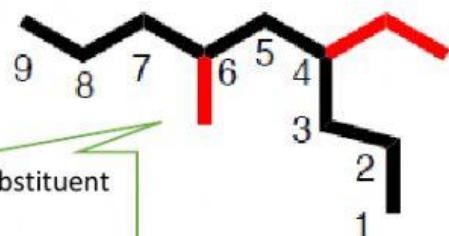


Exercise 3: IUPAC Nomenclature of alkane/ substituents

Applying the Chain Length Rule

1)

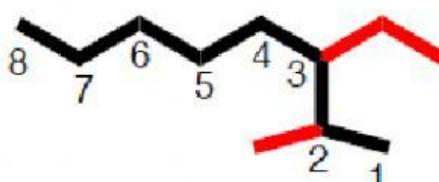


Name of substituent

Name of the substituent

IUPAC NAME:

2)

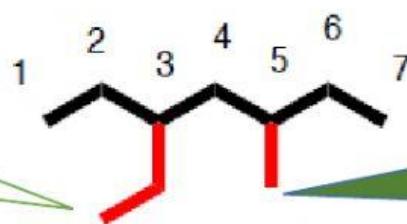


Name of substituent:

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

IUPAC NAME:

3)



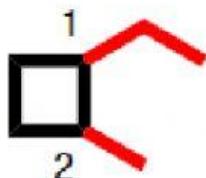
There are **ethyl** and
methyl as substituents

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

IUPAC NAME:

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

4)



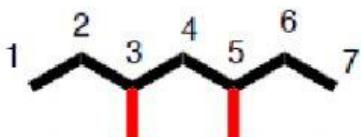
Since the locators/position of the substituents are similar either direction of the chain, write down IUPAC name according to alphabetical order.

IUPAC NAME:



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

5)



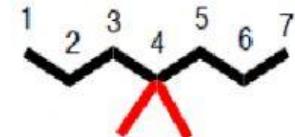
IUPAC NAME:

6)



IUPAC NAME:

7)



IUPAC NAME:

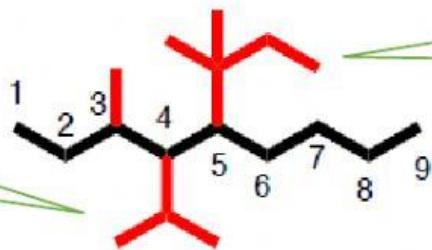
NOT 4-dimethylheptane
NOT 4,4-methylheptane

Extremely common mistakes!



8)

Name of substituent:



Name of substituent:

IUPAC NAME: