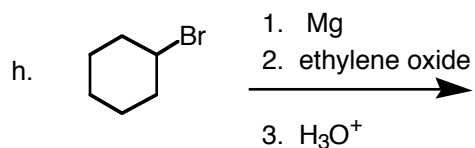
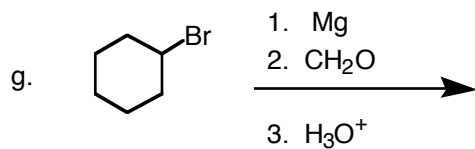
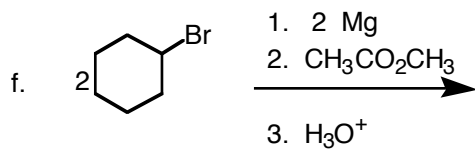
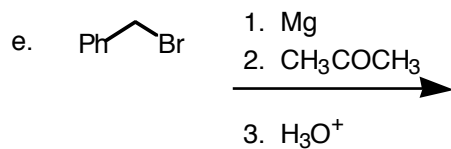
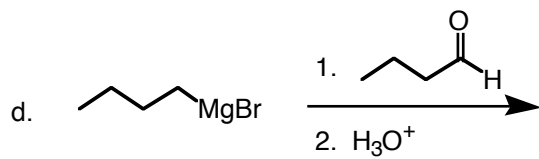
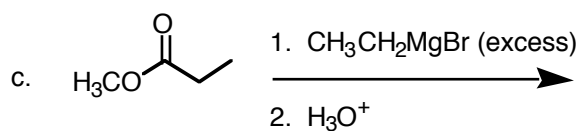
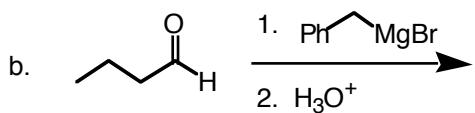
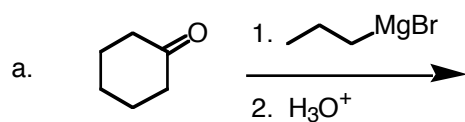
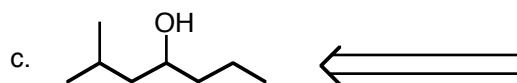
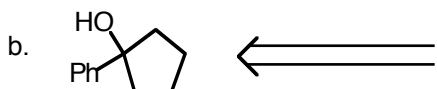
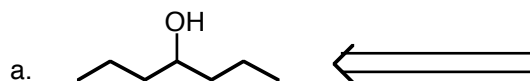
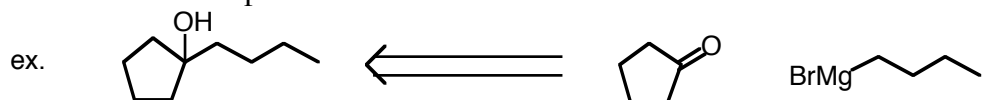


1. Draw the major product for the following reactions involving Grignard reagents.



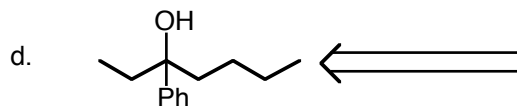
2. For each of the following, draw a Grignard reagent and a carbonyl compound (formaldehyde, an aldehyde, a ketone, or an ester) from which the alcohol shown would be produced, following acid workup.



Combo
One

There are two possible combinations for this one. Draw both possible combinations of carbonyl compound and Grignard.

Combo
Two

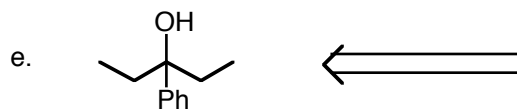


Combo
One

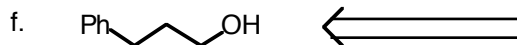
There are three possible combinations for this one. Draw all possible combinations of carbonyl compound and Grignard.

Combo
Two

Combo
Three



Makes this one using an ester as your carbonyl compound.



3. Draw the mechanisms for the following Grignard reactions.

