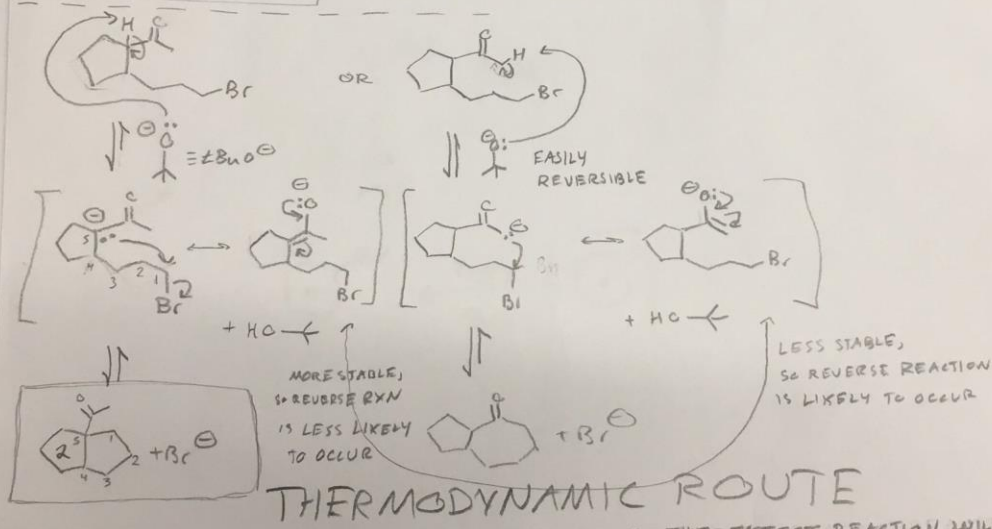
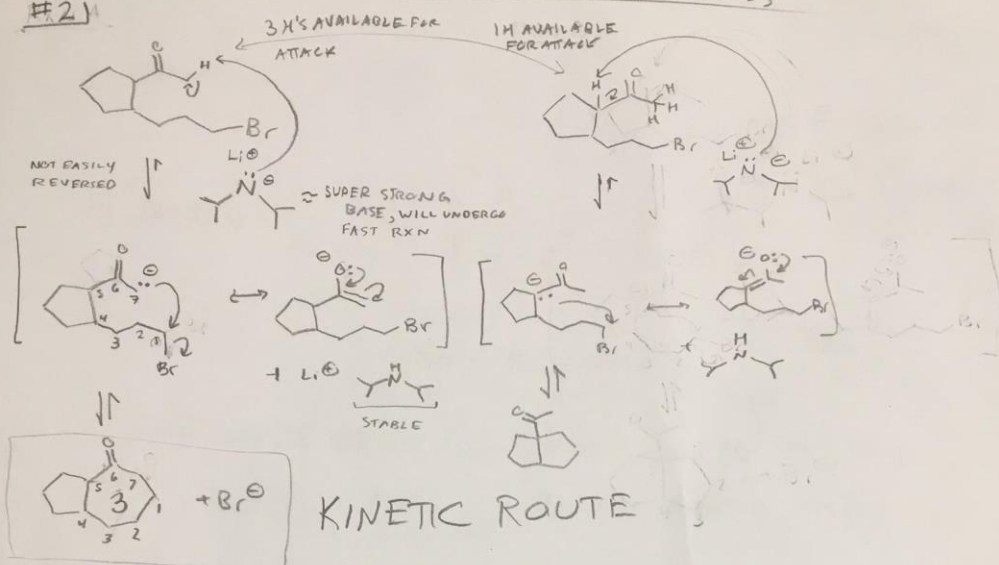


HW 12 SUPPLEMENTALS

#21



THE LDA REACTION IS NOT EASILY REVERSIBLE SO THE FASTEST REACTION WILL PREDOMINATE. THERE ARE 3 H'S ON THE RIGHT OF THE KETONE, & THERE ARE FEWER BULKY GROUPS, THUS INCREASING THE RATE OF REACTION. PROTONATED LDA IS A VERY POOR ACID SO THE REVERSE REACTION HARDLY OCCURS TO ALLOW THE HYDROGEN LEFT OF THE KETONE TO REACT MEANING ③ IS MOSTLY FORMED. PROTONATED EBUD IS A WEAK ACID HOWEVER SO THE REVERSE REACTION MAY OCCUR. BY ZIETZEV'S RULE, THE ALKENE INTERMEDIATE IS MORE STABLE WHEN THE LEFT HYDROGEN IS LOST COMPARED TO THE RIGHT HYDROGEN. THIS MEANS THE REACTION IS THERMODYNAMICALLY DRIVEN TO FORM ②

SECRET

$$2,068 \text{ ft}^2 \cdot 8 \text{ ft}$$

$$\frac{175 \times 10^6 \text{ METRIC} \mid 10^6 \text{ GRAMS} \mid 1 \text{ cm}^3 \mid 1 \text{ ft}^3}{1 \text{ METRIC TON} \mid 1 \text{ GRAM} \mid 28316.8 \text{ cm}^3} = 6.18 \times 10^9 \text{ ft}^3$$

$$\frac{6.18 \times 10^9 \text{ ft}^3}{16.544 \frac{\text{ft}^3}{\text{HOUSE}}} = \boxed{373,554 \text{ HOUSES}}$$

PPT SAID 75 TONS BUT WILLSON STATED 75 MIL TONS
IN CLASS. EITHER IS FINE