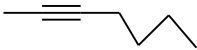
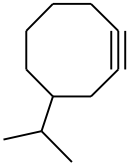


Alkyne Nomenclature

1. Find the longest continuous C chain that includes the $C\equiv C$ bond. The number of C's in this chain gives the root name, with the -yne suffix. (Cyclo- prefix used if the longest chain is a ring.)
2. Number the C chain so that the triple bond will be designated with the lowest number rather than a substituent (i.e., $C\equiv C$ has a higher priority than a substituent).
 - If there are two options with the same number of C's, choose the numbering which gives the lower number for a substituent at the first instance of difference.
3. Indicate the position of the triple bond and the substituents by number location. Substituents and their locations precede the location of the triple bond and the root name.
 - $C\equiv C$ involves sequentially numbered C/s, but only the lower number is noted.
 - If a mono-substituted ring, the $C\equiv C$ is between C1 & C2 and is not overtly designated by number location. (For an unsubstituted ring, there is no number location.)
4. A compound with $C=C$ & $C\equiv C$ is an enyne. Number these from the end nearer the first multiple bond. If there is a choice, the double bond is designated with the lower number.

$\begin{array}{c} \text{CH}_3 \\ \\ \text{CH}_3\text{CH}_2\text{CHCH}_2\text{C}\equiv\text{CCH}_2\text{CH}_3 \end{array}$ <p>6-Methyl-3-optyne OR 6-Methyloct-3-yne</p>	 <p>2-Heptyne OR Hept-2-yne</p>
$\text{HC}\equiv\text{CCH}_2\text{CH}_2\text{CH}_2\text{CH}=\text{CH}_2$ <p>1-Hepten-6-yne OR Hept-1-en-6-yne</p> <p>Note, $C=C$ is higher priority w/ numbering, but suffix is yne</p>	 <p>4-Isopropylcyclooctyne</p>