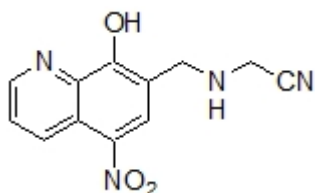


Name: _____

Organic II Lecture
Spring 2013
Quiz #3
(10 points)

1. Using the polygon rule, state whether cycloheptatriene is aromatic, antiaromatic or nonaromatic. Provide a molecular orbital for one of the highest occupied molecular orbitals (HOMO). (4 points, problem 16-48)

2. The following structure has been found to inhibit human cathepsin B, a regulator of protein production (*J. Med. Chem.* **2013**, 521). What aromatic heterocycle is contained in this compound. (2 points)



3. Label each of the following compounds as being aromatic, antiaromatic or nonaromatic. (4 points)

