

You can use this page or another sheet to indicate your answer.

- 1) Indicate whether each of the following molecules are aromatic, non-aromatic, or anti-aromatic.

a)



cyclic
not fully conjugated
not planar
(4n) π electrons

non-aromatic

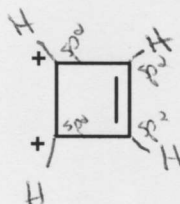
b)



cyclic
fully conjugated
planar
6 π (4n+2) π electrons

aromatic

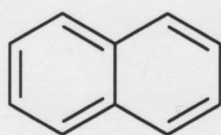
c)



cyclic
fully conjugated
planar
2 π (4n+2) π electrons

aromatic

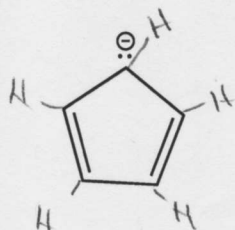
d)



cyclic, bicyclic
planar
fully conjugated

aromatic

e)



cyclic
planar
fully conjugated
6 (4n+2) π electrons

aromatic