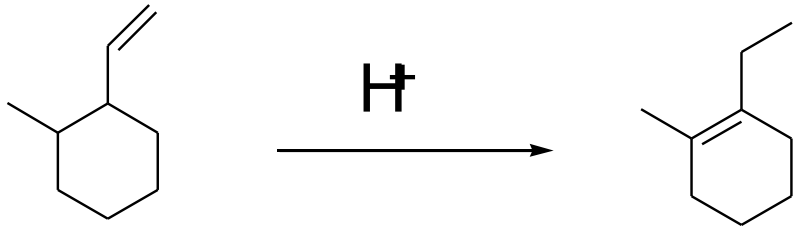
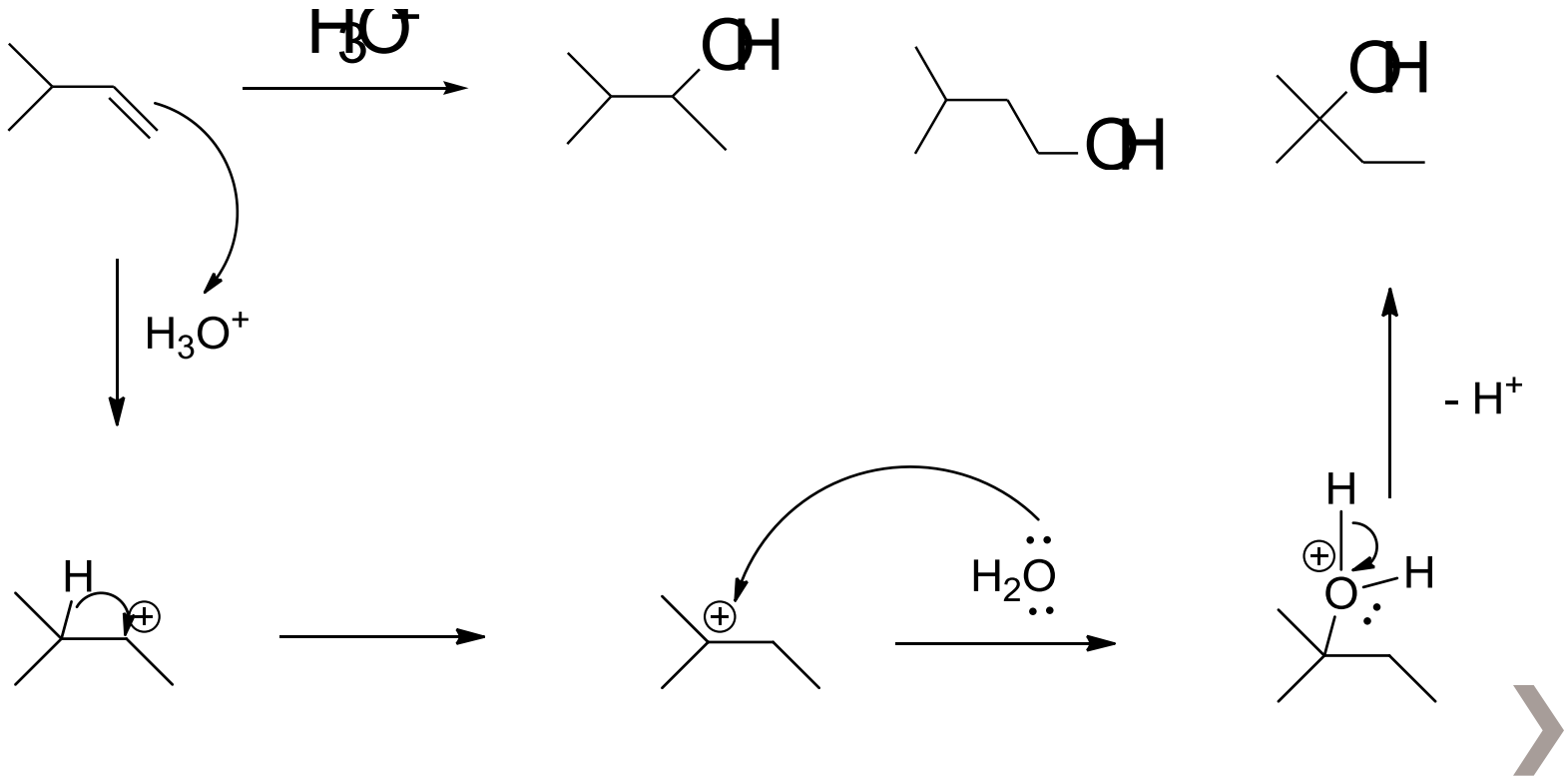
# ALKENY, ALKYNY

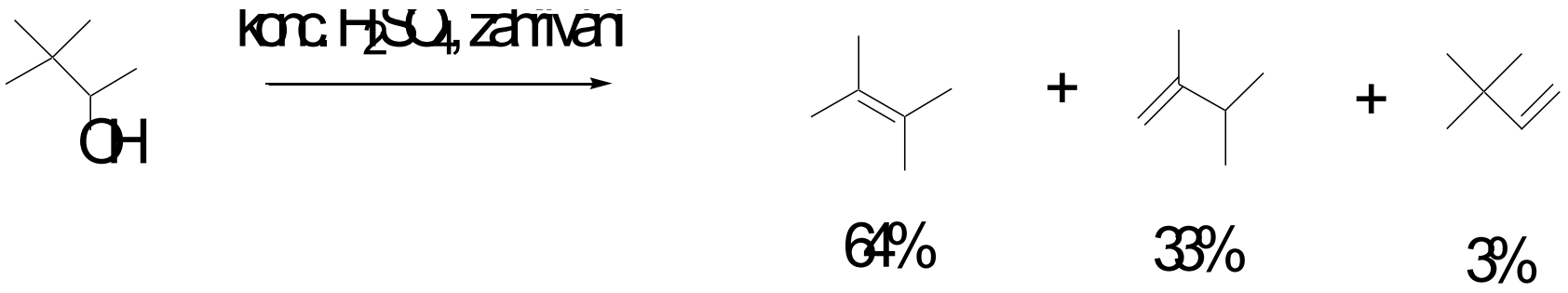
» **Navrhněte mechanismus pro kysele katalyzovanou izomeraci uvedeného alkenu**

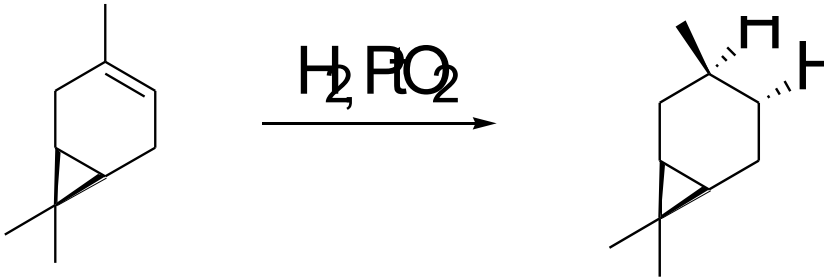


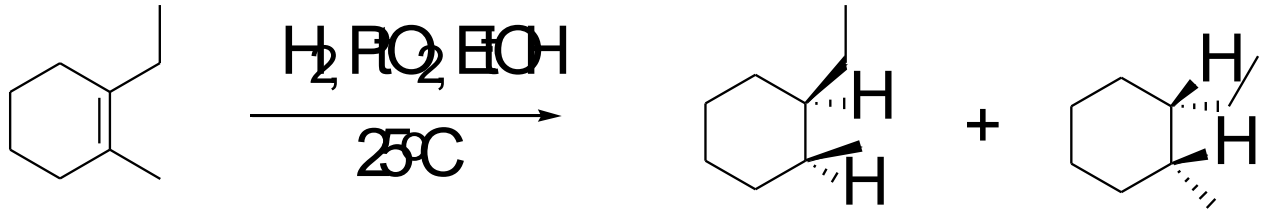
» **Určete, která ze sloučenin bude hlavním produktem reakce a navrhněte mechanismus jeho vzniku**

