

## Self Test 6 (Units 15-16)

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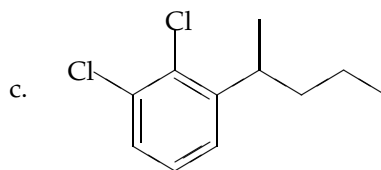
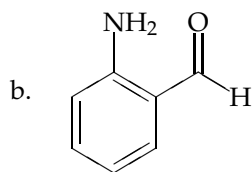
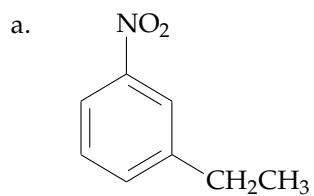
1. Provide structures for the following compounds:

a. 1-phenylcyclooctene

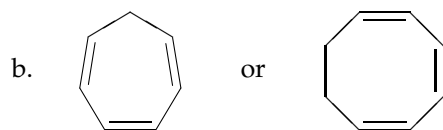
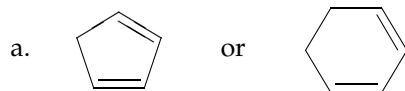
b. 1-bromo-3-chlorobenzene

c. 3-nitrophenol

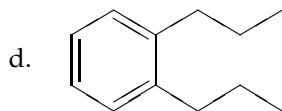
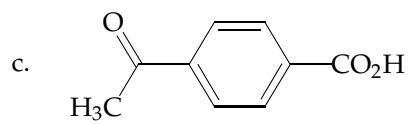
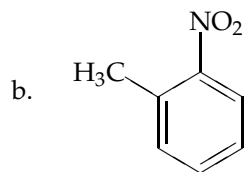
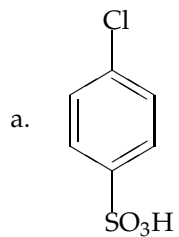
2. Provide complete IUPAC names for the following compounds, including stereochemical designations (i.e., *E/Z*, or *R/S*) where appropriate.



3. For each of the pairs of compounds given below, indicate which member of the pair should be most acidic. Briefly explain your choices.

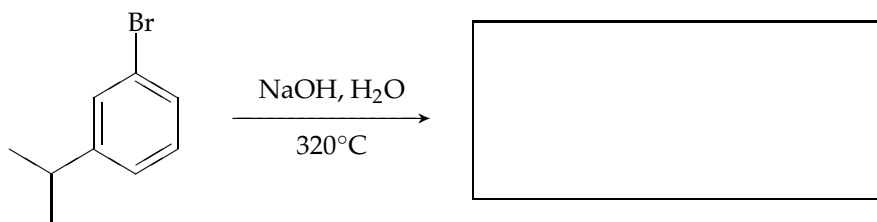


4. Outline a preparation of the following compounds starting in each case from benzene. If multiple steps are required, show all organic intermediates.

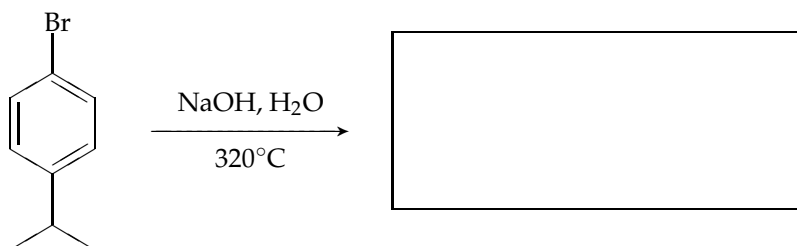


5. Predict all products that would form from each of the following reactions. If multiple products are expected, show them all, but take care not to list the same product multiple times for the same reaction!

a.



b.



c.

