

Massachusetts Institute of Technology
Organic Chemistry 5.511

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Problem Set 5
Unit 2 – Carbanionic Synthons

Design a highly stereoselective synthesis of the following target molecules beginning with commercially available materials. For the compounds indicated, a route to the target molecule in racemic form will be sufficient. Be sure to explicitly identify all reagents necessary for each transformation. Enantiomerically enriched reagents may be used if they are commercially available; however, each stereogenic center in the target molecule must be generated in your synthetic route. In other words, the stereogenic carbons in the chiral reagents you employ cannot be directly incorporated in the final product.

