



reactions involving H⁻ and R⁻

mechanism:

Na H₃B₇H
$$\rightarrow$$
 C=0 \rightarrow H-C-0 Na + BH₃ \rightarrow H-C-0-BH₃ Na \rightarrow H-C-0-H

In the absence of a protic solvent, this is the final product.

The mechanisms for LiAlH₄, RLi, and RMgX are similar, except that the final protonation comes from H_3O^+ that must be added in a *separate* step.

stereochemistry: racemic mixture of products (because the H⁻ can attack either face of the trigonal planar carbonyl group)