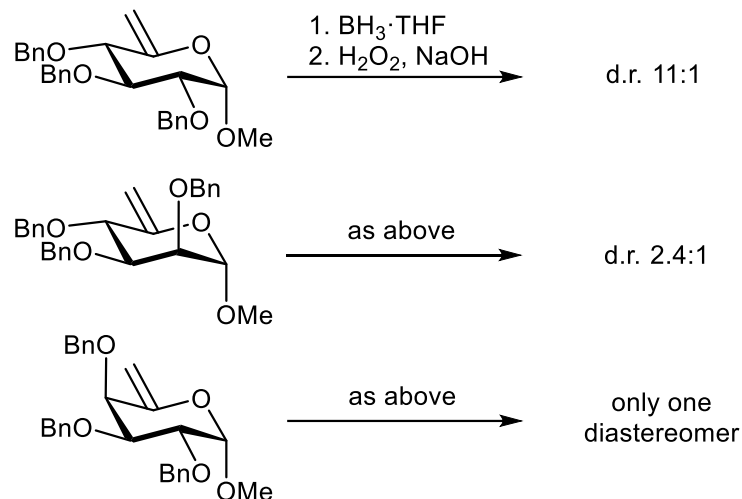


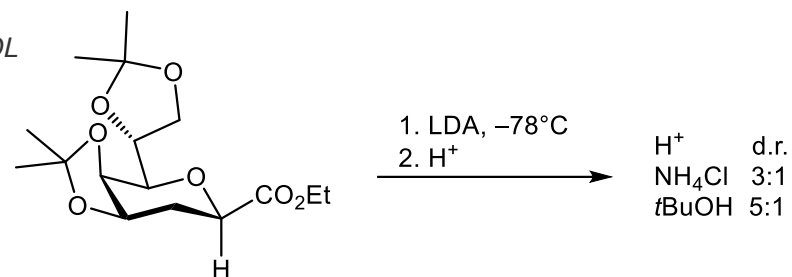
1. **Read** the original paper by Ahn and Eisenstein „Theoretical Interpretation of 1,2-Asymmetric Induction. The Importance of Antiperiplanarity“ *Nouv. J. Chem.* **1977**, 1, 61

[Download from homepage.](#)

2. Predict the stereochemical outcome of the following three reactions. *Synthesis* **2004**, 2991–2994.



3. Rationalize the stereoselectivity of the following reaction sequence. *OL* **2015**, 17, 2388.



4. Propose a synthesis of Phthioceranic acid (see Problem Set 4) based exclusively on directed aldol reactions. What is the (obvious) problem of this approach? How can one combine enolate alkylation and aldol reactions for a more efficient synthesis?