

Use the refcodes provided to prove why each alkene is E or Z using the Cahn Ingold priority rules, with aid of a diagram. (some may have more than one double bond and ignore aromatic rings)

1. ABABEL

2. ACCTHP

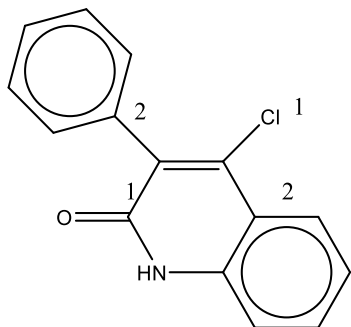
3. IREJAR (concentrate on the central alkene not the 5 membered rings)

4. NAJVUR

5. NPHDZA

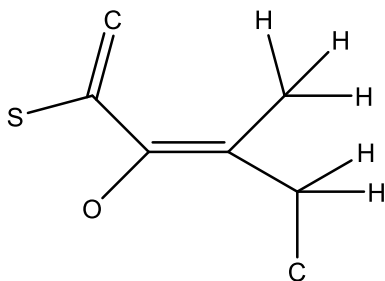
Answer

1. E isomer. Cl takes priority over C. C and C are equal. Look the next bond along COON takes priority over CCC.

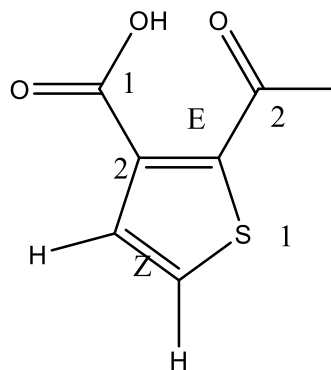


E Isomer

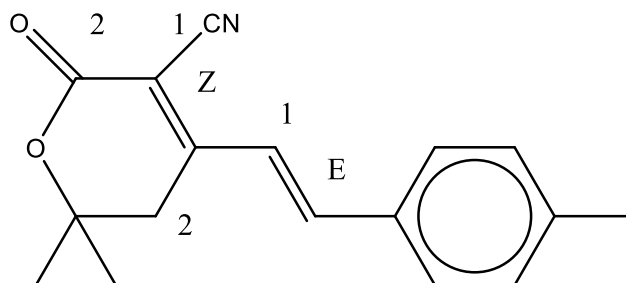
3. Z= O takes priority over C, C and C are the same so look at the next bonds, CHH takes priority over HHH



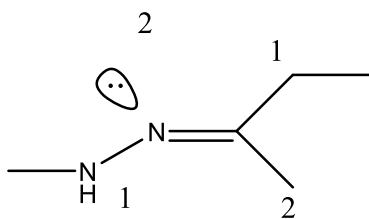
2. 2 alkenes 1 E and 1 Z. Z= S takes priority over H, C takes priority over H. E= S takes priority over C. COOO takes priority over CCH.



4. The central alkene is E because both C groups take priority over the H's and these are opposite to one another. The alkene in the 6 membered ring is Z. CNNN takes priority over COOC, CCCH takes priority over CCHH



It is an E isomer because NH takes priority over the lone pair and CCHH takes priority over CHHH.



E Isomer