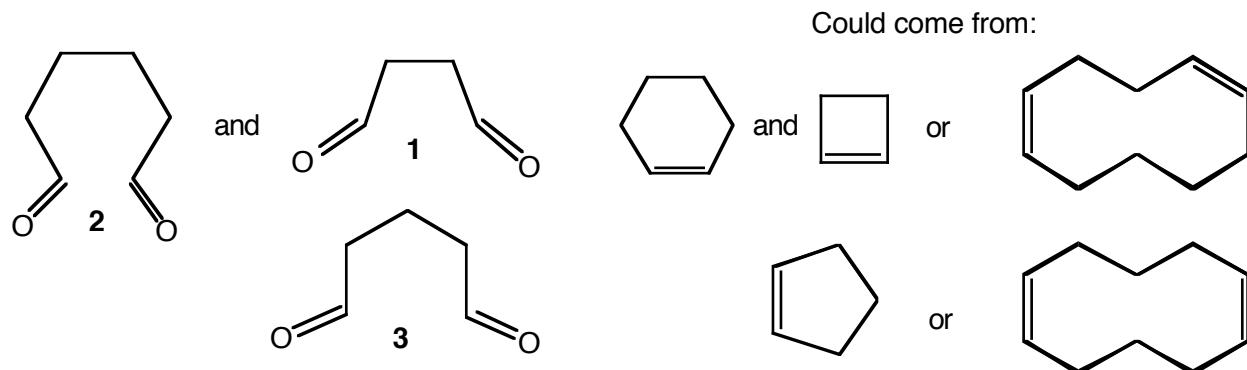


Answers to Problem 97, Chemistry 301X - 2006

Let's work backward and reconstruct the possible dienes first. What alkene can lead to **1**, **2**, and **3** on ozonolysis/reduction?



The cycloalkenes are not dienes, so they can't be the right answer. The dienes shown look promising. What single dibromide could lead to them on treatment with *tert*-butoxide (likely E2 conditions)?

