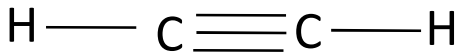
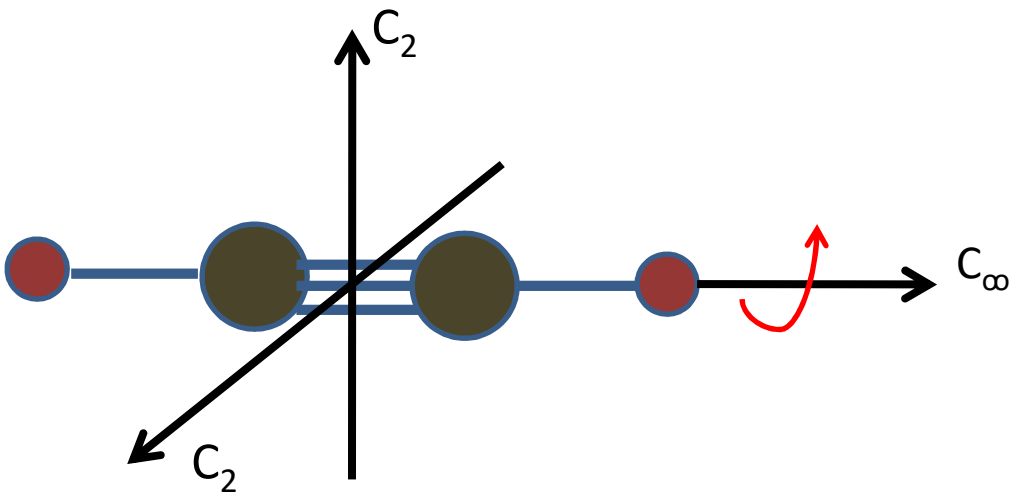
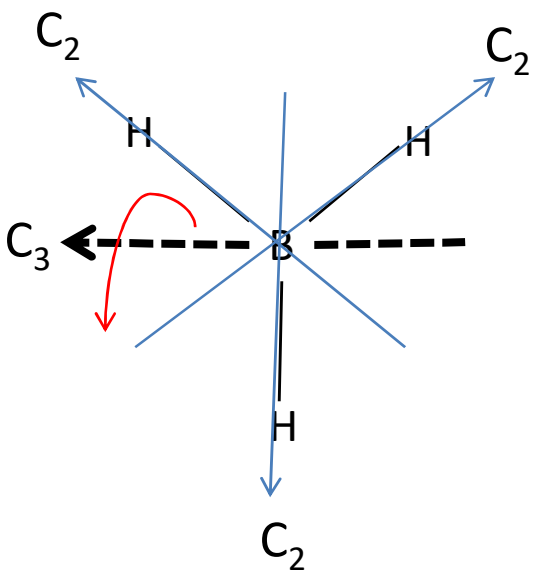


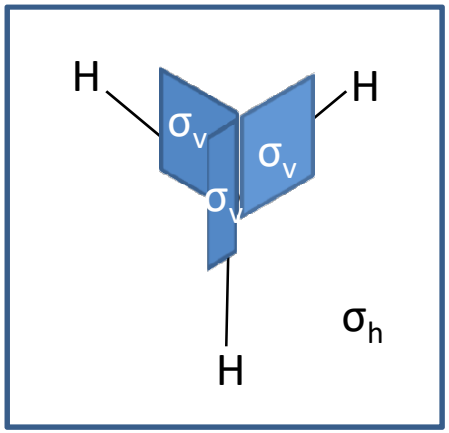


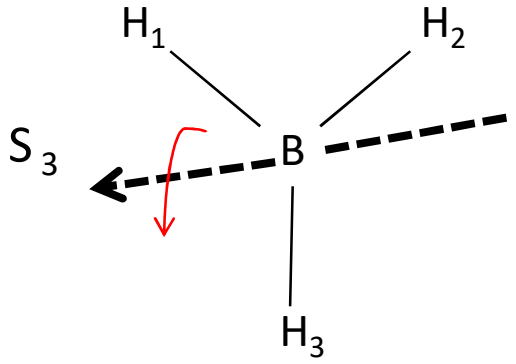
If the molecule is rotated by a very small angle around the axis, it will produce an indistinguishable structure. For example 360°/ 0.034 = 10558.24. So you can take an angle, as much small as possible.

1. One C_∞
2. Two C_2
3. Infinite number of σ_v planes.
4. One σ_h plane.
5. Center of inversion (i) is present.
6. Two S_2 are present. These S_2 are superimposed over C_2 axis.

