Ácido 4-oxopentanoico
93.	Etilamina	94.	N-etilpropilamina
95.	N-etil-N-metilpropilamina	96.	2-aminoetanol
97.	Ácido 2-aminobutanoico	98.	Ácido o-aminobenzoico
99.	Propanamida	100.	N-feniletanamida
101.	N,N-dimetilbencenocarboxiamida	102.	Trietanamida
103.	2-nitropropano	104.	1-nitro-1-propeno
105.	2-nitrobutano	106.	Nitrociclopentano
107.	Butanonitrilo	108.	2-propenonitrilo
109.	2-etilbutanonitrilo	110.	2-metilbencenocarbonitrilo