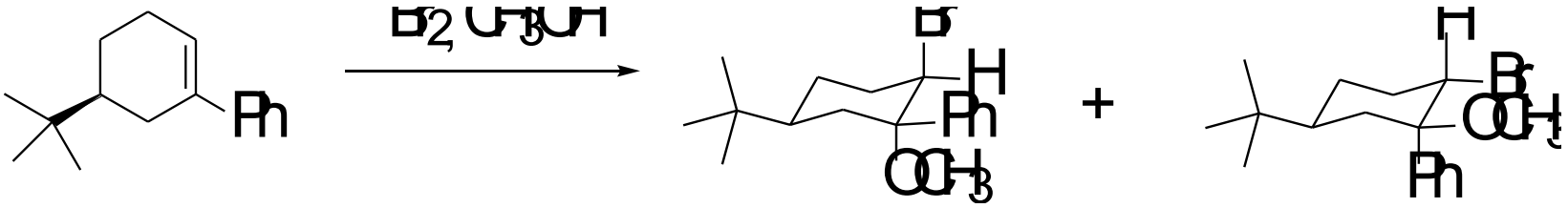


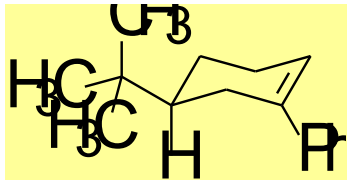
» **Navrhněte mechanismus vzniku hlavního produktu uvedené reakce**



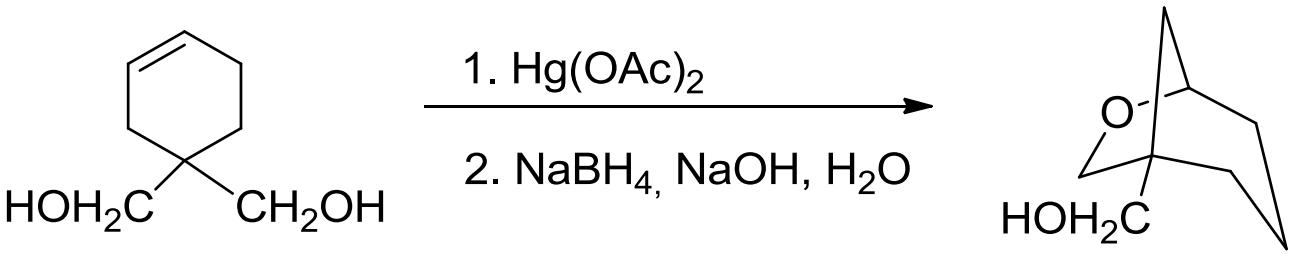



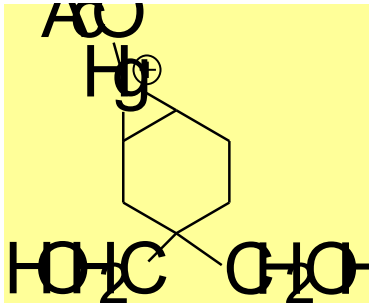


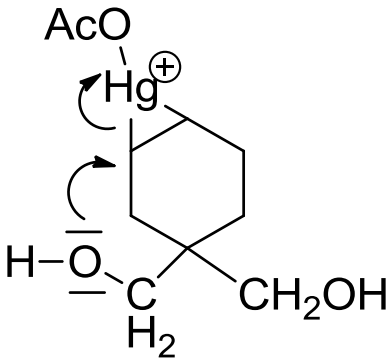


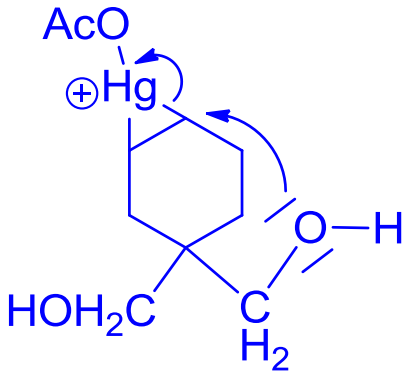


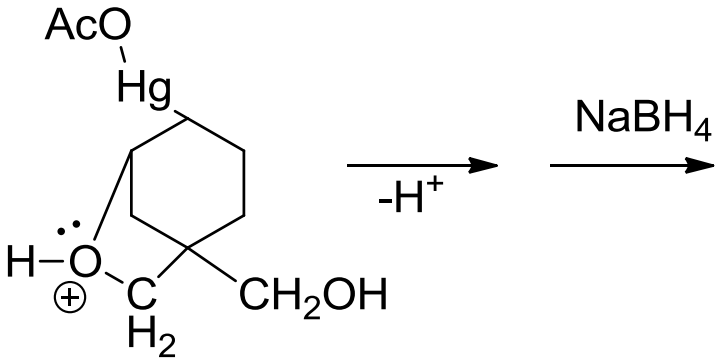
# » Navrhněte mechanismus pro následující reakci



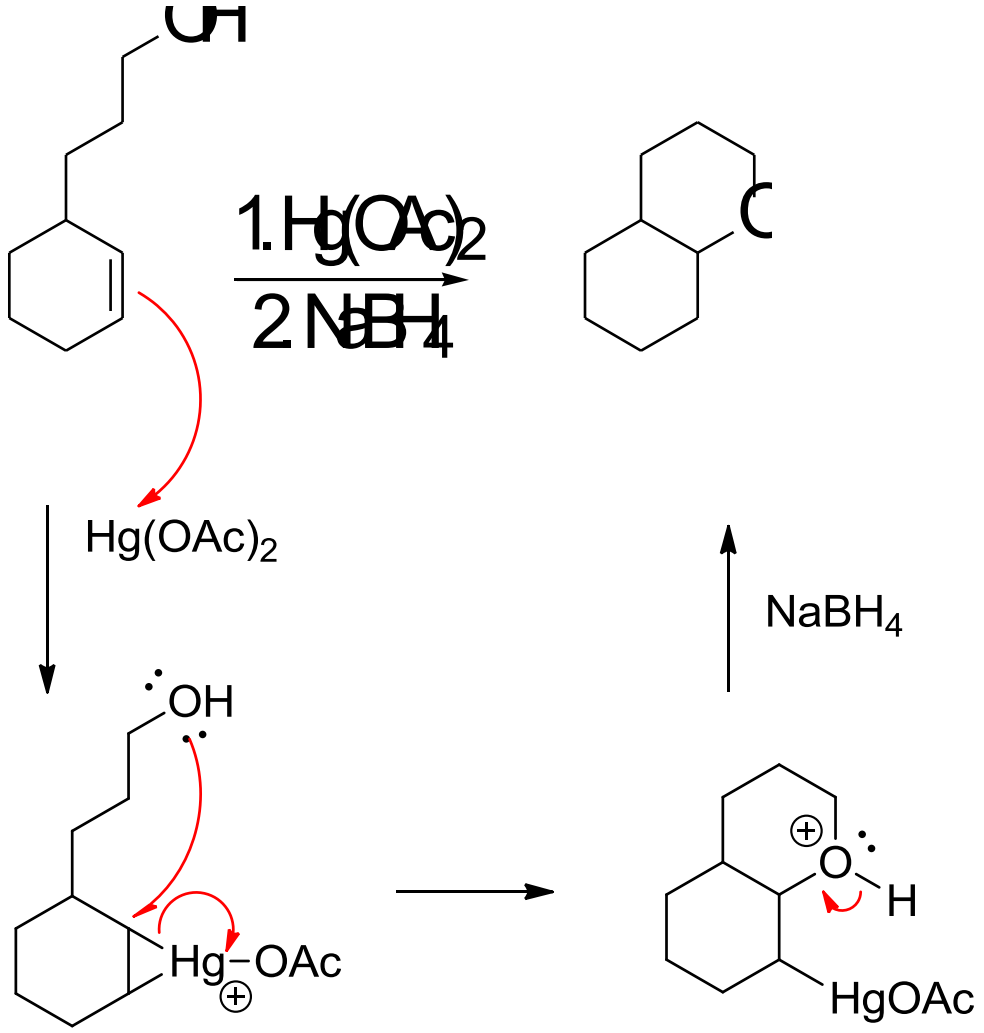





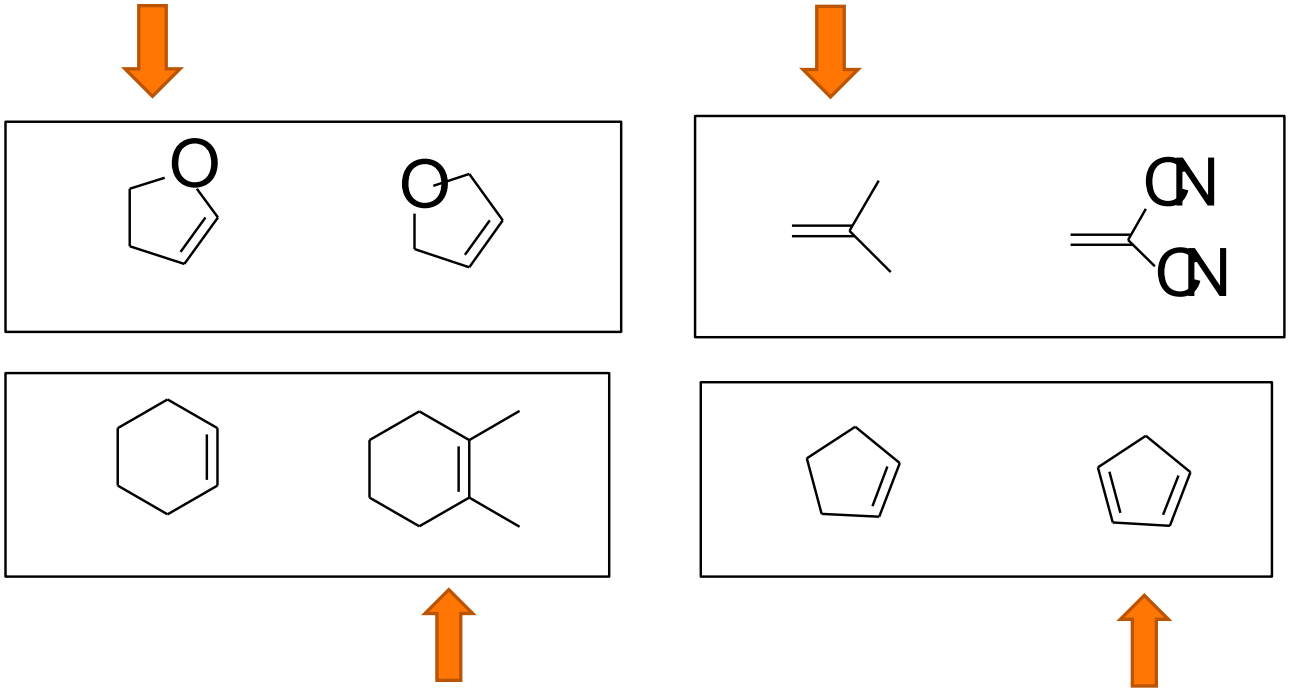



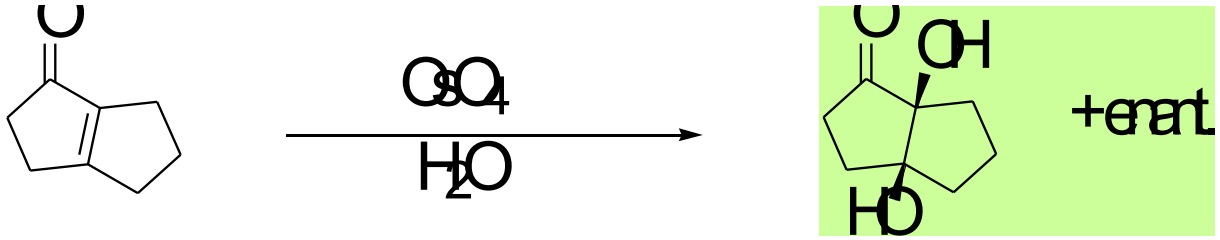
# » Navrhněte mechanismus pro následující reakci

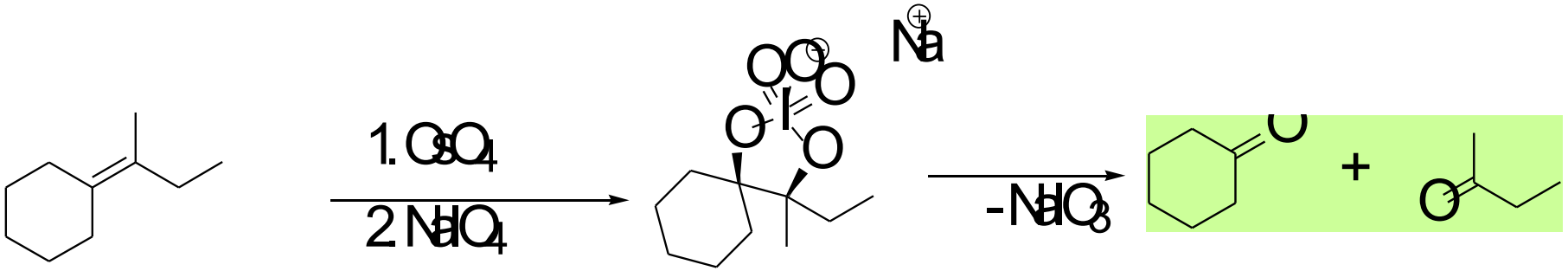


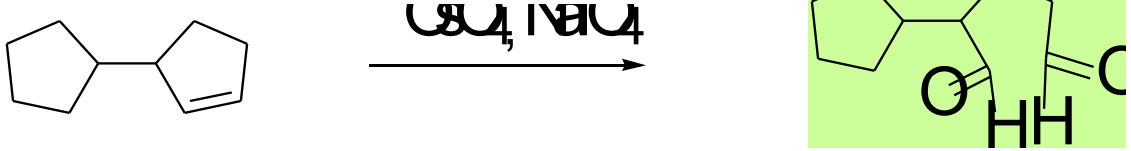
» **Ve dvojicích rozhodněte, který substrát bude rychleji reagovat s 1 ekv. *m-CPBA***



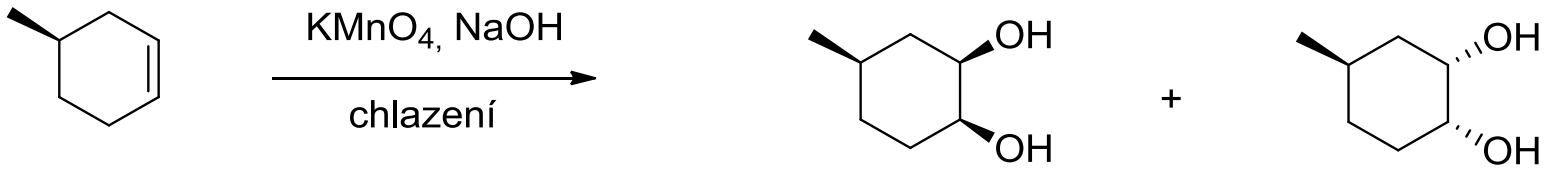
# » Doplňte produkty reakcí včetně správné stereochemie

