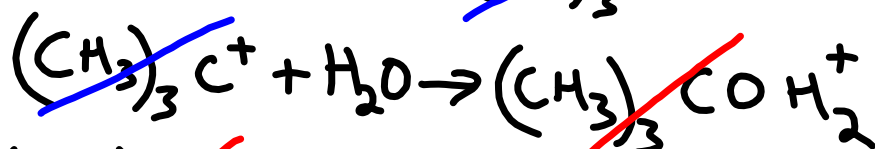
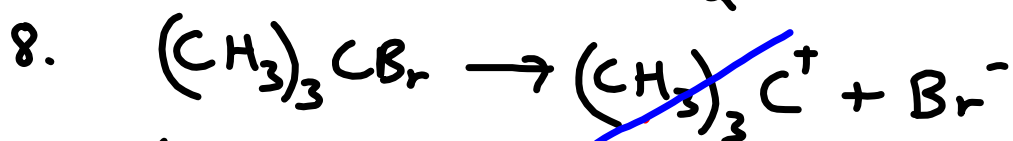
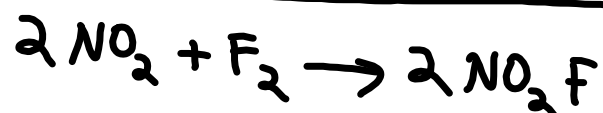
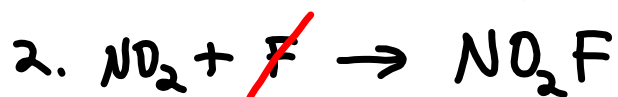


Rxn. Mechanism....

P. 478 #5

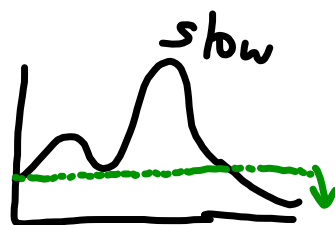


Questions p. 486 #10, 11

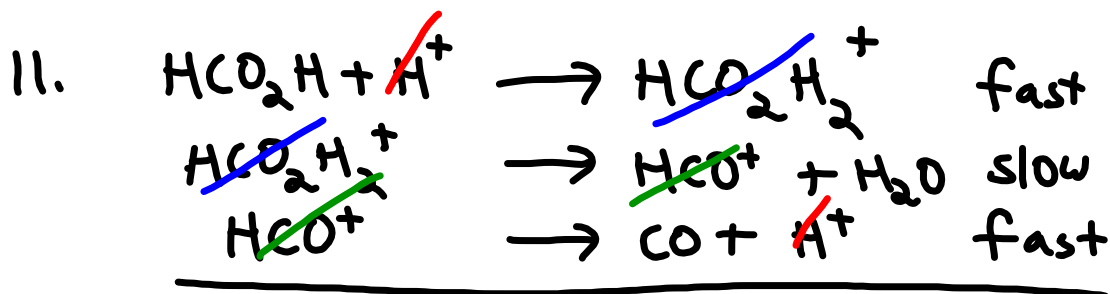
10. 2 - "bumps" on diagram

↑  
E<sub>act</sub>

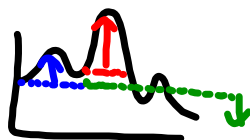
10 R.D.S.  
↓  
Step 2



ΔH - neg.  
exothermic



(b)



R.D.S. #2

P. 555 #69



↓

Trial	[NO]	Rate
1	0.50	$1.90 \times 10^{-2}$
2	1.00	$7.6 \times 10^{-2}$

NO	Rate
$\frac{1.00}{0.50} = 2$	$\frac{7.6 \times 10^{-2}}{1.90 \times 10^{-2}}$
2	4

$$2^n = 4$$

$$\text{order} \rightarrow n = 2$$

Cl<sub>2</sub>

Trial	Cl <sub>2</sub>	Rate
2	0.50	$7.6 \times 10^{-2}$
3	1.00	$15.20 \times 10^{-2}$

$\Delta[\text{Cl}_2]$	Rate
$\frac{1.00}{0.50} = 2$	$\frac{15.2 \times 10^{-2}}{7.6 \times 10^{-2}} = 2$

$$2^n = 2$$

$$n = 1$$

$$\text{Rate} = k [\text{NO}]^2 [\text{Cl}_2]$$