

11/21 基礎有機化学 第7回

② 命名法

- 慣用名
- IUPAC (International Union Pure and Applied Chemistry) 命名法

saturated hydrocarbon

- 飽和炭化水素 (Alkane) の母体

CH₄ methane

CH₃CH₃ ethane

CH₃CH₂CH₃ propane

- 基 (group)

-CH₃ methyl 基

-CH₂CH₃ ethyl 基

-CH₂CH₂CH₃ propyl 基

-Cl chloro

-Br bromo

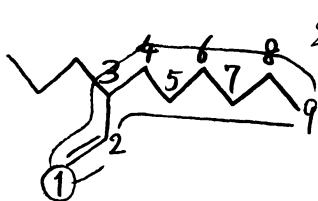
-I iodo

Cl₂ chlorine

Br₂ bromine

I₂ iodine

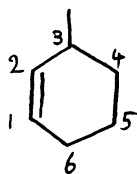
- Alkene



2重結合を含む最長鎖の誘導体と考える

1オンの誘導体

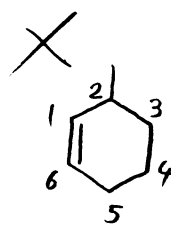
3-propyl-1-octene



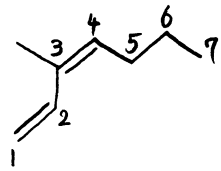
2重結合を小さい番号にするんだけど、

2重結合をまたぐようにしないといけない?

3-methyl-1-cyclohexene

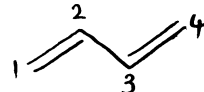


o diene ane → diene



3-methyl-1,3-heptadiene

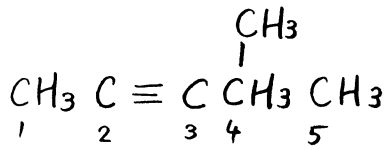
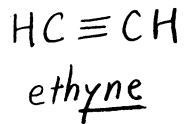
発音上aが入る.



発音上入れる

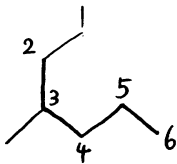
1,3-butadiene

o Alkyne

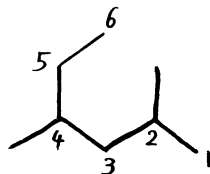


4-methyl-2-pentyne

o 置換基の番号が小さくなるように・アルファベット順

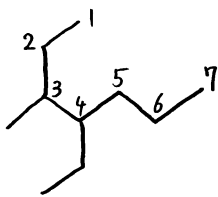


ハキサン誘導体
3-methylhexane

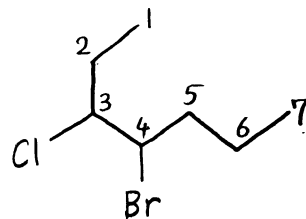


2,4-dimethylhexane

o アルファベット順



4-ethyl-3-methylheptane

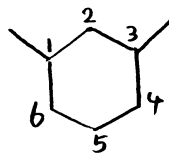


4-bromo-3-chloroheptane

o cyclo



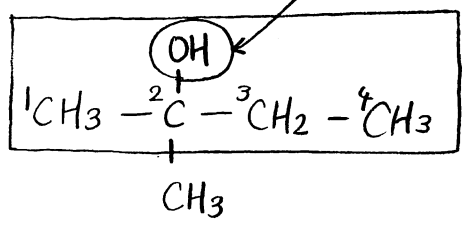
cyclopropane



1,3-dimethylcyclohexane

o Alcohol ane → ol

CH₃OH
methanol

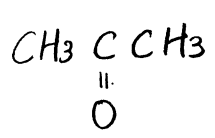


2-methyl-2-butanol

o Aldehyde ane → al

CH₃CHO : ethanal

o ketone ane → one



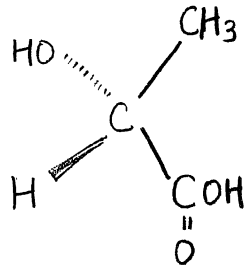
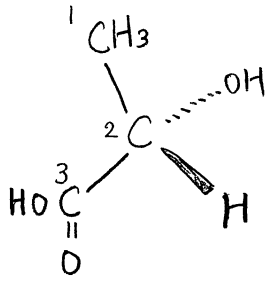
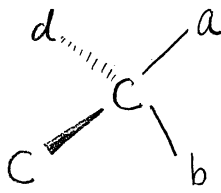
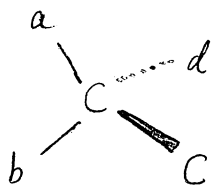
propanone

この場合1がケトンにならないので番号は不要

o oic acid

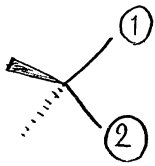
ethanoic acid : CH₃COOH

④ 光学异性体



2-hydroxypropanoic acid

o R.S 表示 → 来週



右巻きか左巻きか？