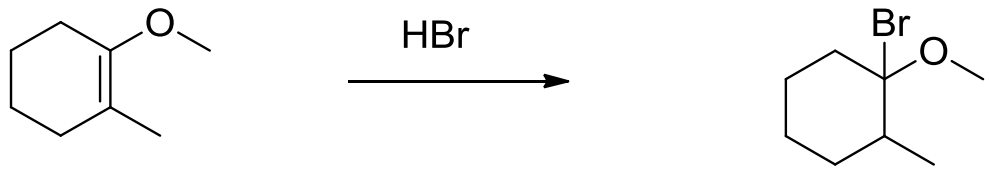


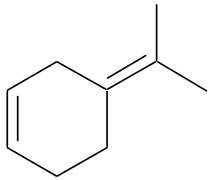




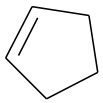
oxidativní štěpení diolů


KMnO4, NaOH
chlazení
OH
OH
+
OH
OH

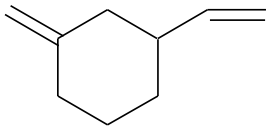

O
HBr
Br
O



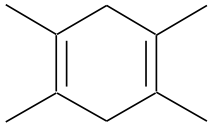
$$\xrightarrow[2\,(CH_3)_2S]{1.\,O_3}$$



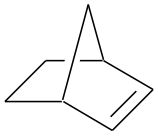
$$\xrightarrow[2\,(CH_3)_2S]{1.\,O_3}$$



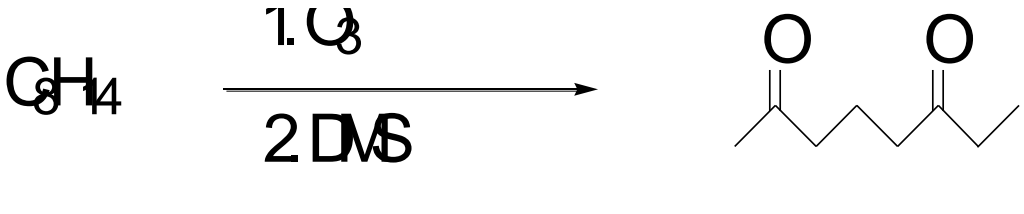
$$\xrightarrow[2\,(CH_3)_2S]{1.\,O_3}$$

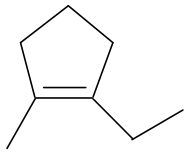


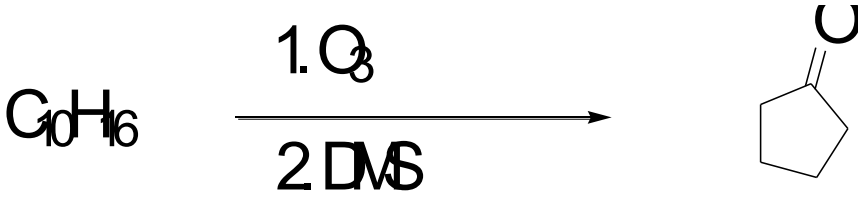
$$\xrightarrow[2\,(CH_3)_2S]{1.\,O_3}$$

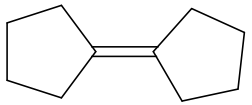


