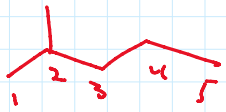
WS3

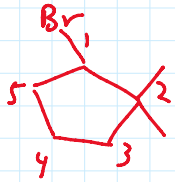
October 1, 2021 11:14 AM

1. Draw structures for

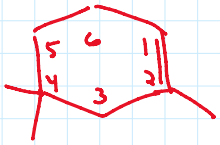
a. 2-methyl pentane



b. 1-bromo-2,2-dimethyl cyclopentane

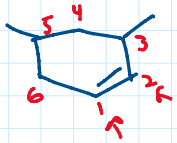


c. 2,4,4-trimethyl cyclohexene



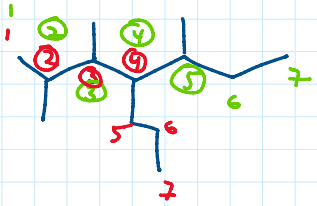
2. Give IUPAC names for:

a.



3,5-dimethylcyclohexene

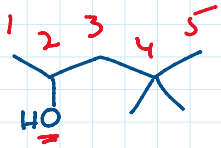
b.



2-methyl
3-methyl
4-propyl
5-methyl

2,3,5-trimethyl-4-propylheptane

c.

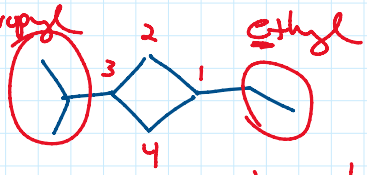


2-pentanol

4,4-dimethylpentan-2-ol

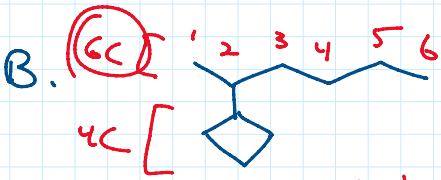
3. Give IUPAC name for:

A.



1-ethyl-3-isopropylcyclobutane

B.

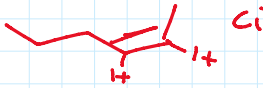


2-cyclobutylhexane

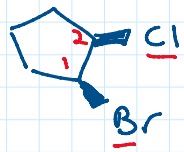
C.

cis-1-bromo-2-chloro-cyclopentane

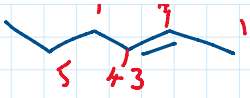
D.



trans

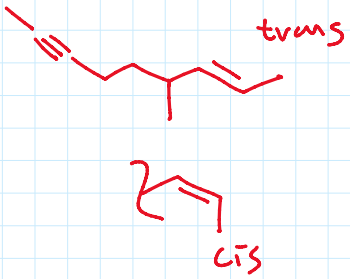
C. 

cyclopentane

D. 

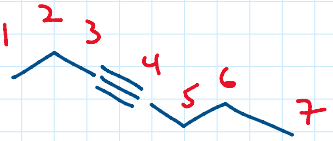
trans

$H_3C\,CH_2CH_2CHCHCH_3$ trans-2-hexene



trans

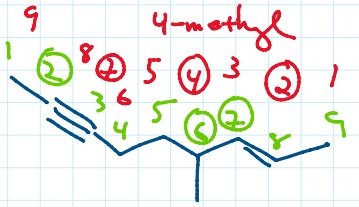
cis

E. 

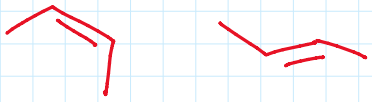
3-heptyne

2 6 7

2 4 7

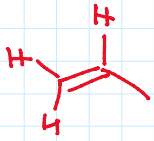
F. 

