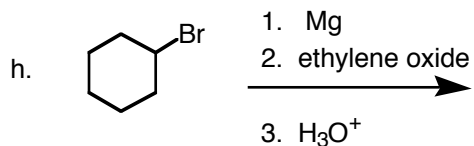
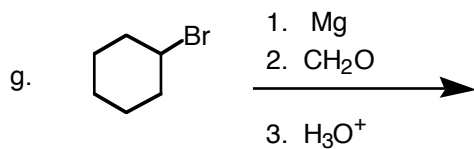
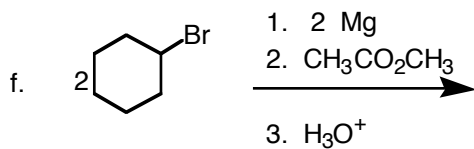
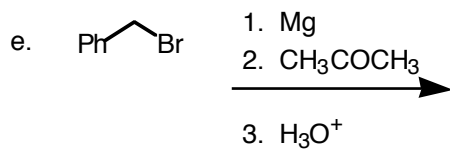
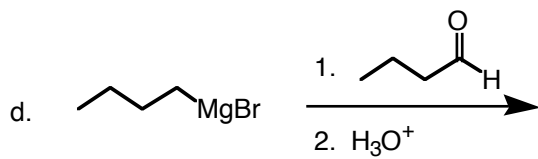
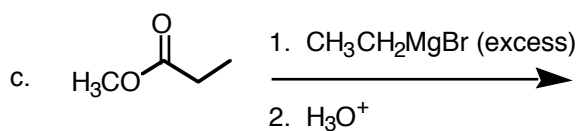
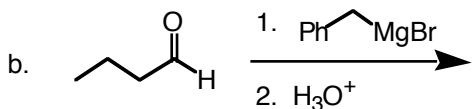
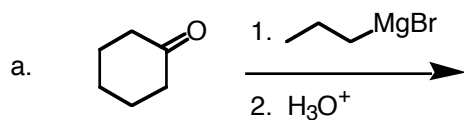
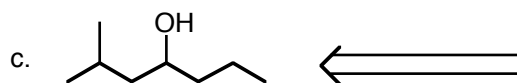
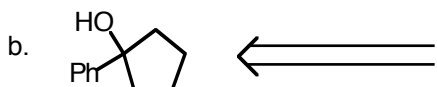
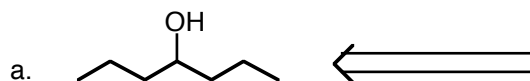
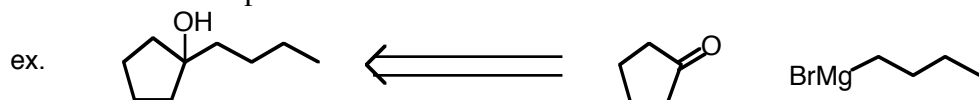


1. Draw the major product for the following reactions involving Grignard reagents.



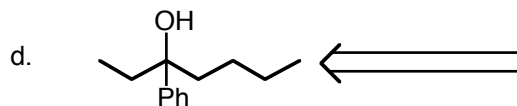
2. For each of the following, draw a Grignard reagent and a carbonyl compound (formaldehyde, an aldehyde, a ketone, or an ester) from which the alcohol shown would be produced, following acid workup.



Combo
One

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

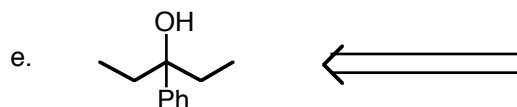
Combo
Two



Combo
One

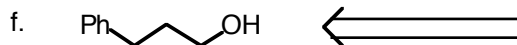
There are three possible combinations for this one. Draw all possible combinations of carbonyl compound and Grignard.

Combo
Two



Makes this one using an ester as your carbonyl compound.

Combo
Three



3. Draw the mechanisms for the following Grignard reactions.

