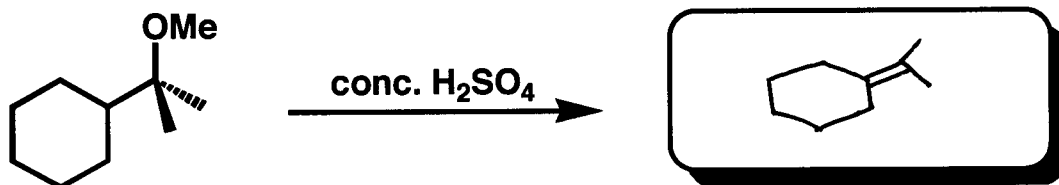


Handout VIII – Elimination Reactions – KEY –

1. Fill in the table.

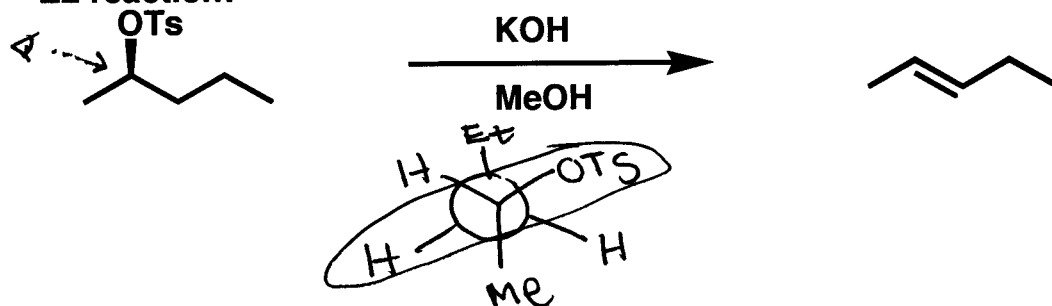
	E1	E2
Number of Steps	2	1
General Mechanism	step-wise	concerted
Kinetics	rate = $k[R-LG]$ (1st order)	rate = $k[R-LG][Base]$ (2nd order)
Stereochemistry	NONE	anti-periplanar
Substrate	3° > 2° > 1°	1° > 2° > 3°
Solvent	polar protic	polar aprotic
Competing Reactions	S _N 1	S _N 2

2. Predict the product of the following E1 reaction.

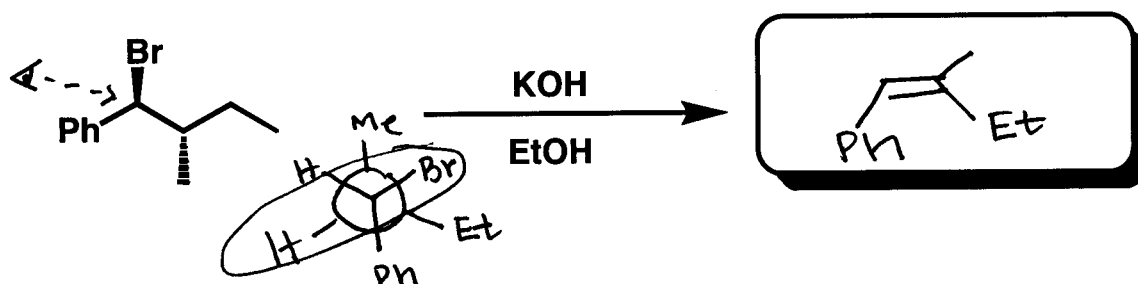


3. E2- Newmans or Chairs

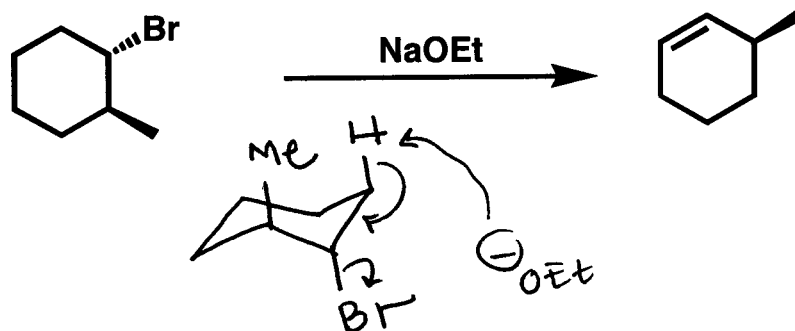
(a) Draw the Newman projection for the conformation required for the E2 reaction:



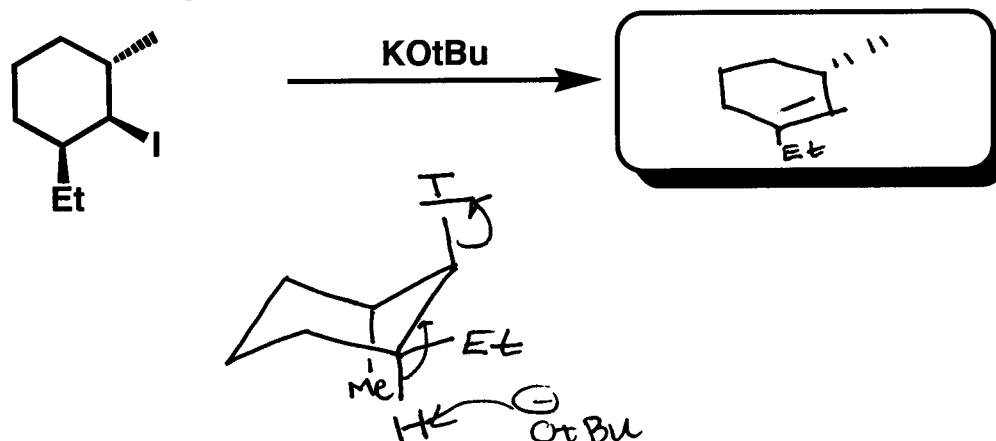
(b) Predict the E2 product:



(c) Draw the chair conformation required for the E2 reaction :



(d) Predict the E2 product:



4. Combined Problems- Substitution and Elimination

