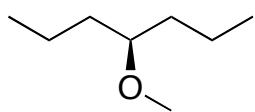
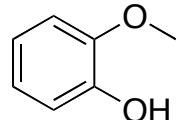


**Problem Set 4 — Ethers and Epoxides**

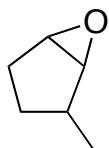
1. Give the proper IUPAC names of the following molecules (indicate stereochemistry when appropriate):



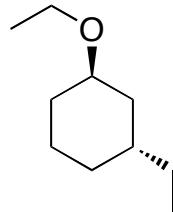
4-methoxyheptane



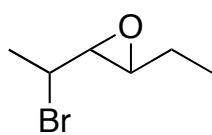
2-methoxyphenol



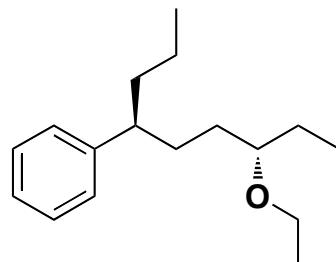
(1,2) epoxy 3 cyclopentane



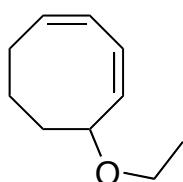
(1*R*,3*R*)-1-ethoxy-3-ethylcyclohexane



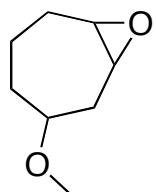
(3,4) epoxy 2-bromohexane



((3*S*, 6*S*)-3-ethoxy 6-phenyl nonane



5-ethoxycycloocta-1,3-diene



(1,2) epoxy 3-methoxy-cycloheptane

2. Complete the following reactions.

