Chemistry 2302 Tuesday, July 1

Workshop 9 Solutions Alcohols from Alkylmetal Reagents

Unless I've indicated specifically that only one alkylmetal reagent is possible, either alkyllithiums or Grignard reagents can be used. (They are interchangeable.)

Br
$$\xrightarrow{Mg, Et_2O}$$
 \xrightarrow{MgBr} \xrightarrow{H} \xrightarrow{H} \xrightarrow{H} \xrightarrow{H} \xrightarrow{H}

$$CH_3$$
—Br \xrightarrow{Li} CH_3 —Li $\xrightarrow{2. H_3O^+}$ HO CH_3

Br
$$Mg, Et_2O$$
 CH_3 CH_3 CH_3 CH_3 CH_3

A number of different sequences the last one could be put together, using two different alkylmetals and a carboxylic acid. Here's one: