

Solution de la série de TD N°6 (Chapitre VI : Chimie organique (Composés organiques, formules, fonctions, Nomenclature))

Exercice N°1 :

1) Dessinez la formule développée des molécules suivantes :

أرسم الصيغة المفصلة للجزيئات التالية:

a) $(\text{CH}_3)_2\text{CHCH}_2\text{OH}$	b) $\text{CH}_3\text{CCl}_2\text{CH}_3$

2) Dessinez la formule topologique (zig-zag) des molécules ci-dessous :

أرسم الصيغة الهيكلية (zig-zag) للجزيئات أدناه:

a) $\text{CH}_3(\text{C}=\text{CH}_2)\text{CH}_2\text{CH}_3$	b) $\text{CH}_3\text{CH}_2\text{CH}=\text{CHCH}_2\text{CH}(\text{CH}_3)_2$

Exercice N°2 :

Donnez la formule semi-développée des produits suivants :

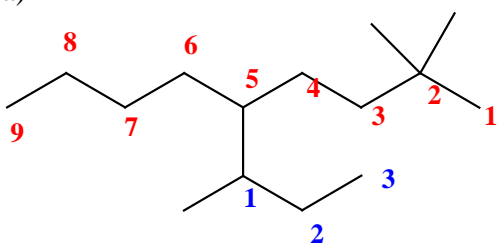
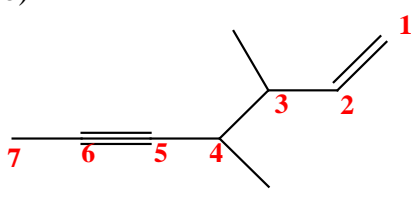
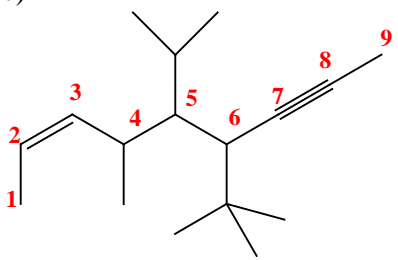
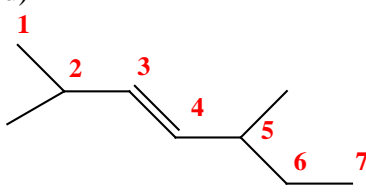
أرسم الصيغة نصف مفصلة للمركبات التالية:

a) hexa-1,3-diène $\text{CH}_2=\text{CH}-\text{CH}=\text{CH}-\text{CH}_2-\text{CH}_3$	b) hept-2-yne-4-ène $\text{CH}_3-\text{C}\equiv\text{C}-\text{CH}=\text{CH}-\text{CH}_2-\text{CH}_3$
c) octa-1,3,5-trién-7-yne $\text{CH}_2=\text{CH}-\text{CH}=\text{CH}-\text{CH}=\text{CH}-\text{C}\equiv\text{CH}$	d) cyclo hexyne

Exercice N°3 :

Nommez les molécules suivantes selon les règles de l'IUPAC :

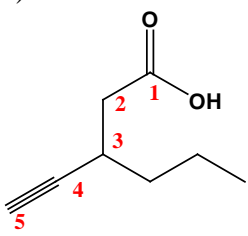
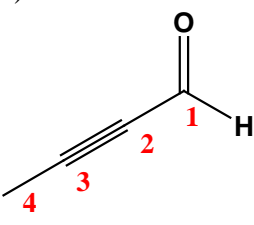
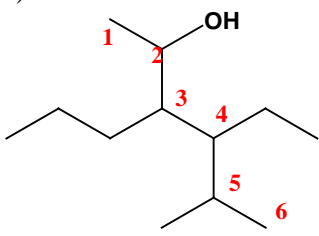
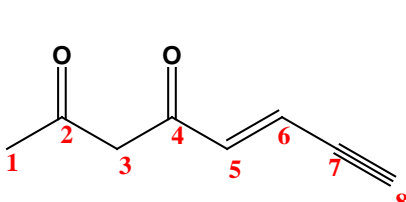
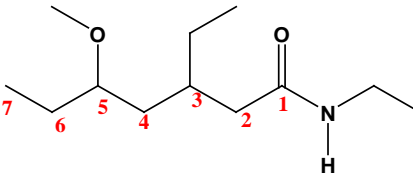
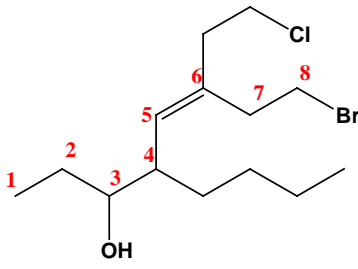
قم بتسمية الجزيئات التالية وفقاً لقواعد IUPAC:

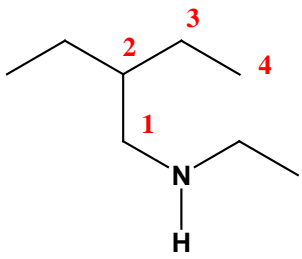
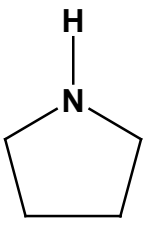
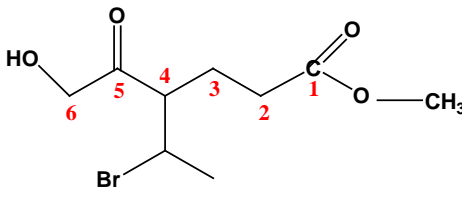
<p>a)</p>  <p>2,2-diméthyl-5-(1-méthylpropyl) nonane</p>	<p>b)</p>  <p>3,4-diméthylhept-1-èn-5-yne</p>
<p>c)</p>  <p>6-tert-butyl-5-isopropyl-4-méthyl non-2-èn-7-yne</p>	<p>d)</p>  <p>2,5-diméthylhept-3-éne</p>

Exercice N°4 :

Nommez les molécules suivantes selon les règles de l'IUPAC :

قم بتسمية الجزيئات التالية وفقاً لقواعد IUPAC:

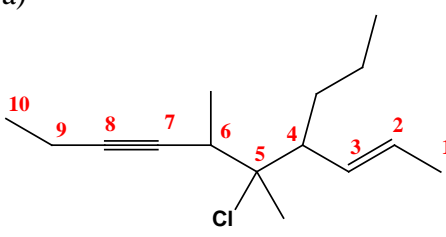
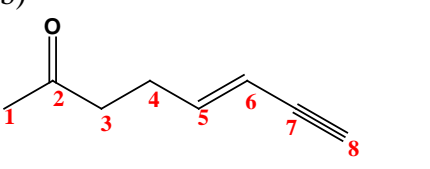
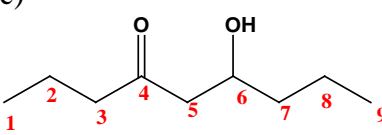
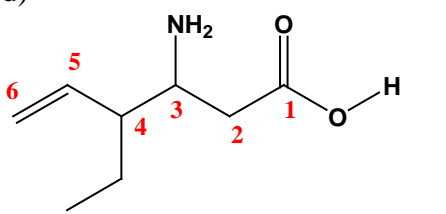
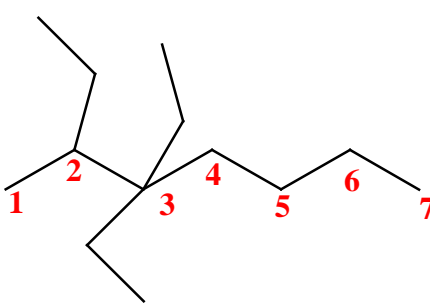
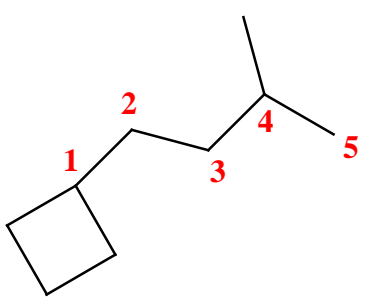
<p>a)</p>  <p>Acide 3-propylpent-4-ynoïque</p>	<p>b)</p>  <p>But-2-ynal.</p>	<p>c)</p>  <p>4-éthyl 5-méthyl 3-propyl hexan-2-ol</p>
<p>d)</p>  <p>Oct-5-en-7-yne-2,4-dione.</p>	<p>e)</p>  <p>N-éthyl-3-éthyl-5-méthoxy heptanamide</p>	<p>f)</p>  <p>8-Bromo 4-butyl 6-(2-chloroéthyl) oct-5-èn-3-ol</p>

<p>g)</p>  <p>N,2-diéthylbutan-1-amine.</p>	<p>h)</p>  <p>Azacyclo pentane</p>	<p>i)</p>  <p>4-(1-bromoéthyl)-6-hydroxy -5-oxo hexanoate de méthyl</p>
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Exercice N°5 :

Dessinez la formule topologique (zig-zag) des molécules ci-dessous :

أرسم الصيغة الهيكلية (zig-zag) للجزيئات أدناه:

<p>a)</p>  <p>5-chloro 5,6-diméthyl 4-propyl-déc-2-èn-7-yne</p>	<p>b)</p>  <p>Oct-5-én-7-yn-2-one</p>	<p>c)</p>  <p>6-hydroxy nonan-4-one.</p>
<p>d)</p>  <p>Acide 3-amino-4-éthylhex-5-énoïque</p>	<p>e)</p>  <p>2,3,3-triéthylheptane</p>	<p>f)</p>  <p>1-cyclobutyl-4-méthylpentane</p>

Pr. BOUANIMBA N.