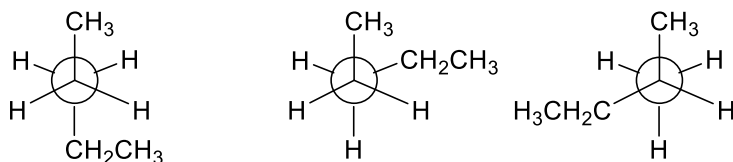


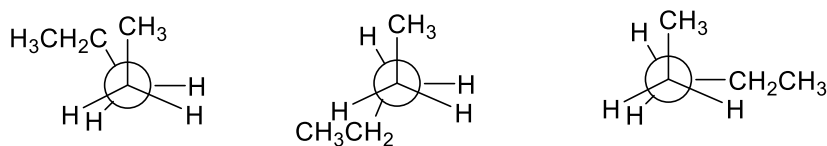
1. Draw all the staggered and eclipsed conformations that result from the rotation of C2-C3 bond of pentane.

Answer:

Staggered Conformers

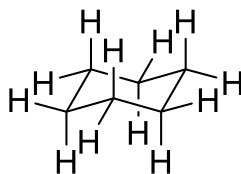


Eclipsed Conformers



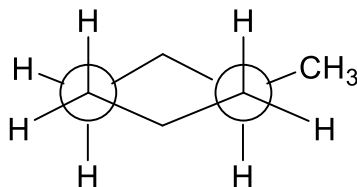
2. Draw the cyclohexane in chair form with all the hydrogens in their equatorial and axial orientations properly.

Answer:

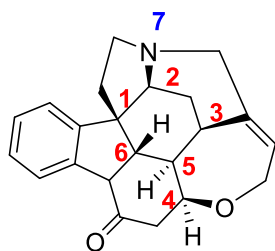


3. Draw the 1-methylcyclohexane in Newman projection.

Answer:



4. How many stereocenters are in the following molecule.



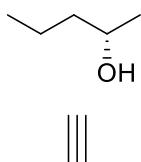
Answer:

Seven (7)

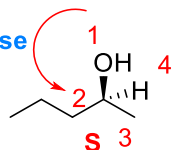
5. Indicate the absolute configuration (R/S) of the following molecules.

6. Answer:

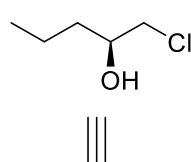
a)



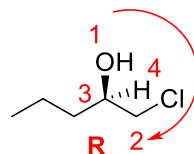
Anticlockwise



b)



Clockwise

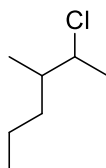


7. The observed rotation of 1.0 g of a compound in 50 mL of solution in a polarimeter tube 50-cm long is What is the specific rotation of the compound?

Answer:

Question was wrong.

8. How many stereoisomers are possible for the following compound.



Answer: Three (4)