## Exercise 97A - Grignard Reactions

What is the product of the following reactions?


1) $\mathrm{BuLi}, \mathrm{THF}$
$\xrightarrow{\text { 2) } \mathrm{H}_{3} \mathrm{O}^{+}}$


2) $\mathrm{CH}_{3} \mathrm{CHO}$
3) $\mathrm{H}_{3} \mathrm{O}^{+}$

4) 



2) $\mathrm{H}_{3} \mathrm{O}^{+}$

What combination of an organometallic and carbonyl compound will give the following products?







$+2$





$\mathrm{Ph}-\mathrm{Li}$



