Identify each of the following as aromatic or nonaromatic by writing A in the center of those which are aromatic.

The heat of hydrogenation of cyclooctene is -23.3 kcal/mol. The heat of hydrogenation of cyclooctatetraene is -100.9 kcal/mol. Use this data to calculate the resonance stabilization energy for cyclooctatetraene. The resonance stabilization energy for benzene is 36.0 kcal/mol. Why is the resonance stabilization energy for cyclooctatetraene different? Answer with a few well chosen phrases or sentences. Use the energy graph below to show the relative positions for cyclooctane, cyclooctene and cyclooctatetraene.
Name the following molecules

Explain why the molecule shown below has aromatic character and a dipole in a few well chosen sentences. Draw a resonance structure in support of your answer.