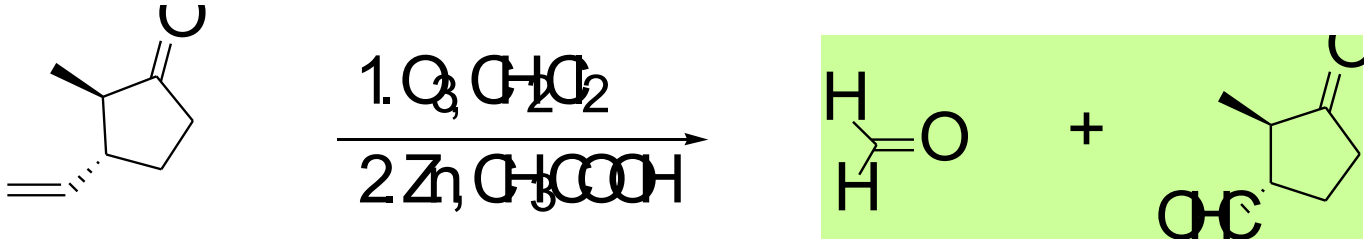
$$\xrightarrow[2\,(CH_3)_2S]{1.\,O_3}$$


C8H14
1. O3
2. DMS
O
O

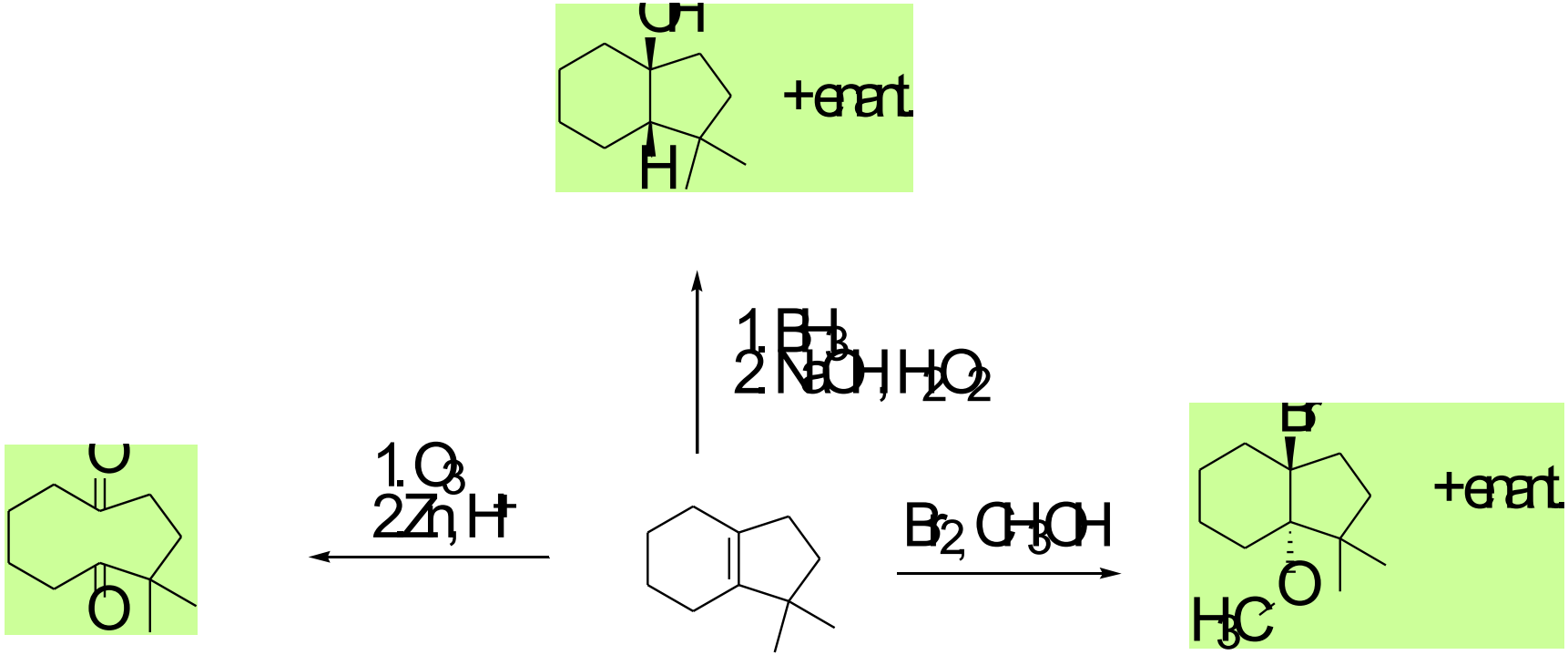



C10H16
1. O3
2. DMS
O

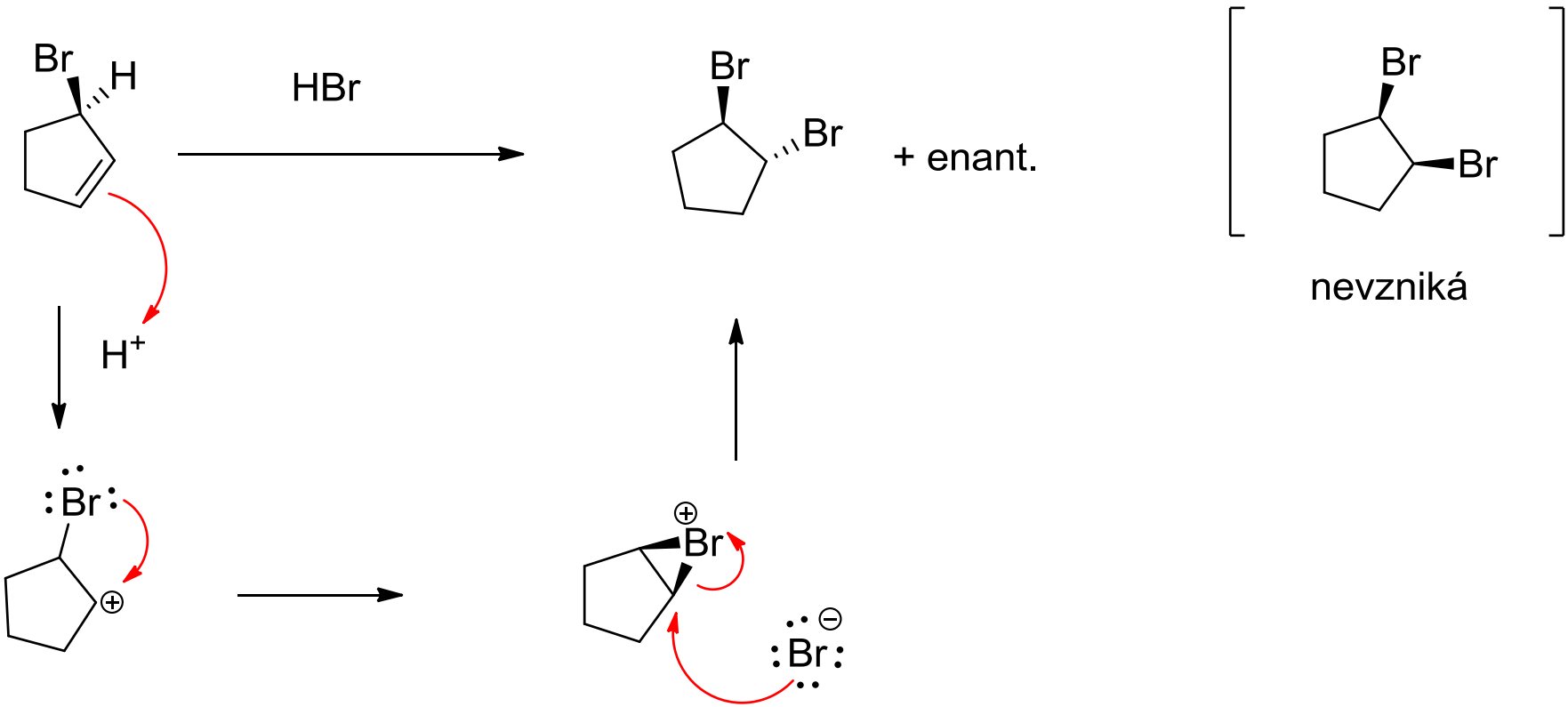



1. O3, CH2Cl2
2. Zn, CH3COOH
+

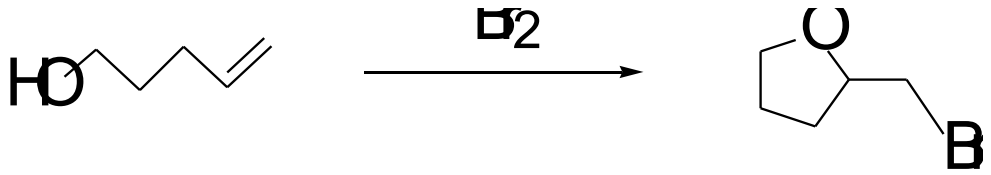
# » Doplňte produkty reakcí včetně správné stereochemie



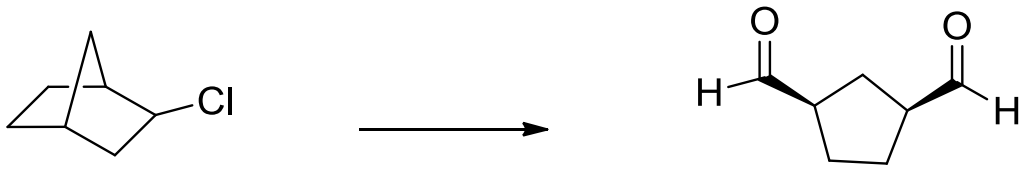
# » Zdůvodněte

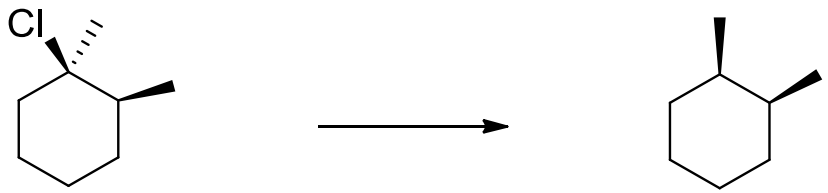


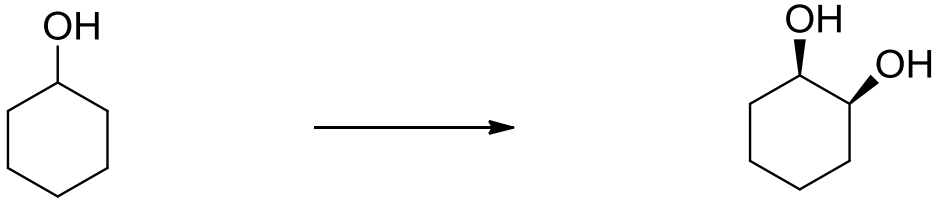
» **Navrhněte mechanismus následující přeměny**

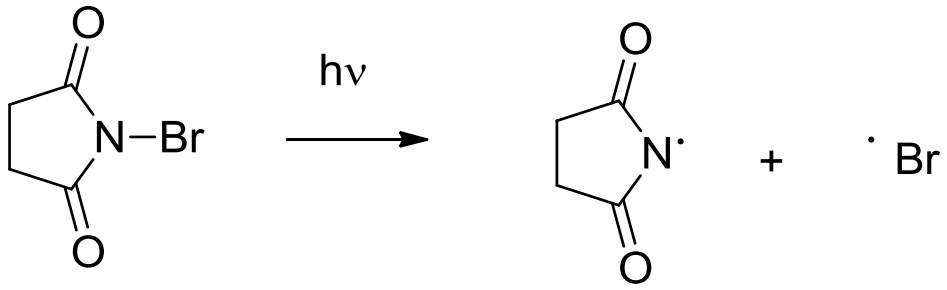


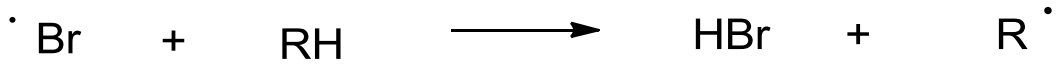
# » Navrhněte syntézu uvedených sloučenin

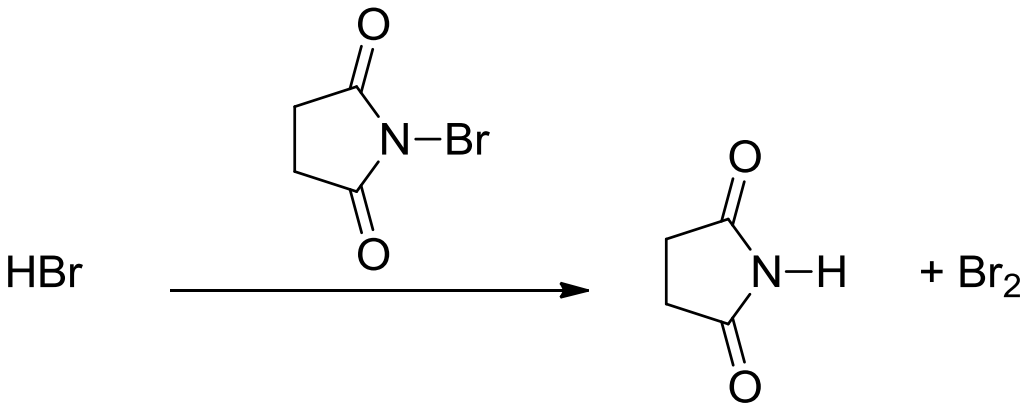


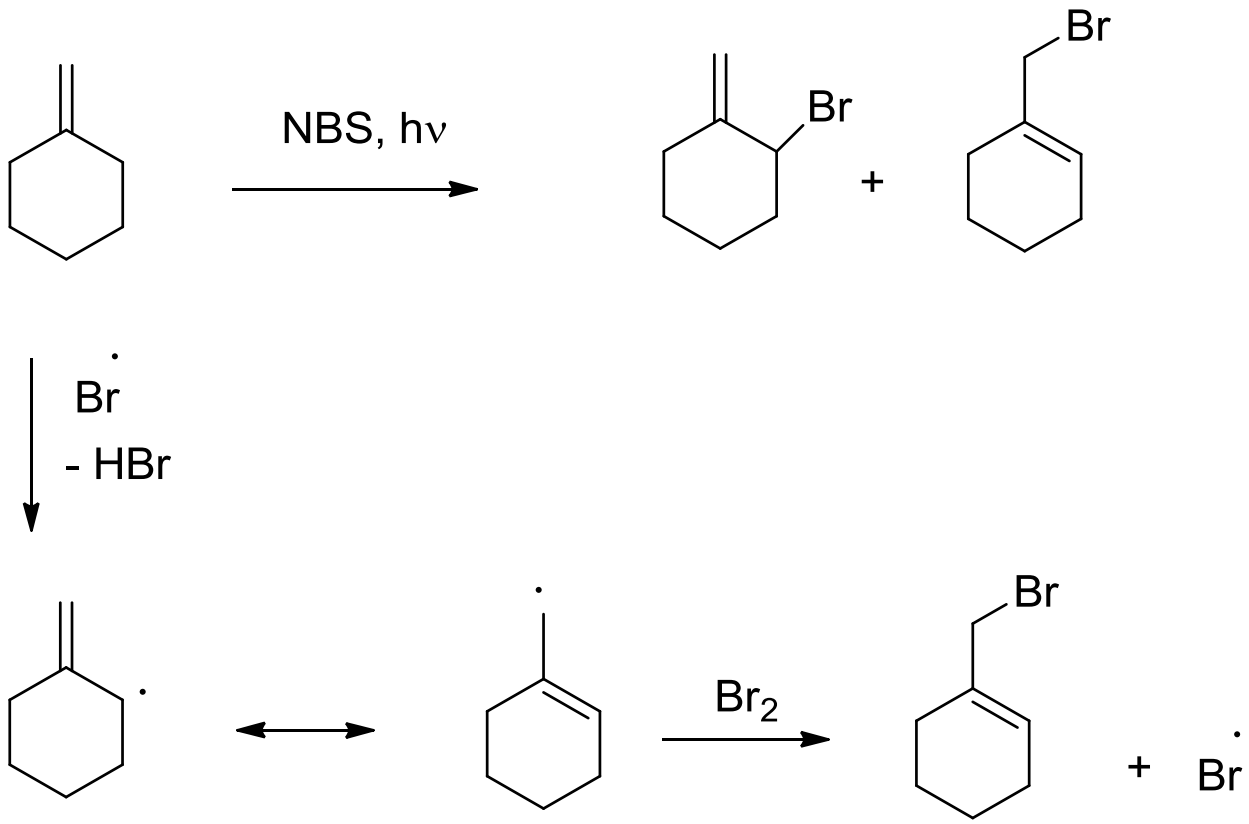




O
N–Br
O
hν
O
N·
O
+
·Br

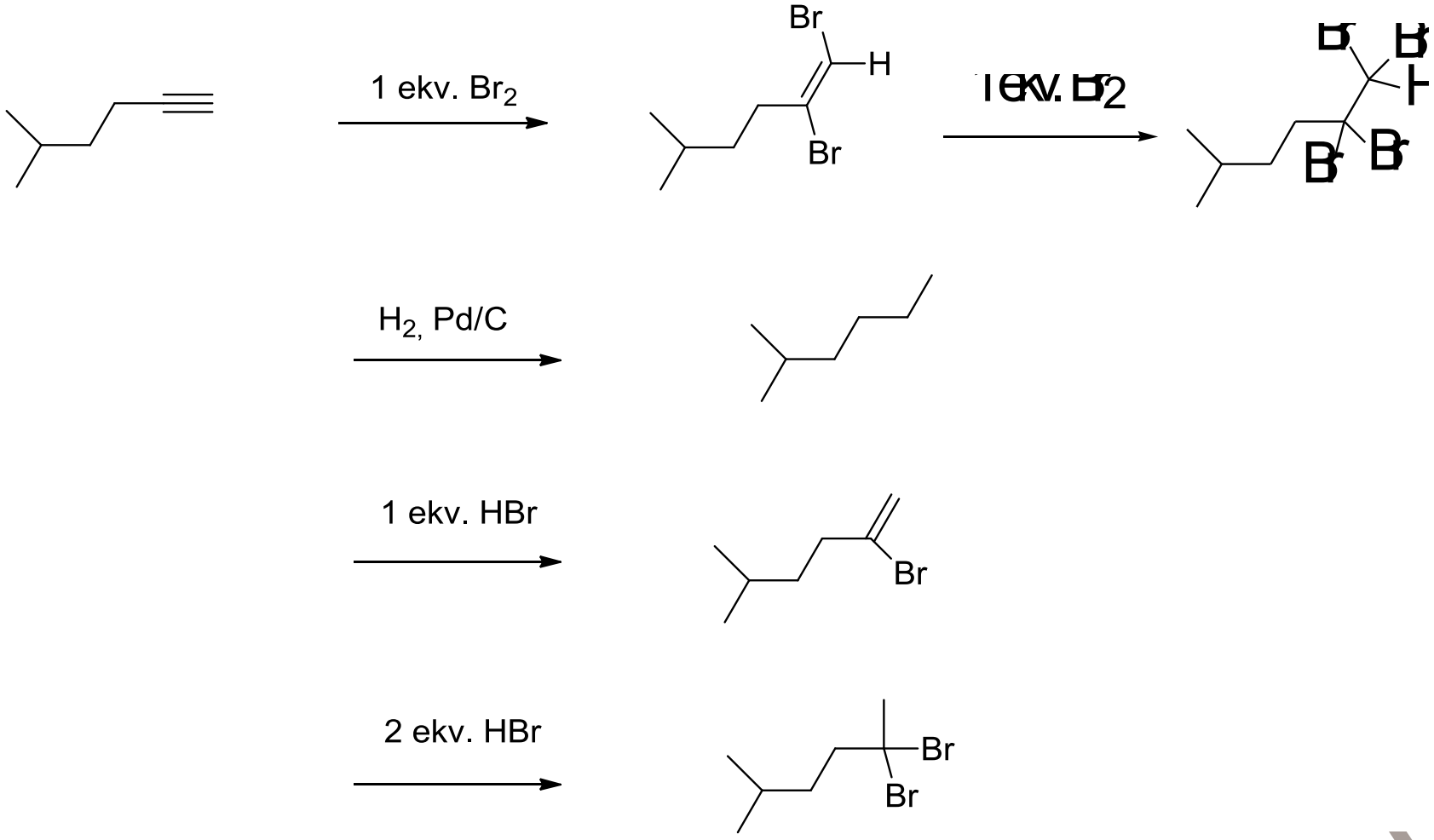

·Br
+
RH
HBr
+
R·


O
N–Br
O
HBr
O
N–H
O
+ Br2

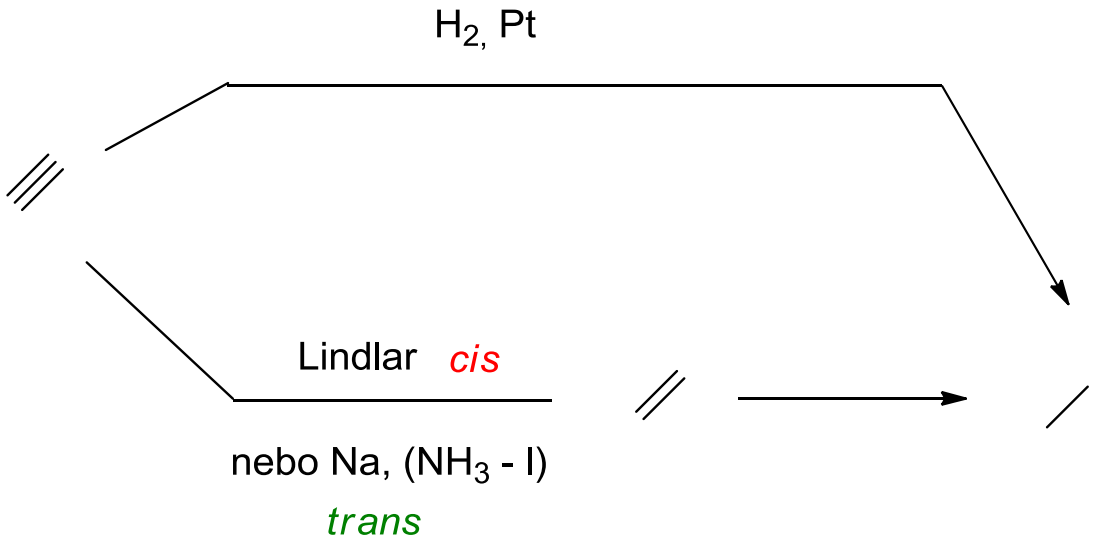
» **Zapište mechanismus následující reakce a pokuste se vysvětlit vznik obou uvedených produktů**

