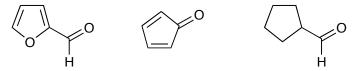


## Suggested problems from your text:

19.2, 19.3, 19.4, 19.5, 19.6, 19.8, 19.9, 19.11, 19.13, 19.14, 19.16, 19.18, 19.21, 19.22, 19.29, 19.32, 19.34, 19.35, 19.36, 19.38, 19.39, 19.40, 19.41, 19.42, 19.45, 19.48, 19.51, 19.52, 19.65, 19.66

## **Additional Practice Problems:**

Rank the following carbonyls in order of increasing reactivity for nucleophilic addition.



The mechanism for the hydrolysis of an acetal is partially shown below. This is the reverse of acetal formation. Complete this mechanism by showing all arrows for electron movements and filling out the partially drawn structures. Include any additional acid or conjugate base necessary for the mechanism.

