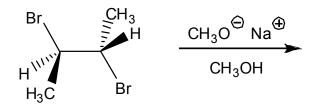
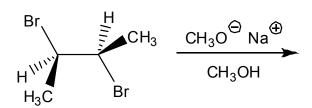
## In-Class Exercise: Stereoselectivity of E2

Each of the diastereomeric 2,3-dibromobutanes below reacts with NaOCH<sub>3</sub> via E2 elimination to give a different alkene product. (For this problem, consider only elimination at the C2-C3 bond in the middle.) For each reaction,

- a) Re-draw the starting material so that the proton that is being removed and the leaving group are *anti* to one another. Newman projections might help you here. (Or they might not—you might not need them.)
- b) Draw the product that would result from the E2 elimination.



meso-2,3-dibromobutane



(R,R)-2,3-dibromobutane