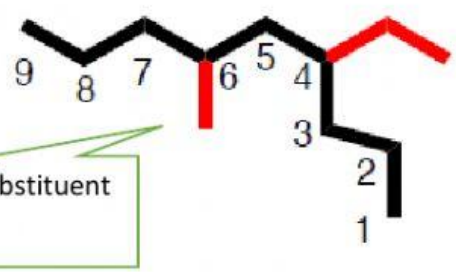
Exercise 3: IUPAC Nomenclature of alkane/ substituents

Applying the Chain Length Rule

1)

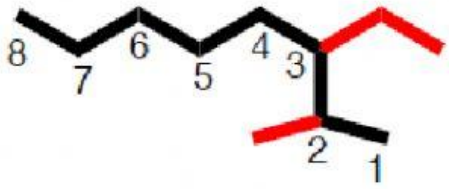


Name of substituent

Name of the substituent

IUPAC NAME:

2)



Choose parent chain @ Longest continuous C with highest number of R

Name of substituent:

IUPAC NAME:

3)



There are ethyl and methyl as substituents

Since the locators/position of the substituents are similar either direction of the chain, write down IUPAC name according to alphabetical order.

IUPAC NAME:

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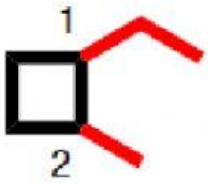
There are **ethyl** and **methyl** as substituents

4)



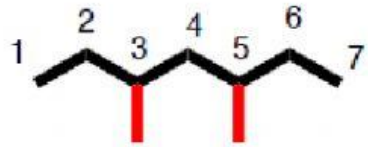
Since the locators/position of the substituents are similar either direction of the chain, write down IUPAC name according to **alphabetical order**.

IUPAC NAME:



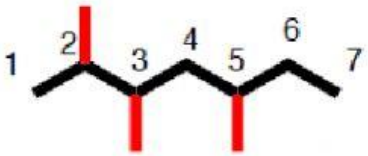
Multiples of the same substituent are given the prefixes "di", "tri", "tetra", etc. The lowest locator rule still applies.

5)



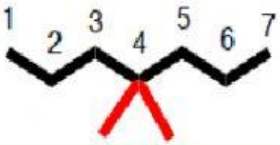
IUPAC NAME:

6)



IUPAC NAME:

7)



IUPAC NAME:

NOT 4-dimethylheptane
NOT 4,4-methylheptane

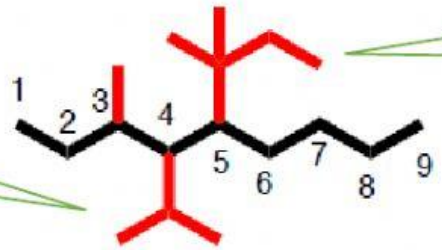
Extremely common mistakes!



LIVEWORKSHEETS

8)

Name of substituent:



Name of substituent:

IUPAC NAME:

LIVEWORKSHEETS