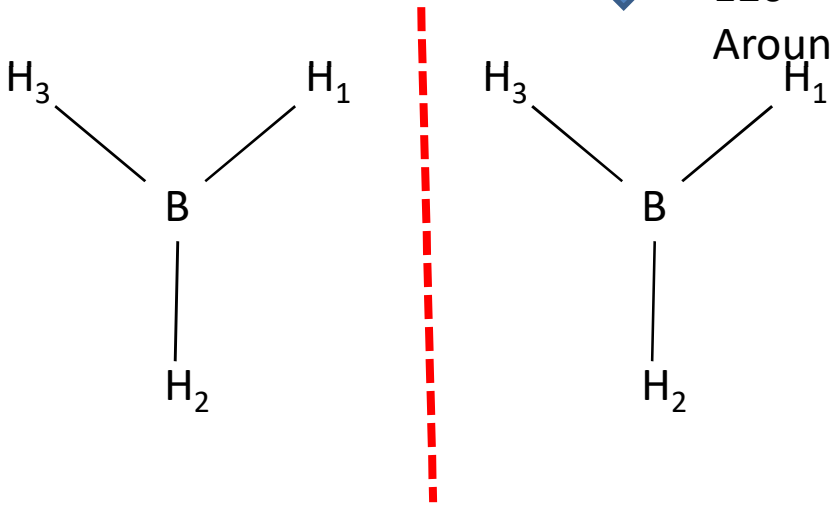
(ii)





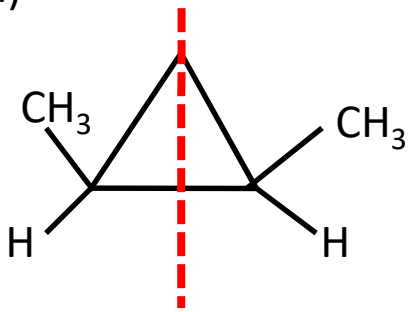


After rotation of 120 ° Around the axis



1. One C_3 axis
2. Three C_2 axis.
3. One σ_h
4. Three σ_v
5. One $S_{3.}$

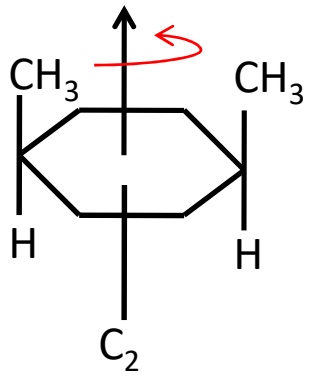
(iii)

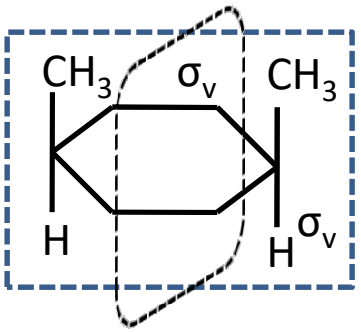


Mirror plane

One plane of symmetry.

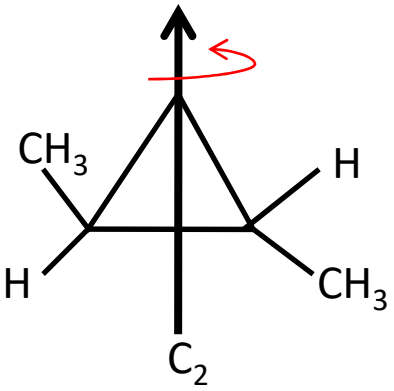
(iv)





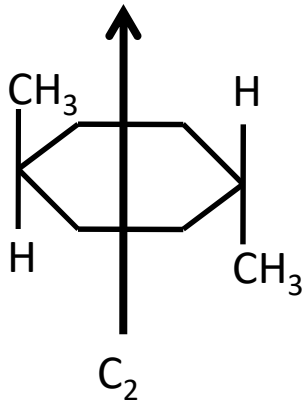
1. One C_2 axis of symmetry.
2. Two σ_v

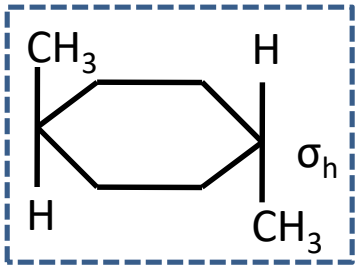
(iv)



One C_2 axis of symmetry.

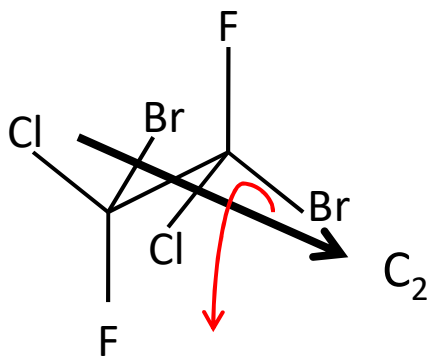
(iv)





1. One C_2 axis of symmetry.
2. One σ_h
3. Centre of inversion is present.
4. One S_2 is present.

(vii)



One C_2 axis of symmetry.

(iv) and (vii) are disymmetric compounds.