## SYNTHESIS: Ch 6-7

A strong base with a secondary alkyl halide gives E2 as the major product. The most substitued alkene is formed. A trans alkene is more stable than cis, so it is also the more likely product.

A strong base with a secondary alkyl halide gives E2 as the major product. The bulky base gives the less substitued alkene.

There is no direct way to go from an alcohol to an alkane. The only alcohol reaction you know is dehydration. The resulting alkene can then be hydrogenated.

$$H_2O$$

This is a substitution on a tertiary alkyl halide. A strong base must be avoided or E2 will be the major product. Use water as a weak base/nucleophile.