

Bonding and General Concepts ^{1.}

Deg-I (H), Paper-II, Ch-1, Gr.-B

Lecture-6, 12/12/2020, Session 2020-23

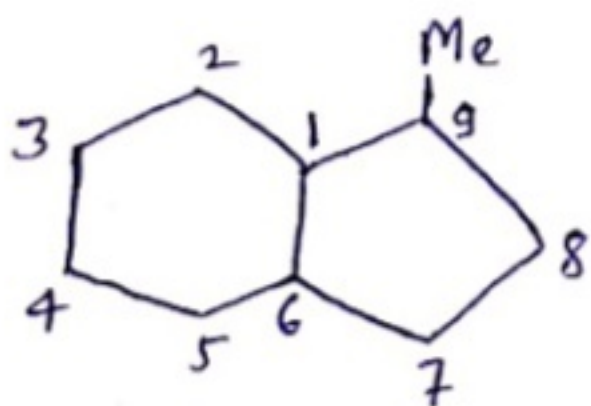
Nomenclature of Bicyclo Compounds

c) If substituents are present, number the bridge-head proceeding first along the longest bridge-head (ie; the larger ring), then along the next longest bridge-head and back to the first bridge-head. **contd.**

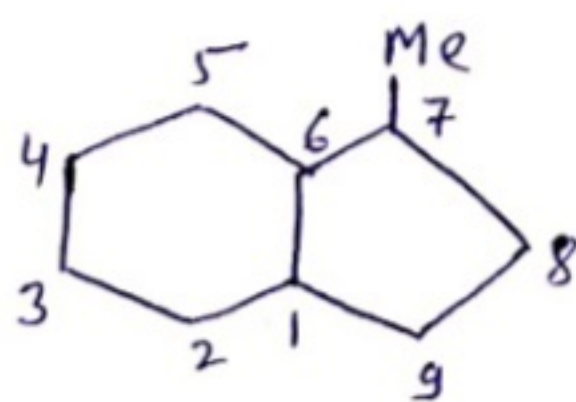
* The shortest bridge is numbered last.

* Out of the two bridge-head 'c' atoms start numbering from that bridge-head 'c' atom from where the position of the substituent is lowest.

For example;



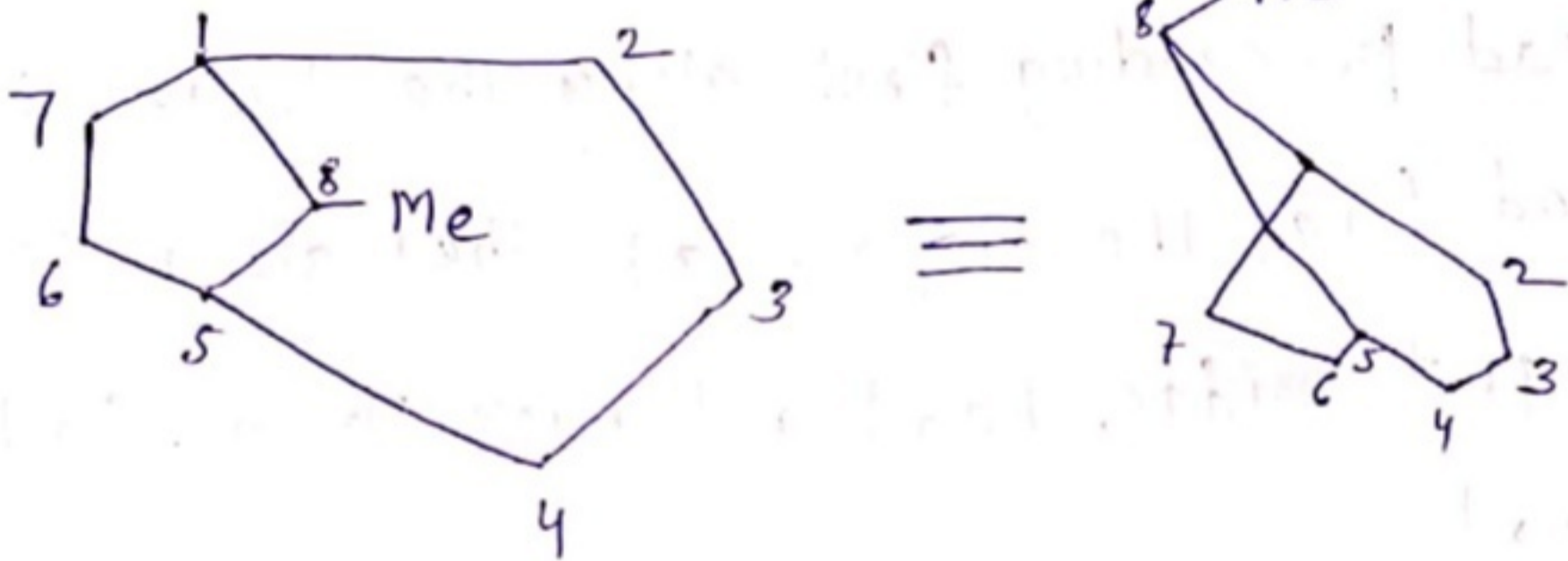
(Wrong numbering since, the position of the substituent is at C-9.)



Correct numbering
Since, the position of the substituent is at the lowest no. i.e; C-7

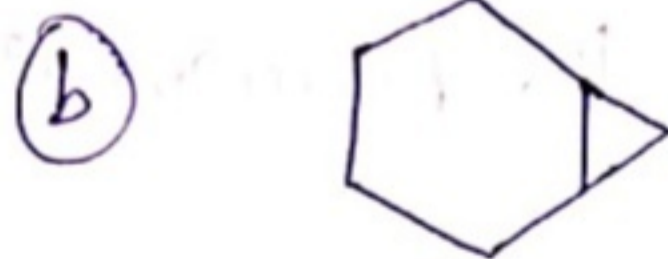
IUPAC name : 7-methylbicyclo [4.3.0] nonane

* Numbering from the longest bridge-head (ie; from the larger ring) to the next longest bridge-head (ie; to the smaller ring.)



8-methylbicyclo [3.2.1] octane

Q. Give the IUPAC name of the following compounds:



Ans: a) Bicyclo [1.1.0] butane

(b) Bicyclo [4.1.0] heptane

(c) Bicyclo [4.2.0] octane.

**Nomenclature of
Bicyclo Compounds**
completed