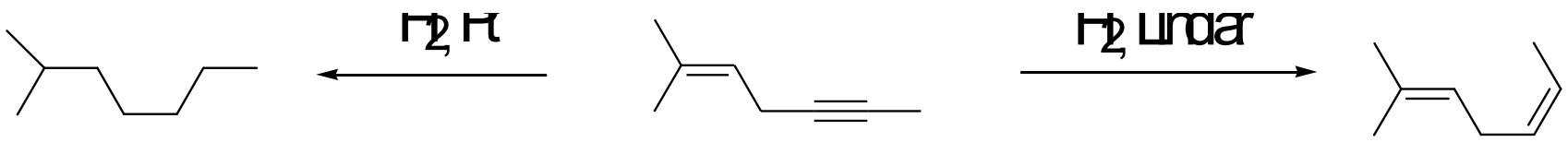


# » ALKYNY

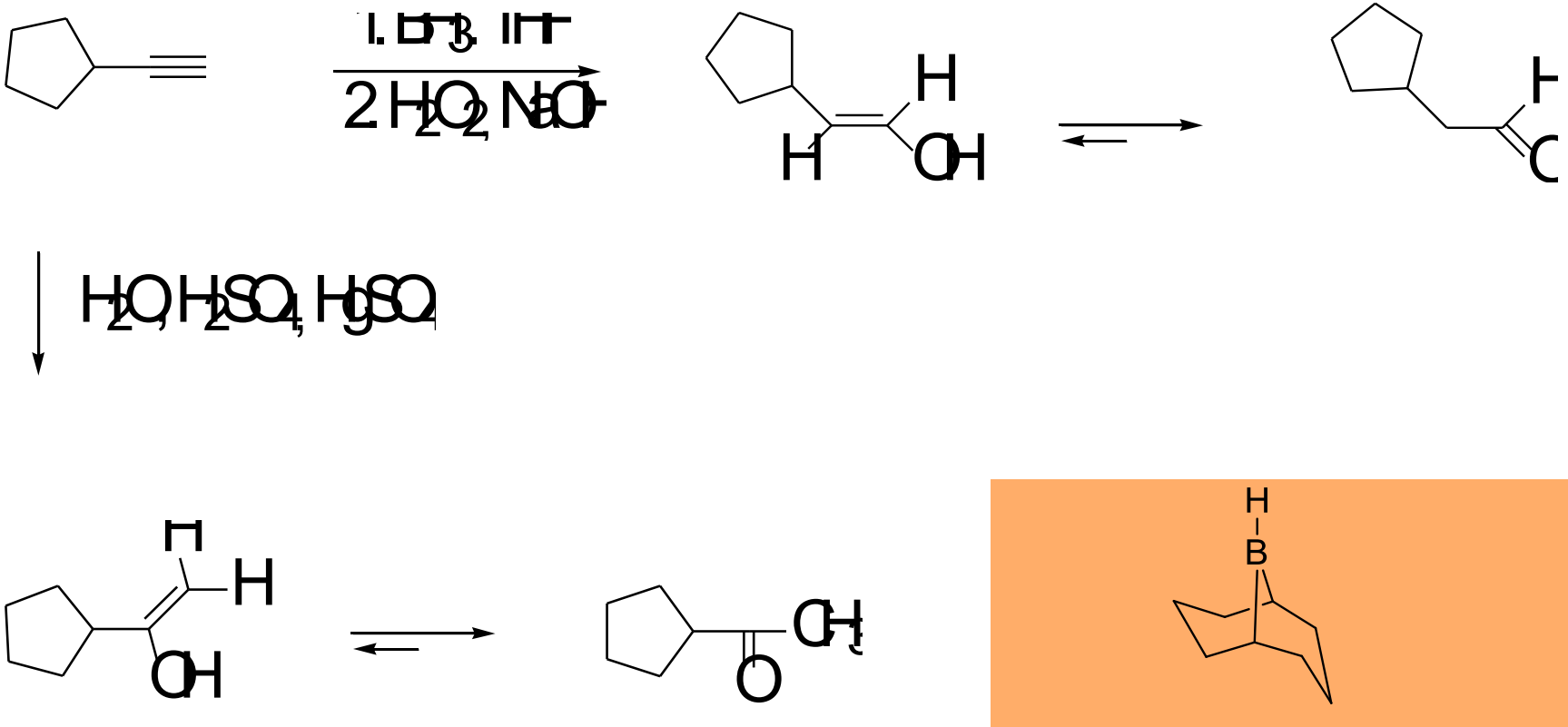


# » ALKYNY



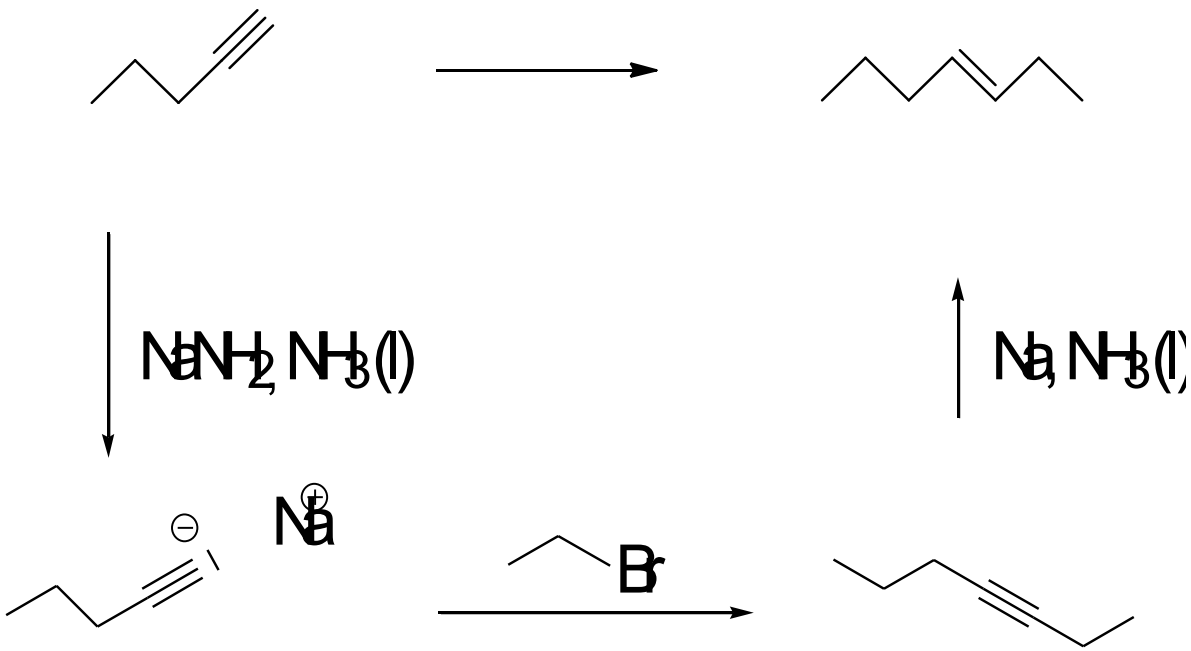
# » Hydroborace alkynů



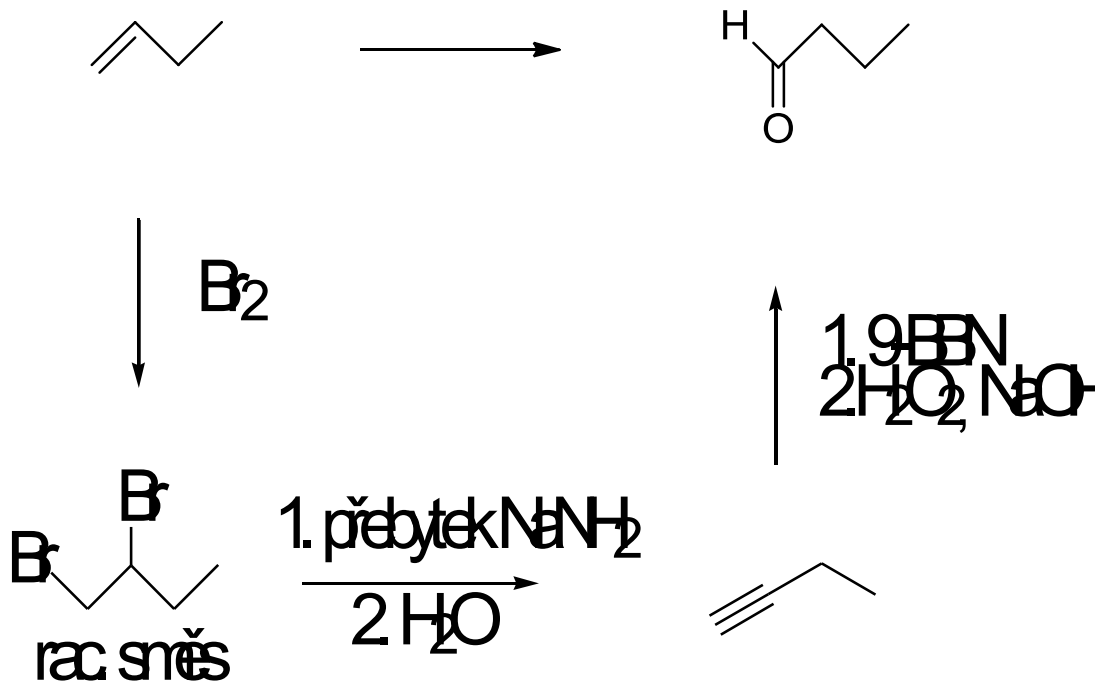


9-BBN prevence vícenásobné reakce

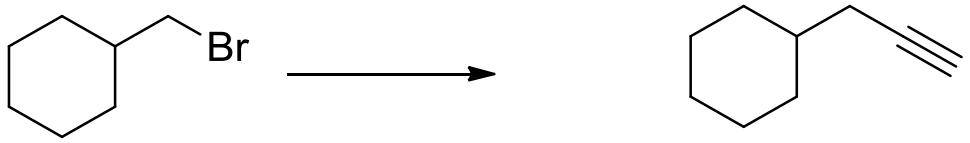
» **Navrhněte způsob následující přeměny v několika krocích**

