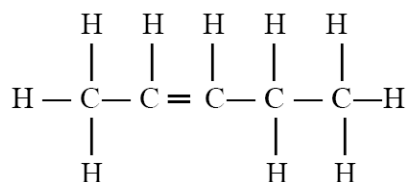
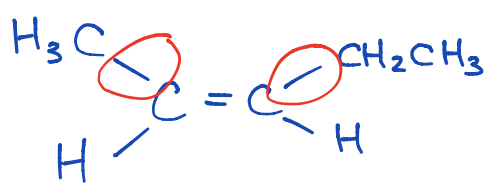
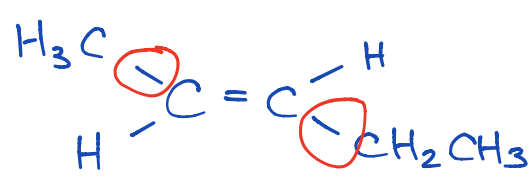


## Naming and Drawing Alkenes Worksheet and Key

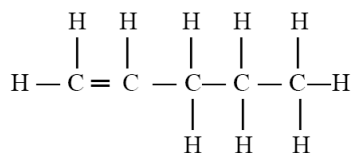
1) Draw and name the *cis* and *trans* condensed structure of:



<p><i>cis</i> condensed structure:</p> 	<p><i>trans</i> condensed structure:</p> 
<p>name: <u>cis - 2 - pentene</u></p>	<p>name: <u>trans - 2 - pentene</u></p>

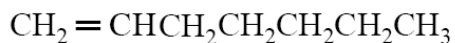
2. Name the following alkenes (include cis- or trans- for the alkenes that when appropriate)

a)



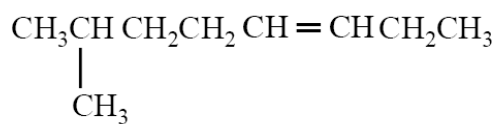
Name: 1 - pentene

b)



Name: 1 - heptene

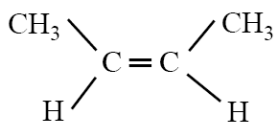
c)



Name: 7 - methyl - 3 - octene

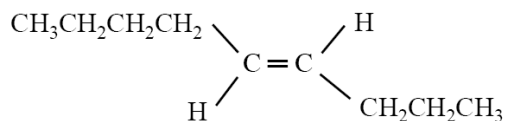
Be careful to correctly identify carbon #1.....

d)



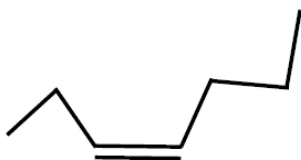
Name: cis - 2 - butene

e)



Name: trans-4-nonene

f)



Name: cis-3-heptene

3. Draw the line bond, condensed, and skeletal structure of the following alkenes.

a) 1-hexene

line-bond structure	condensed structure	skeletal structure
$\begin{array}{cccccc} \text{H} & \text{H} & \text{H} & \text{H} & \text{H} & \text{H} \\   &   &   &   &   &   \\ \text{H}-\text{C} & =\text{C} & -\text{C} & -\text{C} & -\text{C} & -\text{C}-\text{H} \\   & &   &   &   &   \\ \text{H} & & \text{H} & \text{H} & \text{H} & \text{H} \end{array}$	$\text{H}_2\text{C}=\text{CHCH}_2\text{CH}_2\text{CH}_2\text{CH}_3$	

b) 2-methyl-4-isopropyl-1-nonene

line-bond structure	condensed structure	skeletal structure
$\begin{array}{cccccccc} & & \text{H} & & & & & & \\ & &   & & & & & & \\ \text{H} & \text{H} & \text{H} & \text{H} & \text{H} & \text{H} & \text{H} & \text{H} & \\   &   &   &   &   &   &   &   & \\ \text{H}-\text{C} & =\text{C} & -\text{C} & -\text{C} & -\text{C} & -\text{C} & -\text{C} & -\text{C} & -\text{H} \\   & &   &   &   &   &   &   & \\ \text{H} & & \text{H} & \text{H} & \text{H} & \text{H} & \text{H} & \text{H} & \\ & &   & & & & & & \\ & & \text{H} & \text{C} & -\text{C} & -\text{C} & -\text{H} & & \\ & &   &   &   & & & & \\ & & \text{H} & \text{H} & \text{H} & & & & \end{array}$	$\begin{array}{c} \text{CH}_3 \\   \\ \text{H}_2\text{C}=\text{CCH}_2\text{CH}(\text{CH}_2\text{CH}_2\text{CH}_2\text{CH}_2\text{CH}_3) \\   \\ \text{H}_3\text{CCHCH}_3 \end{array}$	

c) cis-2-hexene

line-bond structure	condensed structure	skeletal structure
$\begin{array}{cccc} \text{H} & \text{H} & \text{H} & \text{H} \\   &   &   &   \\ \text{H}-\text{C} & -\text{H} & \text{H} & -\text{C} & -\text{C} & -\text{H} \\   &   &   &   &   \\ \text{H} & & \text{H} & \text{H} & \text{H} \\ & &   & & \\ & & \text{H} & & \\ & &   & & \\ & & \text{H} & & \end{array}$	$\begin{array}{c} \text{H}_3\text{C} \quad \text{CH}_2\text{CH}_2\text{CH}_3 \\ \diagdown \quad \diagup \\ \text{C}=\text{C} \\ \diagup \quad \diagdown \\ \text{H} \quad \text{H} \end{array}$	