trans - 4-methyl - non-2-en-7-yne

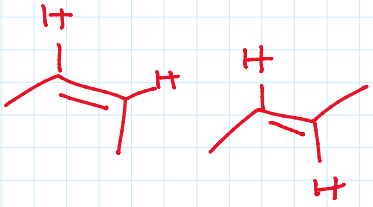


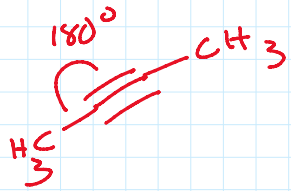
cis-butene

trans butene



X cis/trans

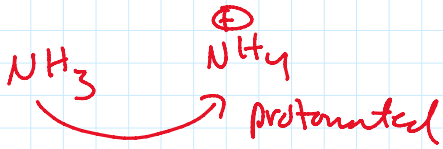




Ch 3

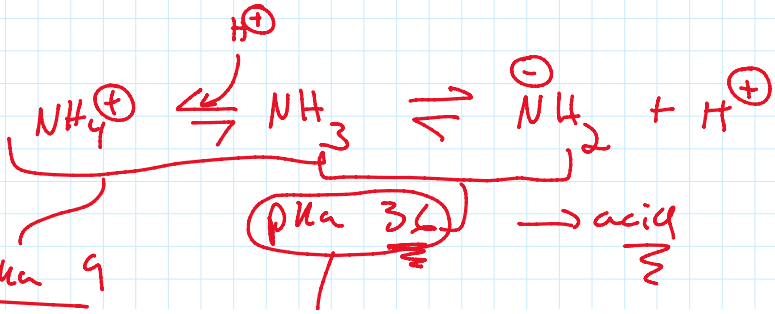
"protonated" = has proton / H atom

protonated deprotonated

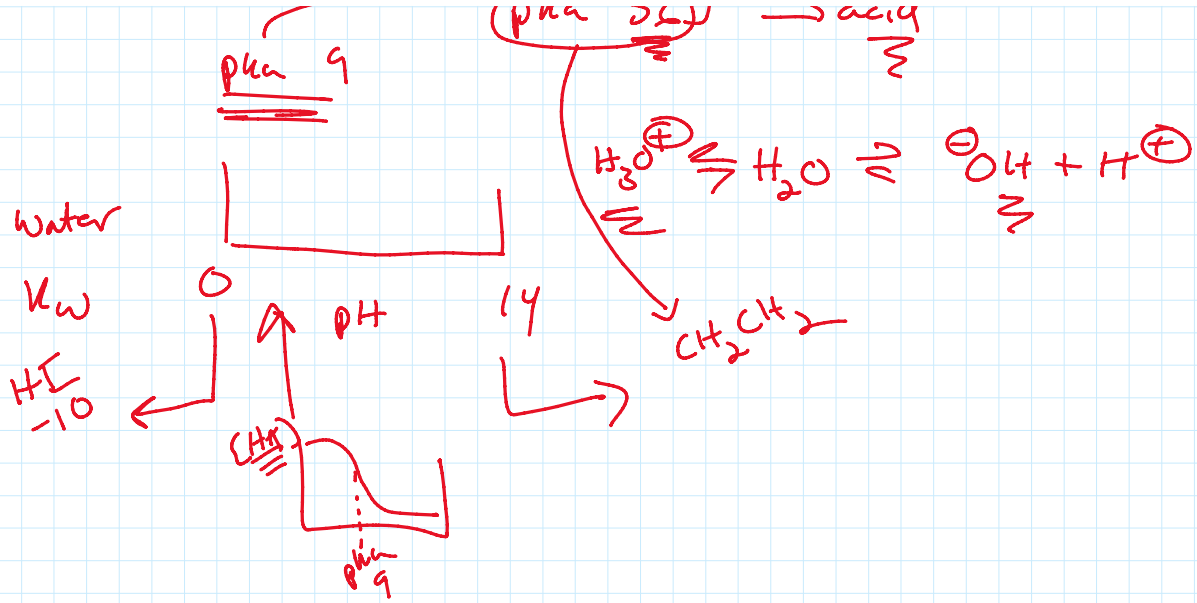


protonated

Equilibrium for NH_3/NH_4^+



pKa 9 pKa 36 → acid


pKa 9
pKa 25
acid
$H_3O^+ \rightleftharpoons H_2O \rightleftharpoons {}^{\ominus}OH + H^+$
water
K_w
0
pH
14
$CH_2CH_2^-$
HI
-10
CHR
pKa 9