## CHM 3150 Organic Chemistry II Dr. Laurie S. Starkey, Cal Poly Pomona

2



Chapter 17, Aromaticity & Nomenclature (Ch. 17/18, Part 1) – Practice Problems

What is the name of the compound shown? Is it aromatic?



Add all missing H atoms and lone pairs in the given drawing. Is this structure aromatic?

Provide an acceptable name for each compound.

Determine whether or not each of the following is aromatic. Explain.





6



7



Draw ortho-nitrophenol.

Which of the following represents the molecular orbital (MO) diagram for the compound shown?





A)

$$\frac{--\pi^*}{\frac{1}{4}}\frac{\pi^*}{\pi^*}$$

B)

C)

D)

 $\mathbf{E}_{j}$ 

Shown below is ceftaroline (trade names Teflaro and Zinforo), an antibiotic drug that was introduced in 2010. By 2014, MRSA had mutated to develop resistance. Identify the aromatic ring(s) in ceftaroline.