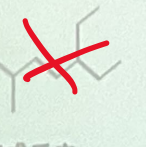
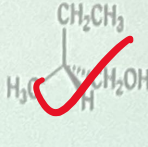
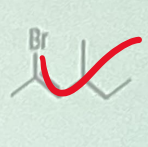
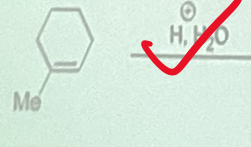
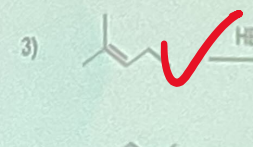


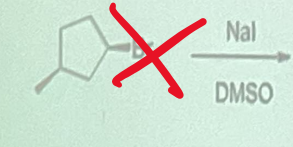
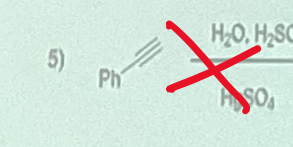
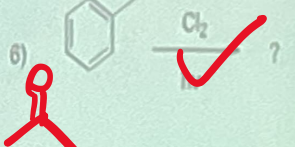
随堂测试

一、根据IUPAC命名规则写出下列化合物的英文名称，或者根据名称写结构

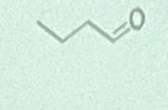
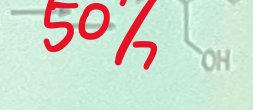
1.  2.  3.  4.  5. 正庚烷

二、完成反应

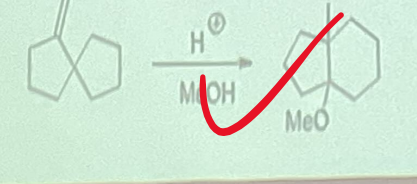
1.  2.  3.  ? $\xrightarrow{\text{NaOH}}$?

4.  ? $\xrightarrow{\text{DMSO}}$? 5.  ? 6.  ? $\xrightarrow{\text{NaOH, DMSO}}$?

三、用不超过两个碳的有机化合物及相关原料和任意无机物合成下列化合物

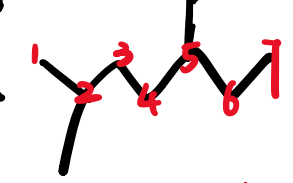
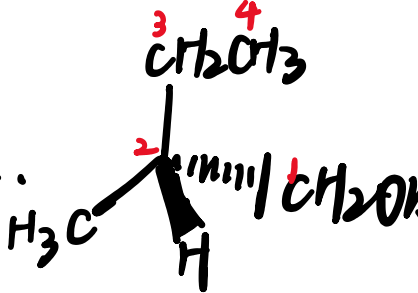
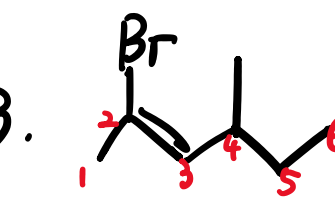
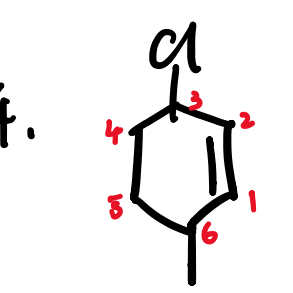
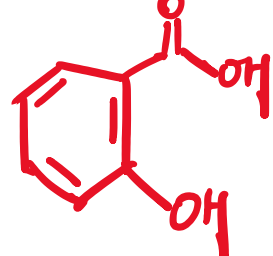
1) $\text{H}-\text{C}\equiv\text{C}-\text{H}$ $\xrightarrow{80\%}$  2) $\text{H}-\text{C}\equiv\text{C}-\text{H}$ $\xrightarrow{50\%}$ 

四、画出反应机理

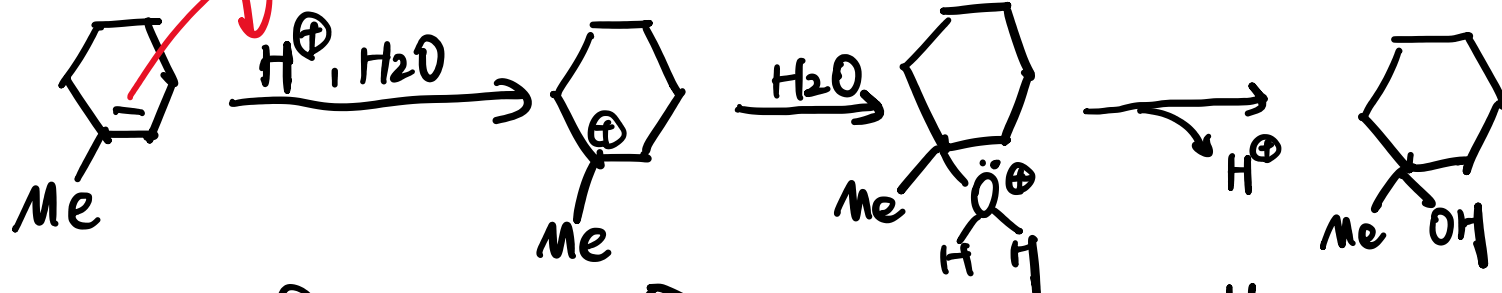
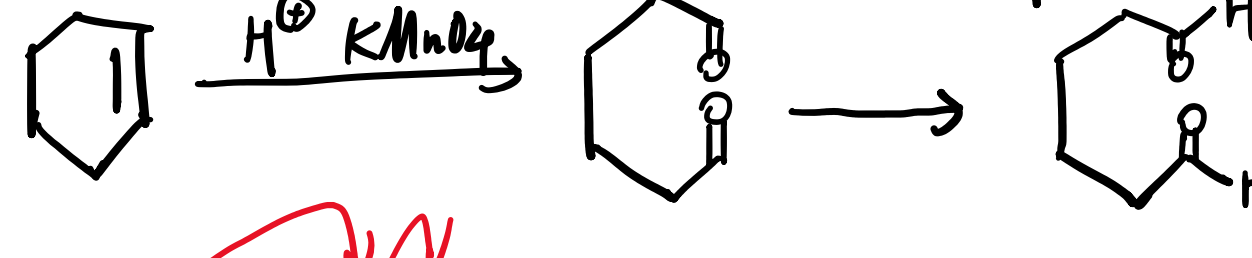
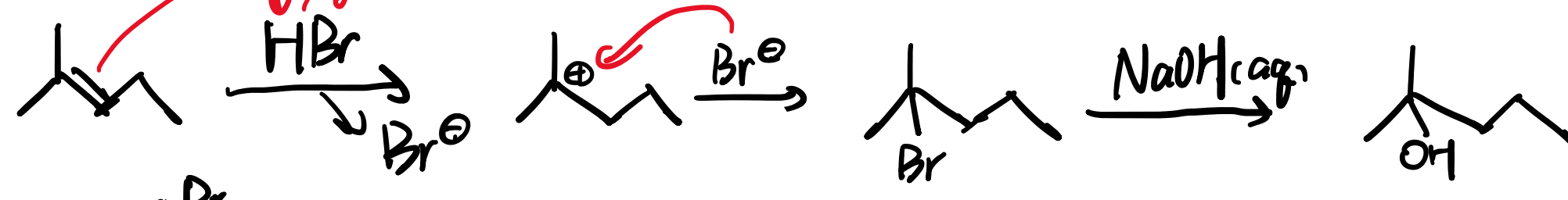
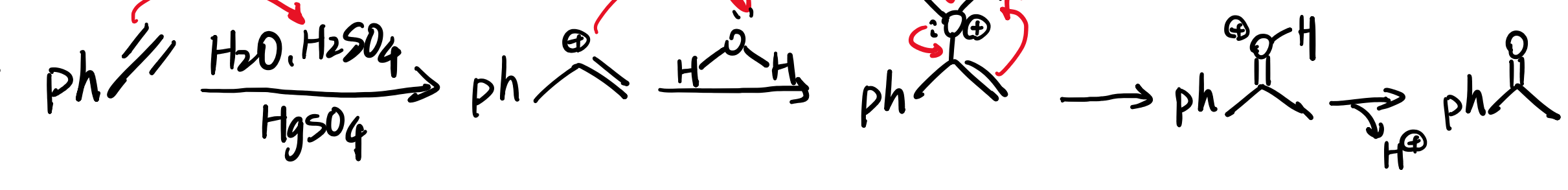
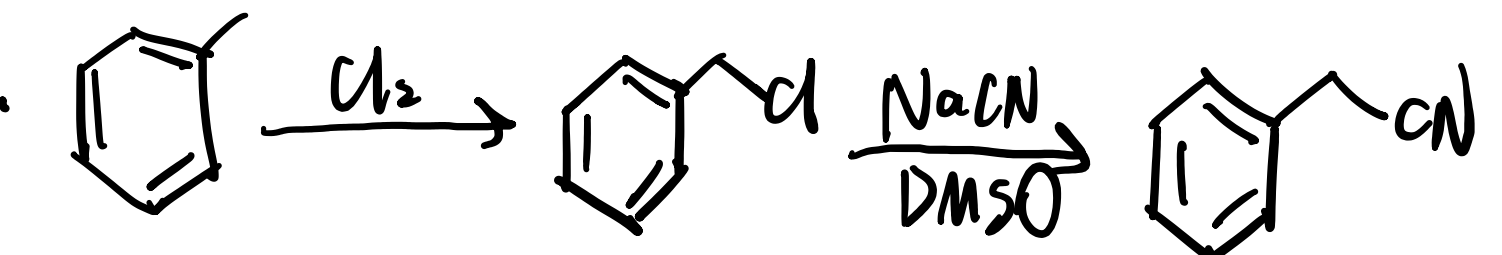


NaOH 水溶液取代
NaOH 醇溶液消除

一、命名

1.  5-ethyl-2-methylheptane
2.  (R)-2-methylbutan-1-ol
3.  (Z)-2-bromo-4-methylhex-2-ene
4.  3-chloro-6-methylcyclohex-1-ene
5. 阿司匹林 

二、反应

1. 
2. 
3. 
4.  (S_N2)
5. 
6. 

三、合成设计

1. $\text{H}-\text{C}\equiv\text{C}-\text{H} \Rightarrow \text{butanal}$, $\text{H}-\text{C}\equiv\text{C}-\text{H} \xrightarrow{\text{H-Br}} \text{CH}_2=\text{CHBr} \xrightarrow{\text{H}_2/\text{Pt}} \text{CH}_3\text{CH}_2\text{CH}_2\text{Br} \xrightarrow{\text{NaNH}_2} \text{CH}_3\text{CH}=\text{CH}_2 \xrightarrow{\text{Lindlar's cat.}/\text{H}_2} \text{cis-2-butene} \xrightarrow{\text{BH}_3/\text{H}_2\text{O}_2/\text{OH}^-} \text{2-butanol} \xrightarrow{\text{PCC}} \text{2-butanone}$
2. $\text{H}-\text{C}\equiv\text{C}-\text{H} \Rightarrow \text{3-pentanol}$, $\text{H}-\text{C}\equiv\text{C}-\text{H} \xrightarrow{\text{H-Br}} \text{CH}_2=\text{CHBr} \xrightarrow{\text{H}_2/\text{Pt}} \text{CH}_3\text{CH}_2\text{CH}_2\text{Br} \xrightarrow{\text{NaNH}_2/2\text{eq.}/\text{Br}_2(2\text{eq.})} \text{CH}_3\text{CH}=\text{CHCH}_3 \xrightarrow{\text{Lindlar's cat.}/\text{H}_2} \text{cis-2-pentene} \xrightarrow{\text{HBr}/\text{Mg}} \text{2-pentanol} \xrightarrow{\text{RCHO}} \text{3-pentanol}$

四、反应机理