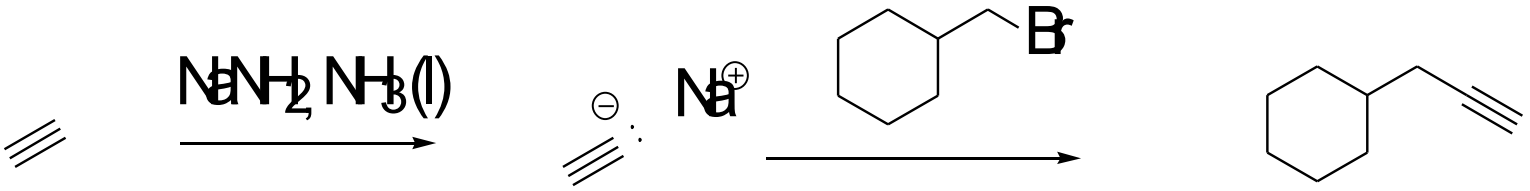


» **Navrhněte způsob následující přeměny v několika krocích**

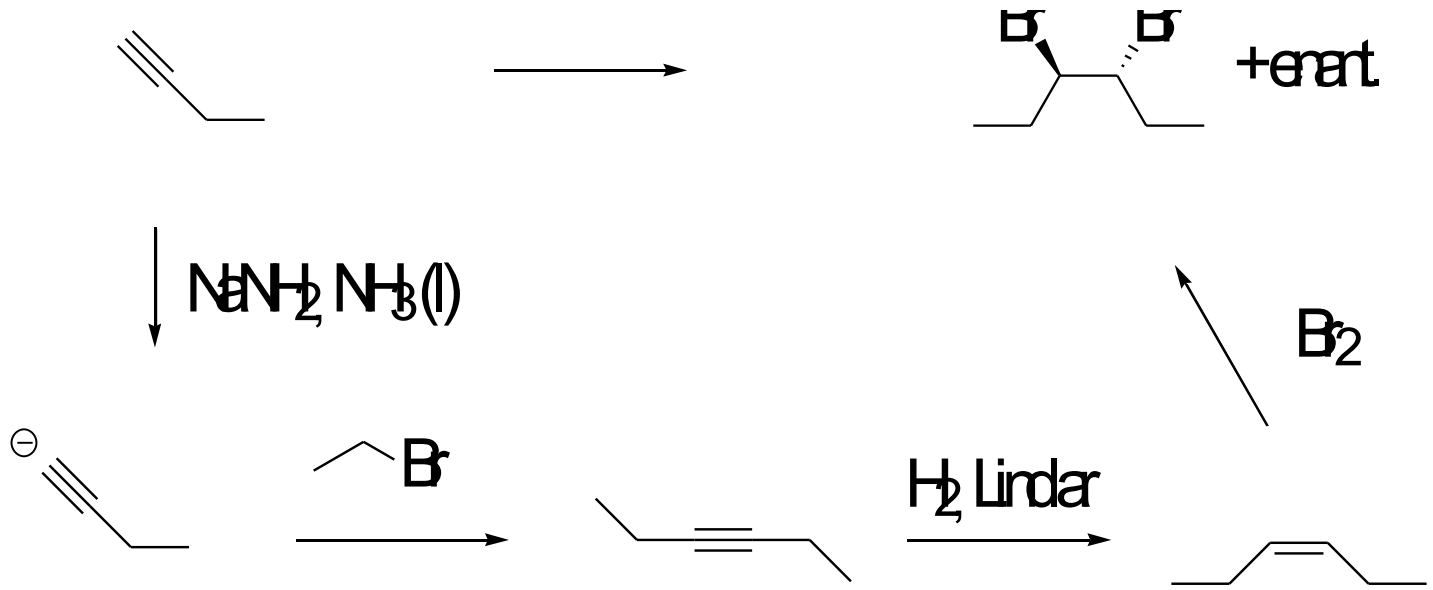


» **Navrhněte způsob následující přeměny v několika krocích**

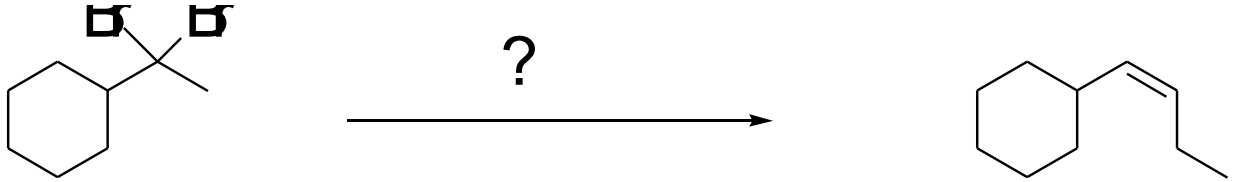


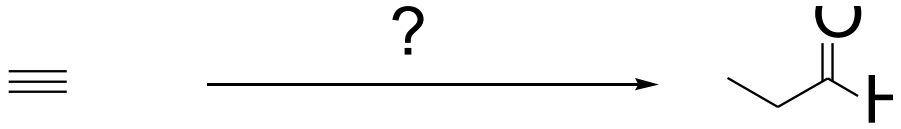
» **Navrhněte způsob následující přeměny v několika krocích**



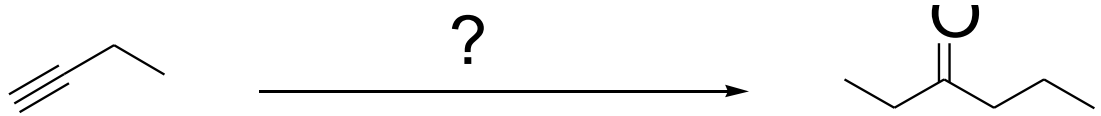
1. přebytek $NaNH_2$
2. EtCl
3. $H_2$, Lindlar



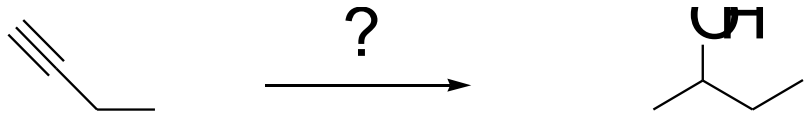

1. $NaNH_2$
2. MeI
3. 9-BBN
4. $H_2O_2$, NaOH



1. $NaNH_2$
2. EtI
3. $HgSO_4$, $H_2SO_4$, $H_2O$

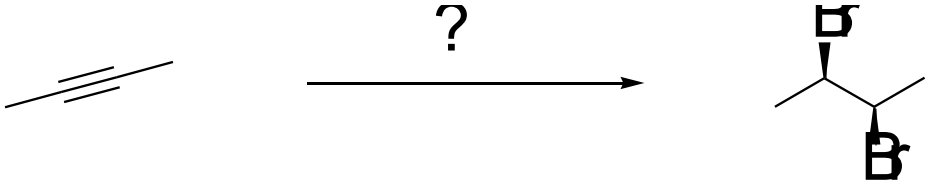



1. $H_2$ , Lindlar
2. $H_2O$, $H^+$



1. $H_2$, Lindlar
2. $Br_2$

?



+ enant.

1. $H_2$, Lindlar
2. *m*-CPBA
3. $H_3O^+$

?

nebo

1. Na, $NH_3$-*l*
2. $OsO_4$, NMO