



INVESTICE DO ROZVOJE VZDĚLÁVÁNÍ

Alkeny a alkadieny - názvosloví

Temacká oblast : Chemie - organická chemie

Datum vytvoření: 11. 7. 2012

Ročník: 2. ročník čtyřletého gymnázia (sexta osmiletého gymnázia)

Stručný obsah: Principy systematického a triviálního názvosloví alkenů, alkadienů a uhlovodíkových zbytků.

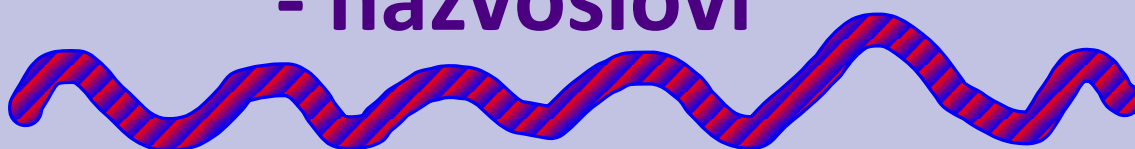
Způsob využití : Aktivní práce studentů při tvorbě názvů a vzorců alkenů a alkadienů, uplatnění znalostí principů názvosloví organických sloučenin.

Autor: Mgr. Svatava Benešová

Kód: VY_32_INOVACE_29_HBEN06

Gymnázium a Jazyková škola s právem státní jazykové zkoušky Zlín

Alkeny a alkadieny - názvosloví



- 1) Alkeny nerozvětvené
- 2) Alkeny rozvětvené
Alkenyly
- 3) Alkadieny nerozvětvené
- 4) Alkadieny rozvětvené

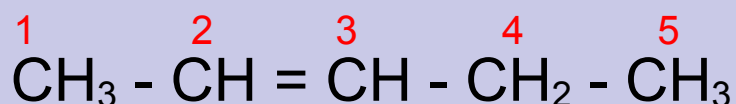
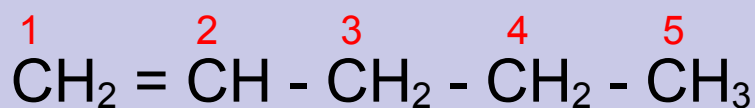
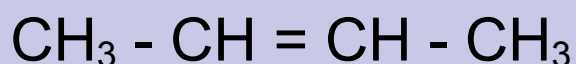
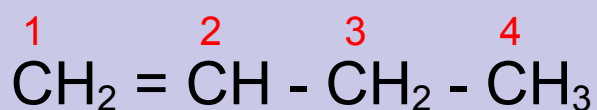
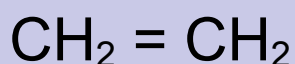
Alkeny - názvosloví

definice:

- obecný vzorec alkenů:

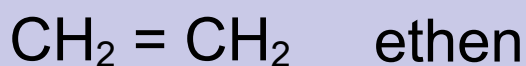
$n = 2, 3, 4, \dots, x$

- koncovka názvu alkenů:

Přiřad' ke vzorcům názvy:

triviálně: propylen propen but - 1 - en
 triviálně: ethylen pent - 1 - en ethen
 pent - 2 - en but - 2 - en

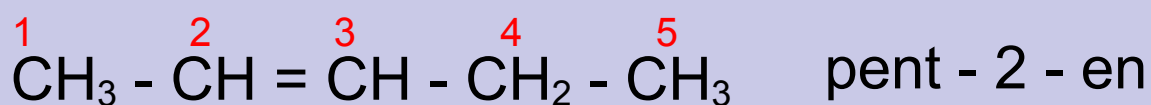
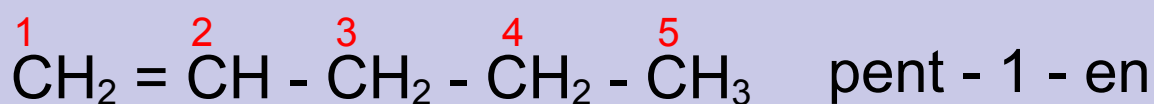
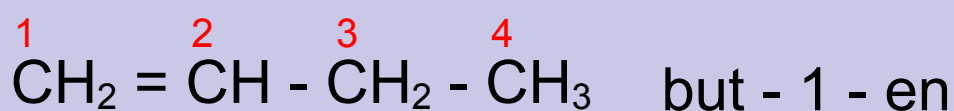
Řešení:



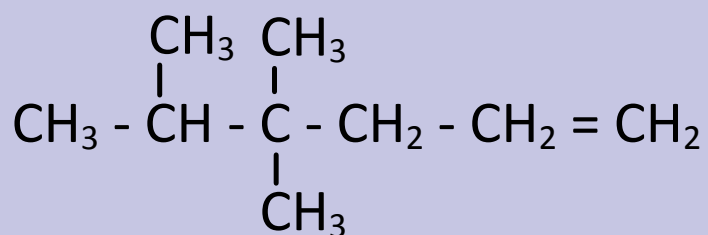
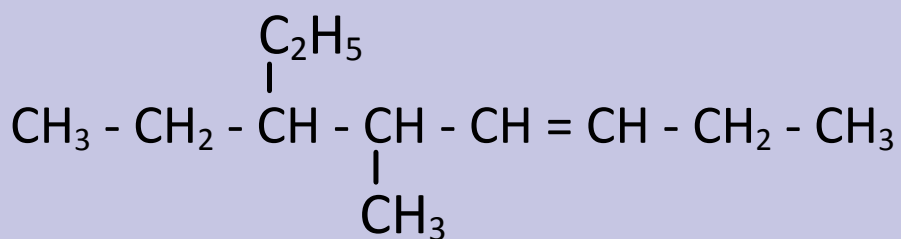
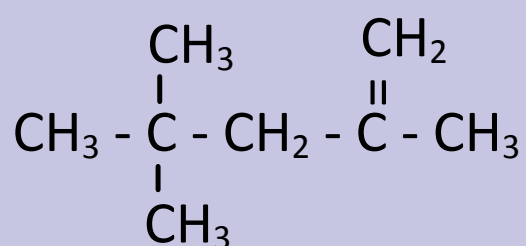
triviálně: ethylen



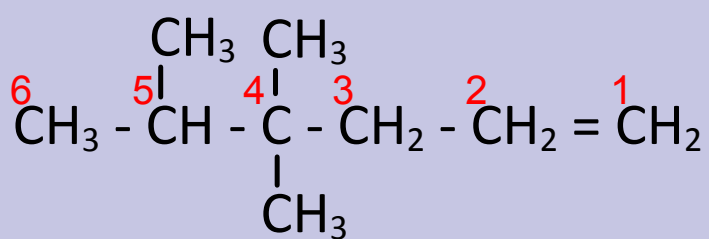
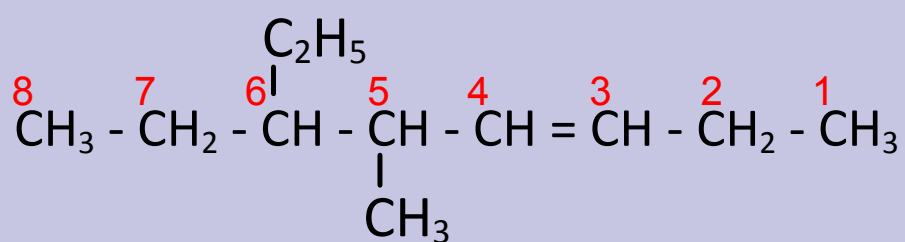
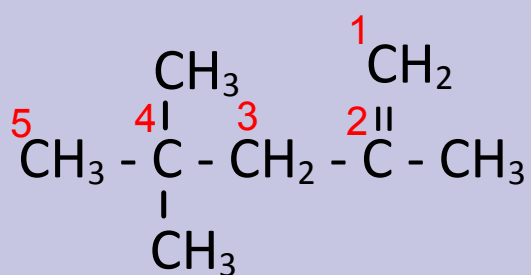
triviálně: propylen



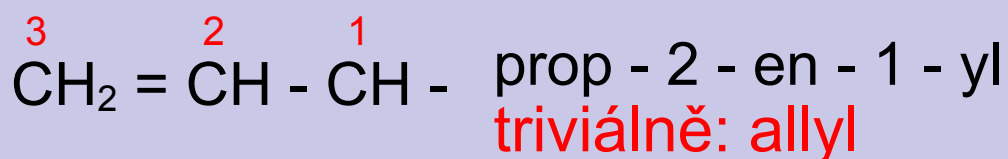
Očísľuj správně hlavní řetězce alkenů:



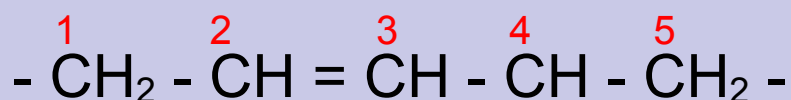
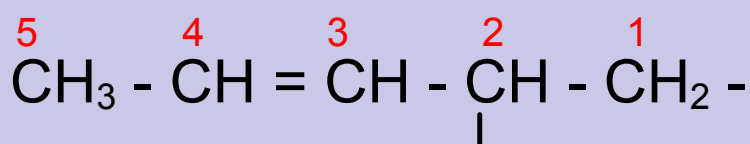
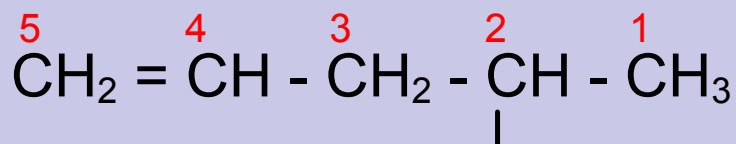
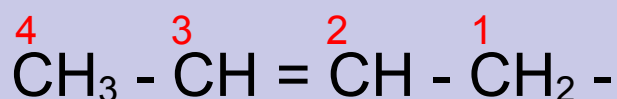
řešení:

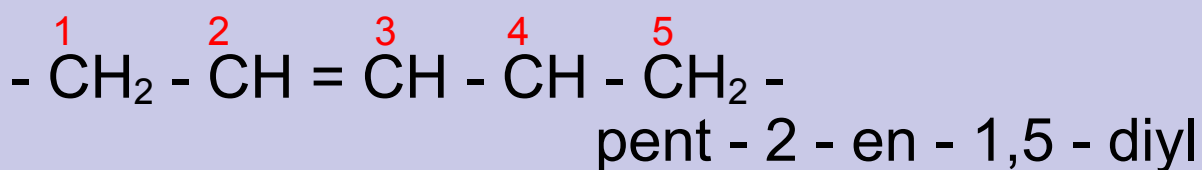
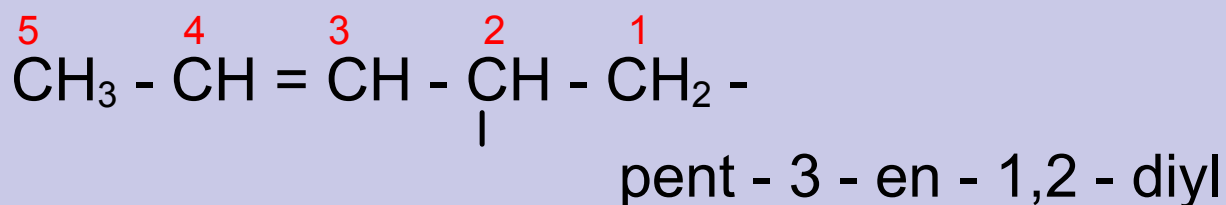
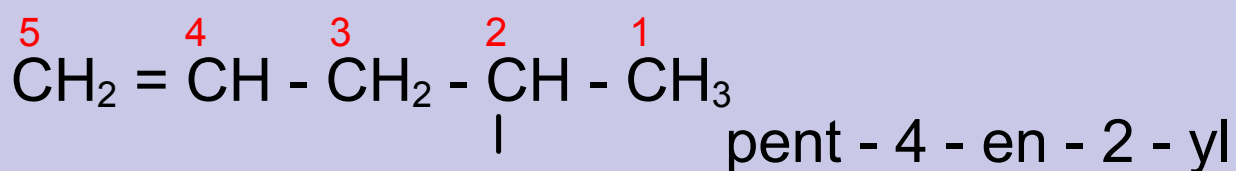
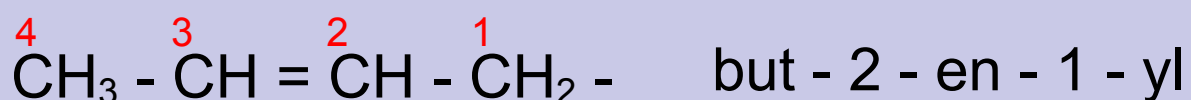


Alkenyly

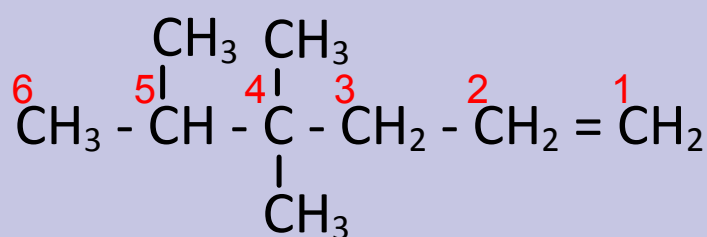
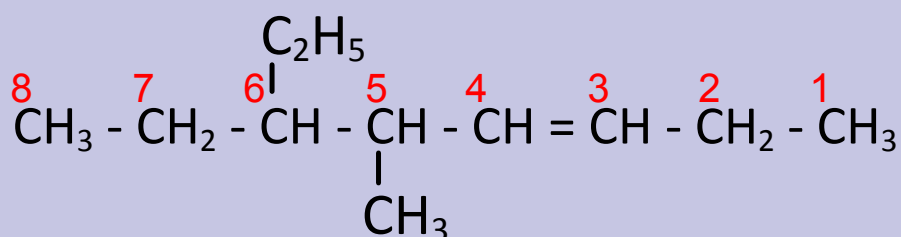
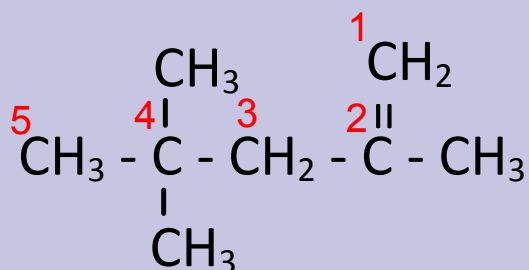


Vytvoř názvy:

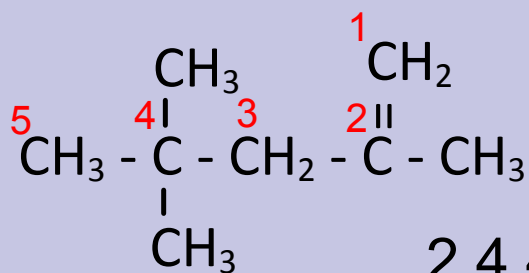


Řešení:

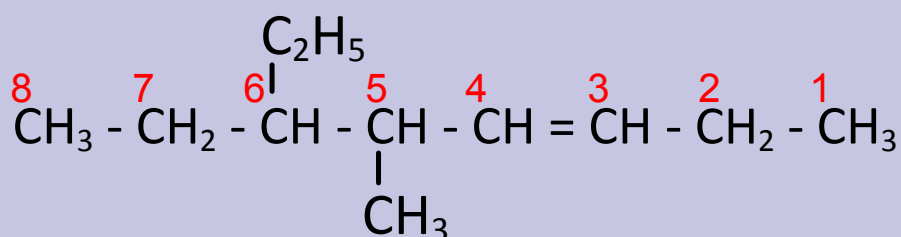
Vytvoř názvy alkenů:



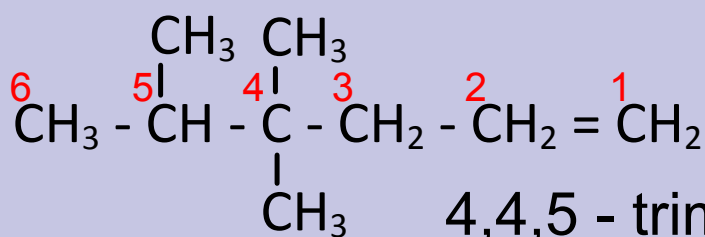
Řešení:



2,4,4 - trimethylpent - 1 - en



6 - ethyl - 5 - methylokt - 3 - en



4,4,5 - trimethylhex - 1 - en

Alkadieny - názvosloví

definice:

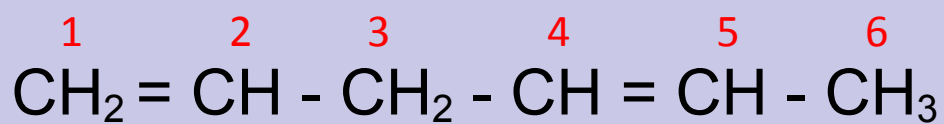
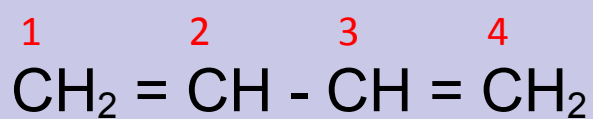
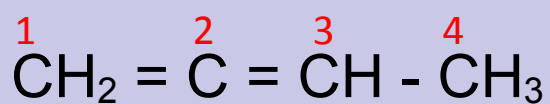


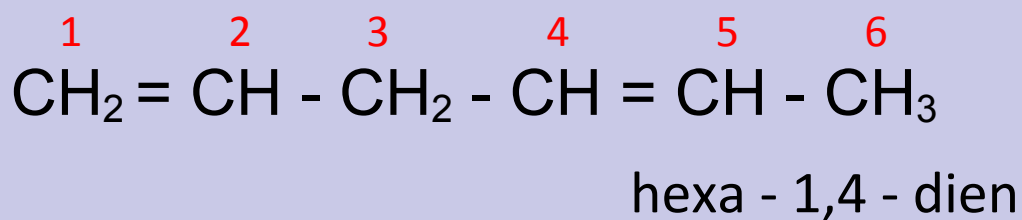
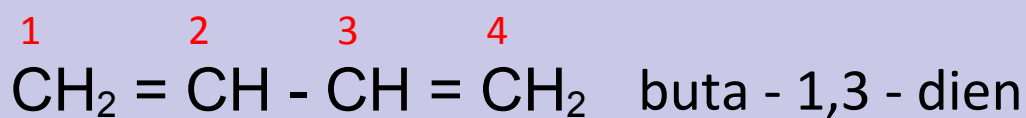
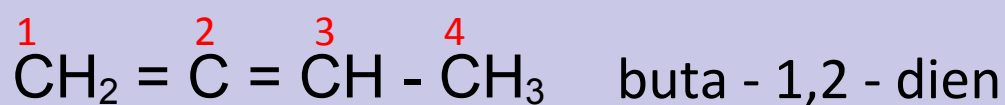
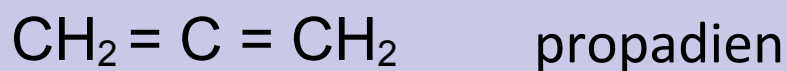
- obecný vzorec alkadienů:

$$n = 3, 4, \dots, x$$

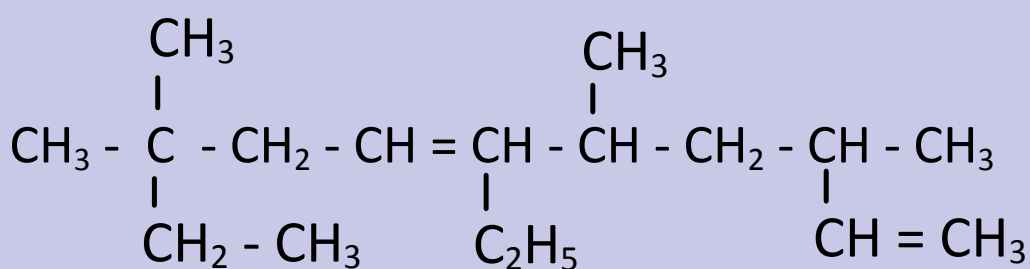
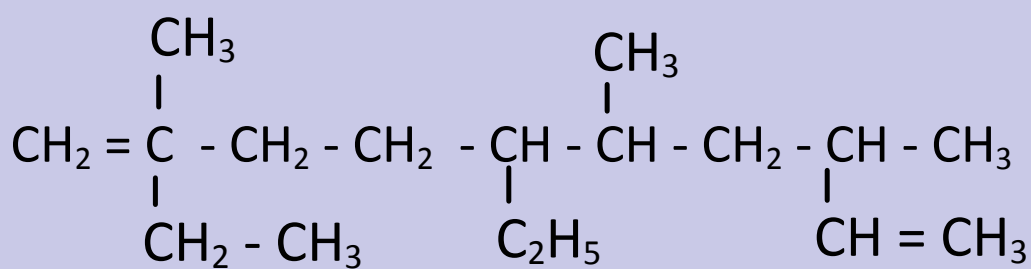
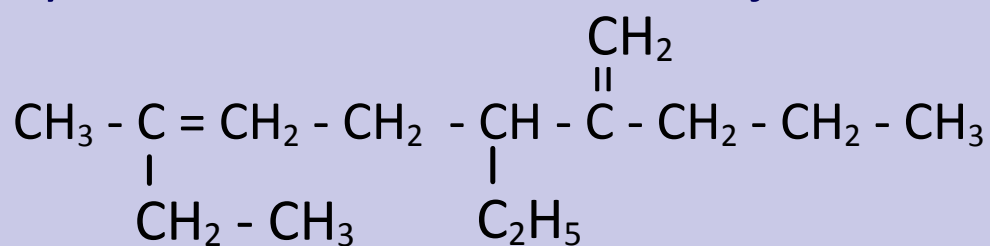
- koncovka názvu alkadienů:

Vytvoř názvy:

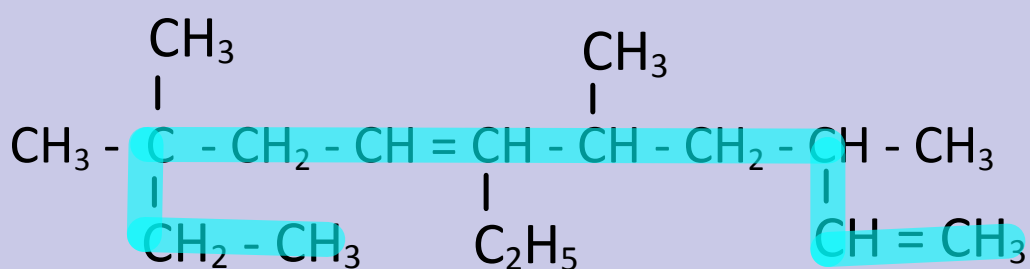
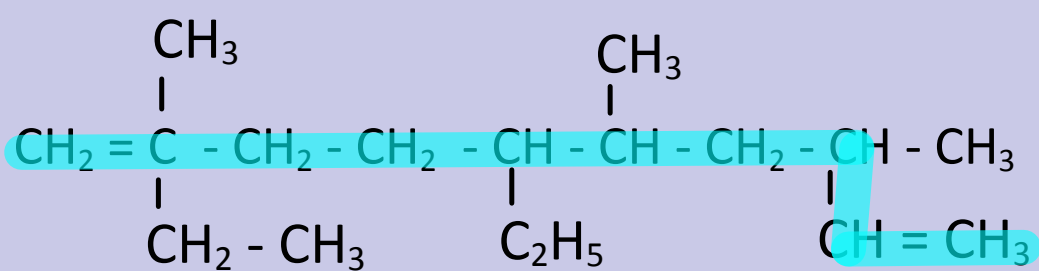
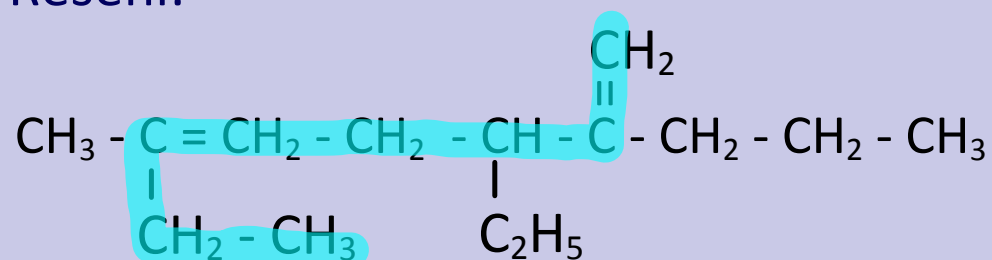


Řešení:

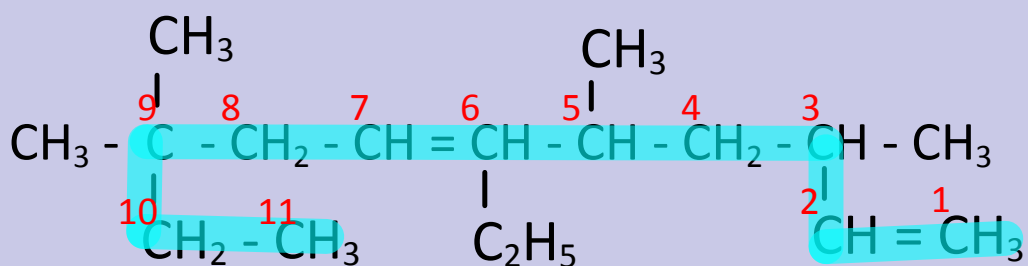
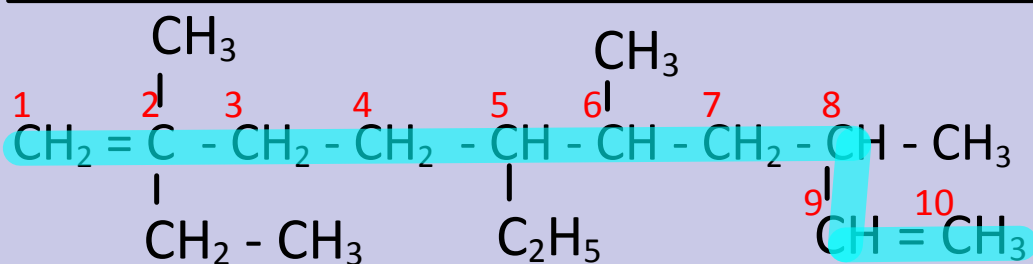
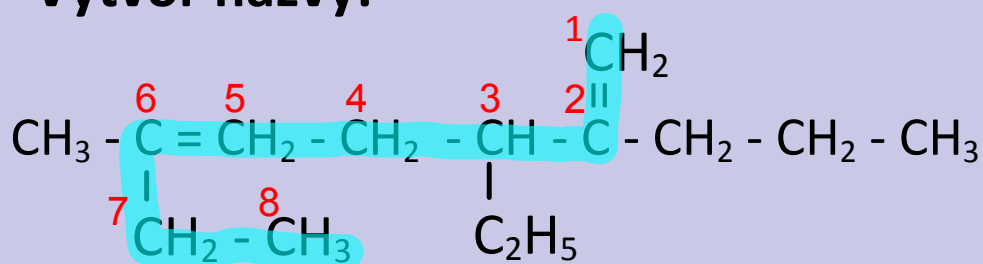
Vyber hlavní řetězec u následujících uhlovodíků:

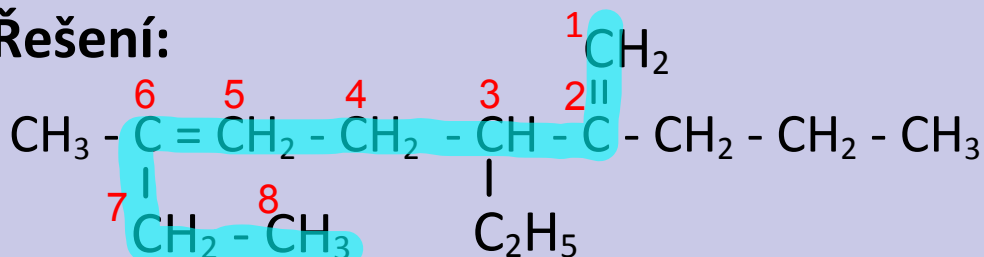


Řešení:

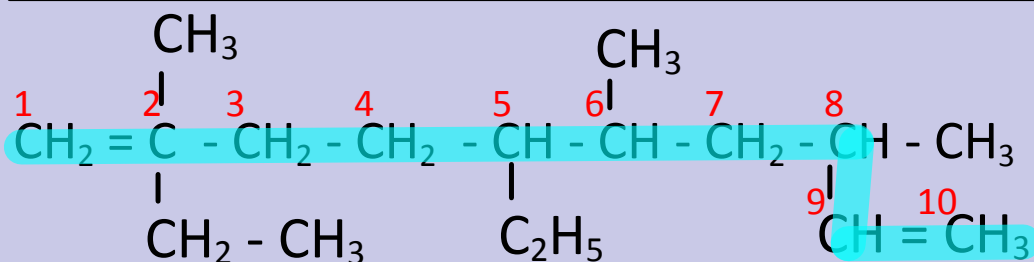


Vytvoř názvy:

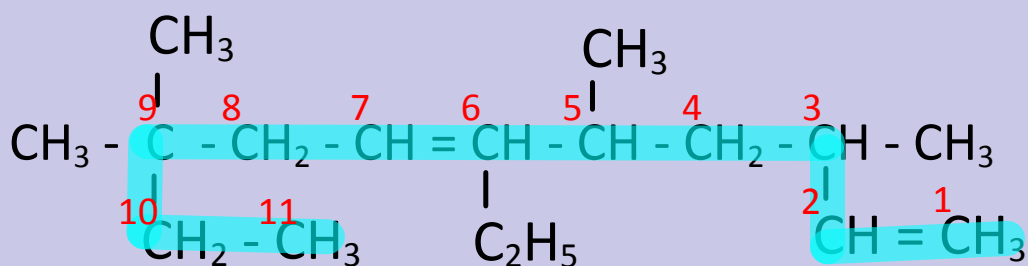


Řešení:

3 - ethyl - 6 - methyl - 2 - propyl - 1,5 - dien



2,5 - diethyl - 2,6,8 - trimethyl - 1,9 - dien



6 - ethyl - 3,5,9,9 - tetramethyl - 1,6 - dien

Nazvi uhlovodíky a uhlovodíkové zbytky:

