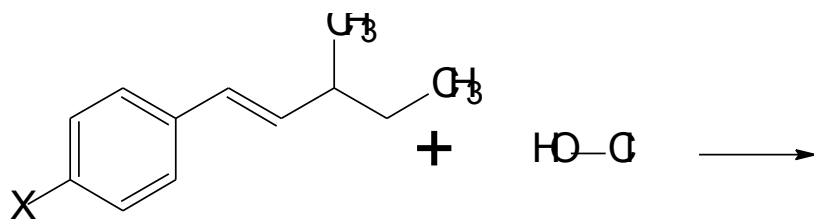
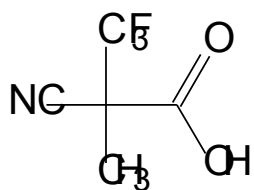
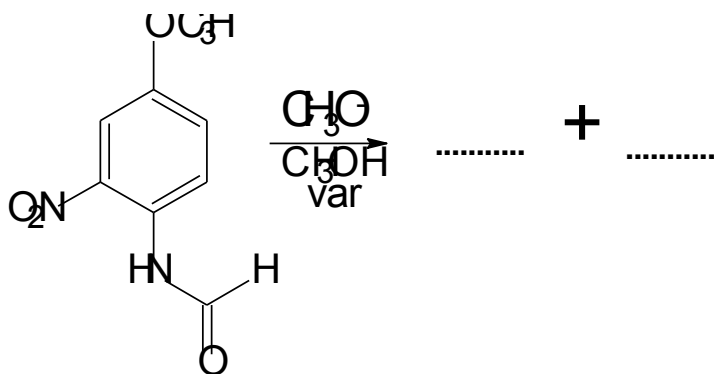
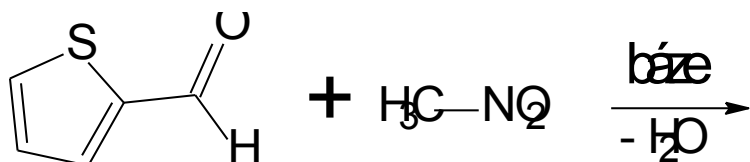
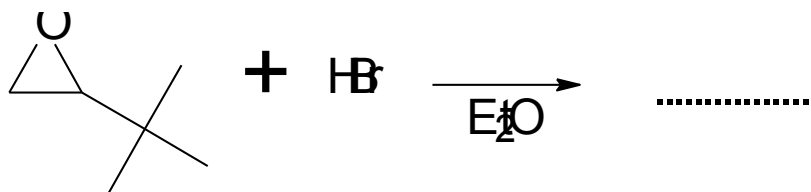
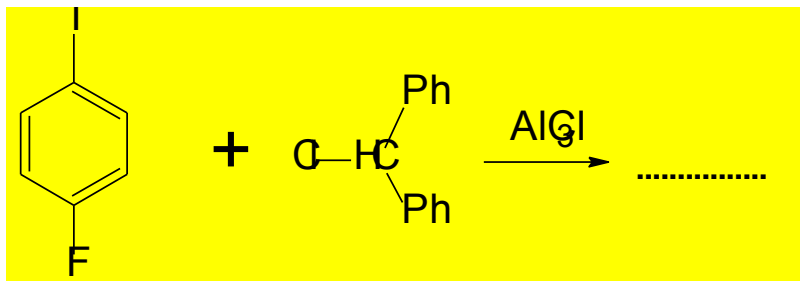
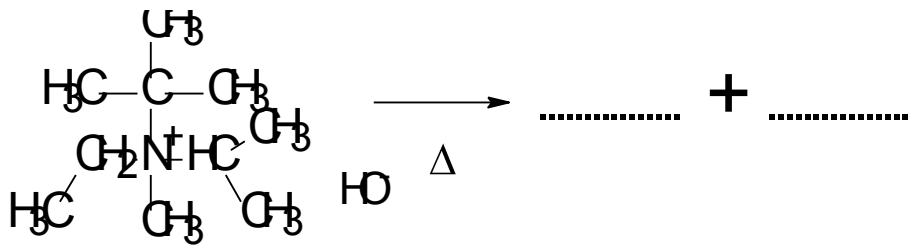
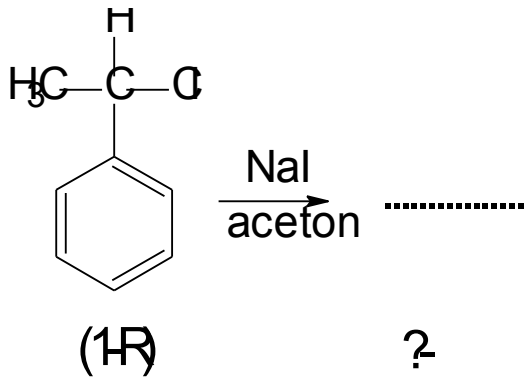


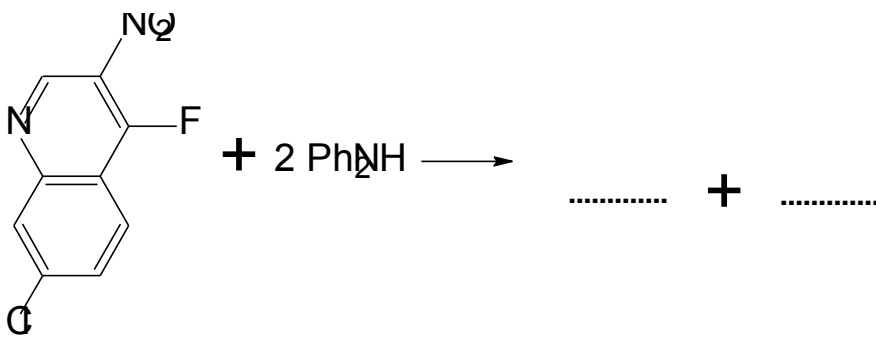
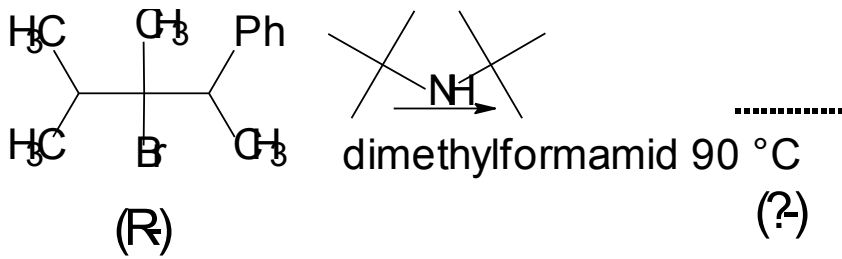
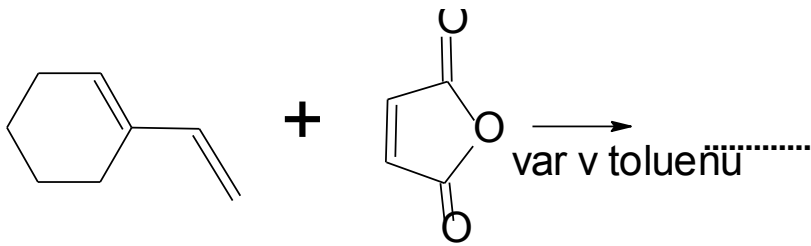
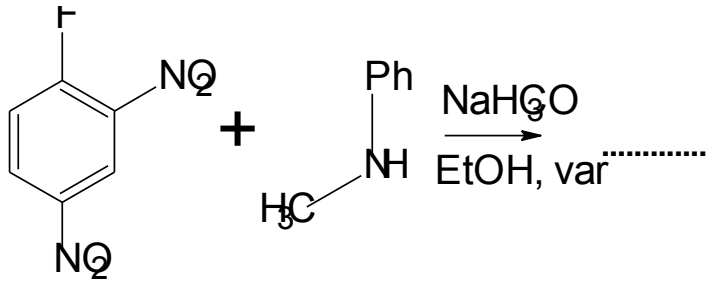
Určete absolutní konfiguraci nadřazenímatonu

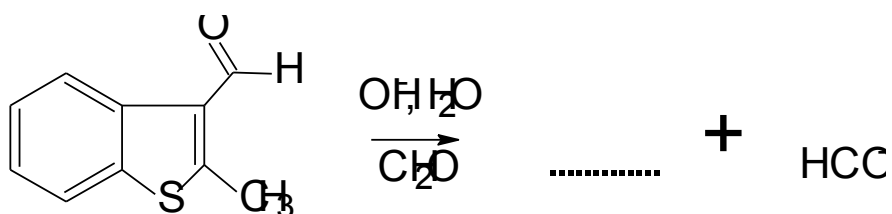
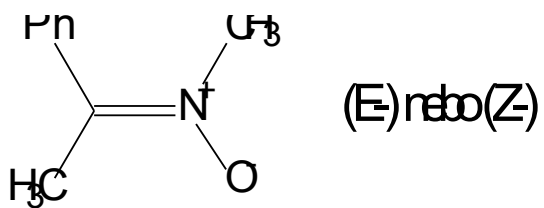


- A) Jaký produkt vznikne?  
 B) Pro které  $\text{X}$  bude probíhat reakce rychleji?



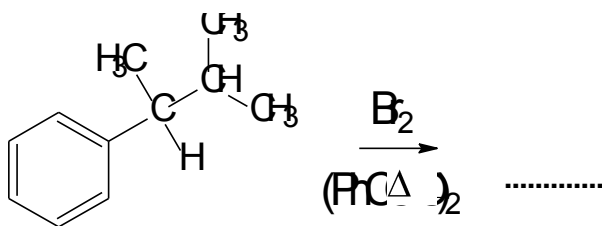
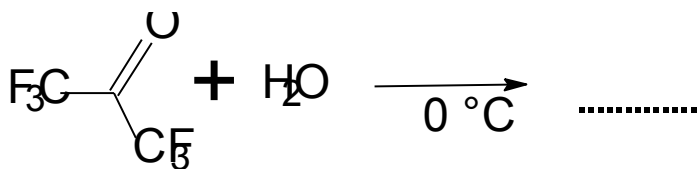




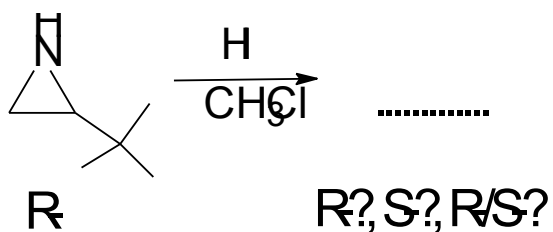
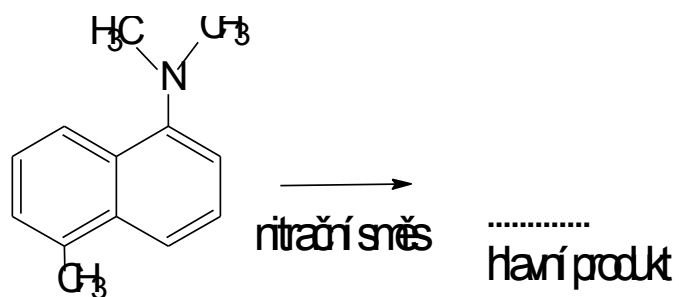
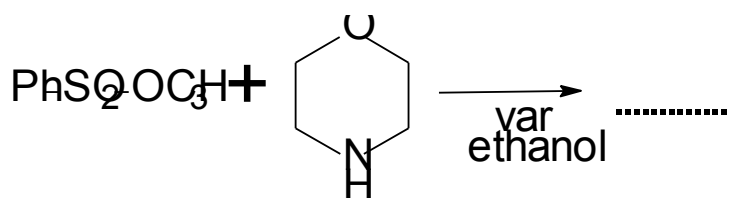


Seřadte podle rostoucí basicity (ve vodě):

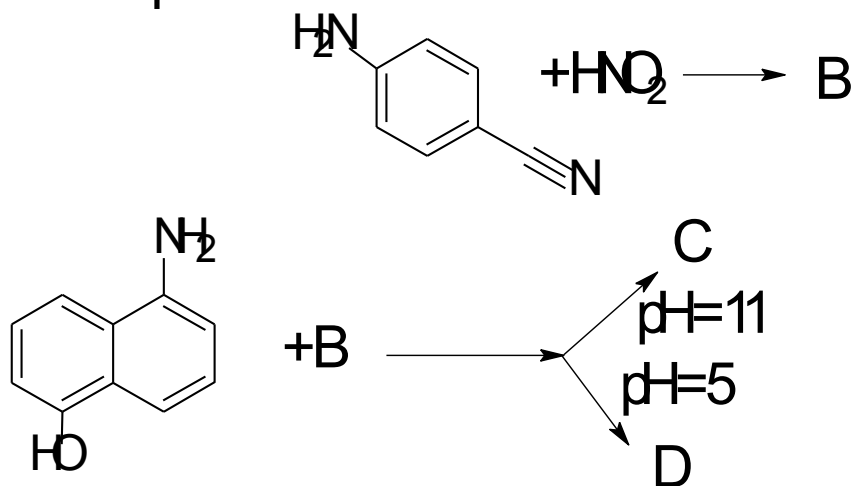
$\text{NH}_3$     pyrrol     $\text{NH}(\text{OH})_2$     pyridin     $\text{CH}_3(\text{CH}_2)_{10}\text{NH}_2$

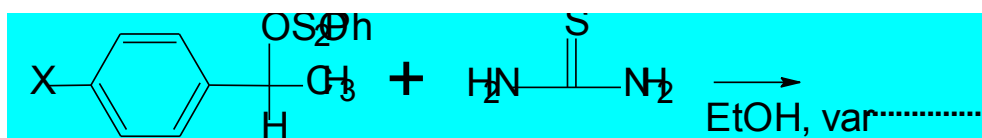
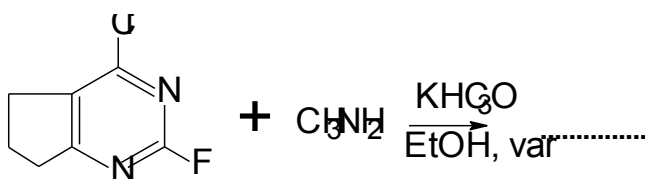
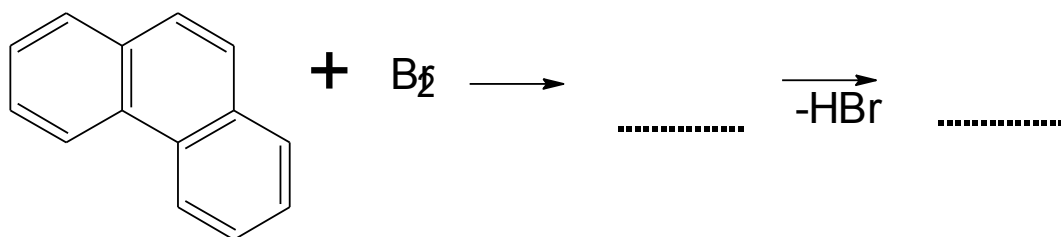


Znáší se průběh reakce, pokud místo  $\text{B}_2$  použijeme  $\text{I}_2$ ?



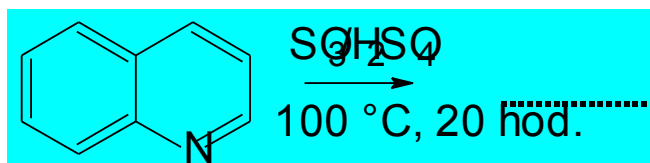
Doplň reakční schéma

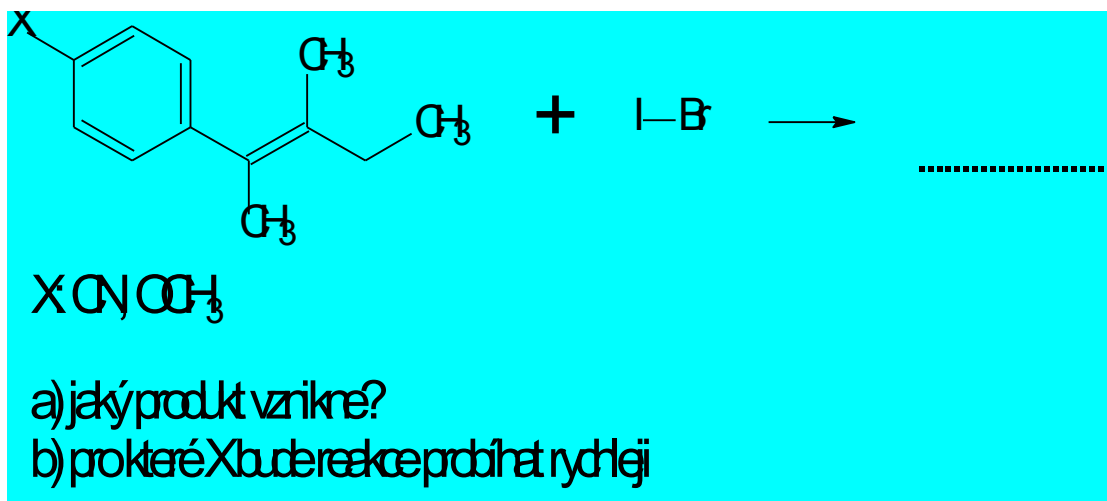
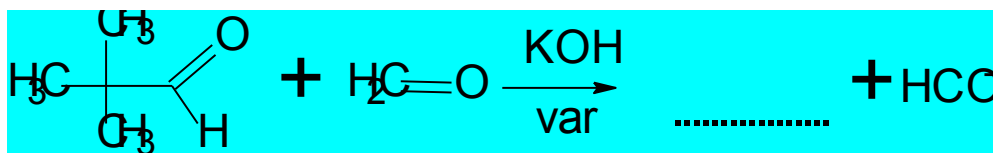
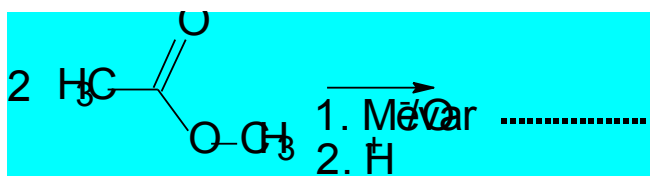
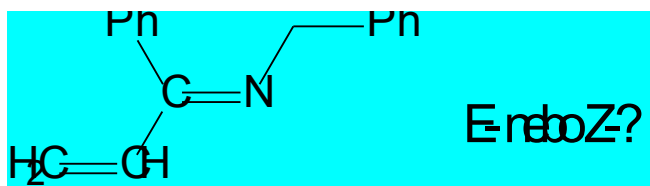
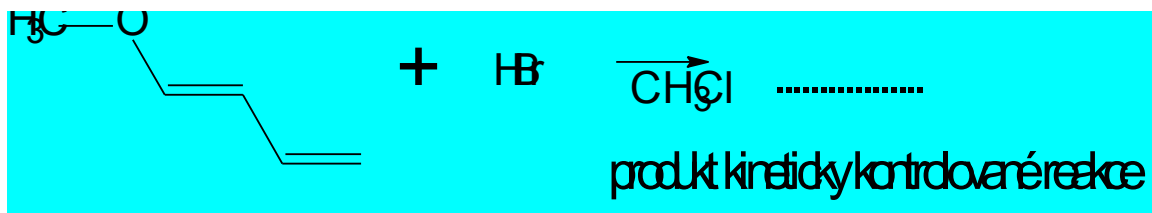




X = H, -OH, -OR

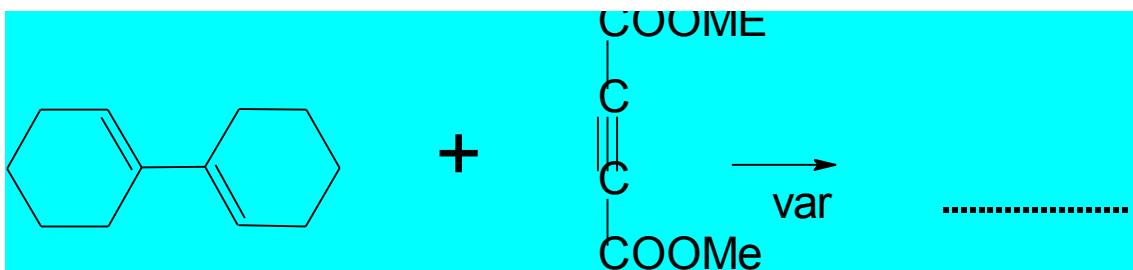
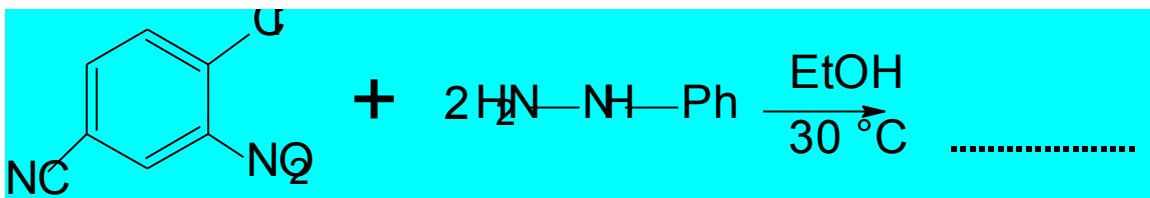
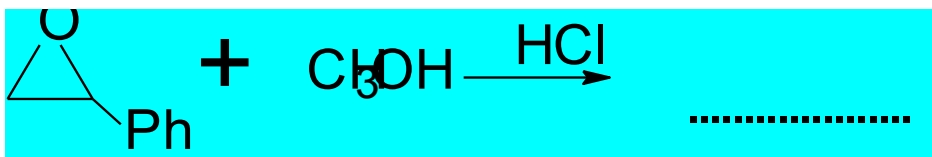
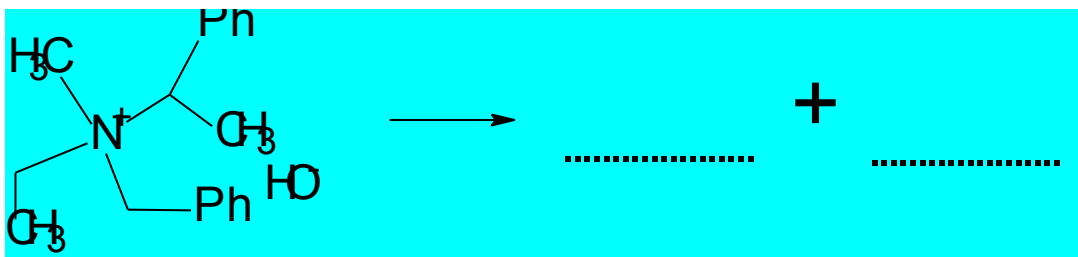
Proč? Jaká reakce je to?

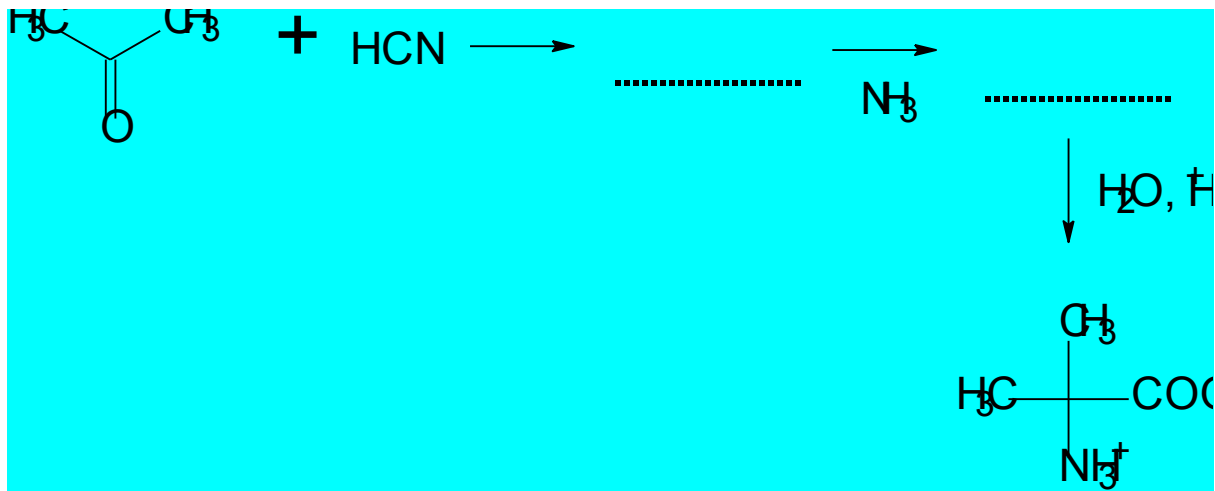
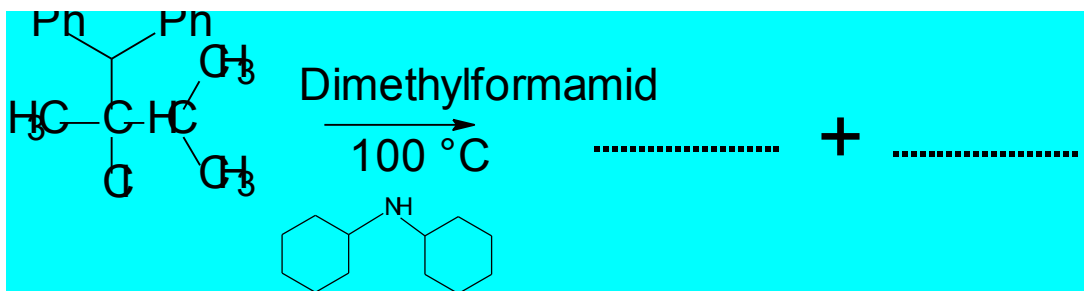
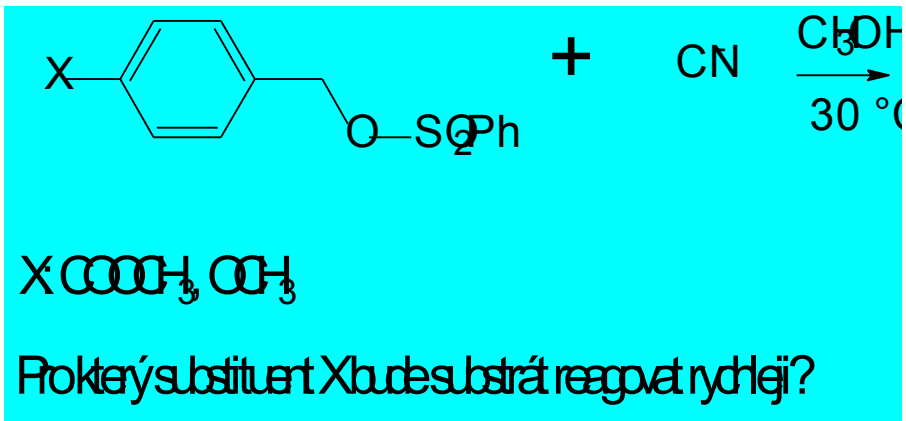


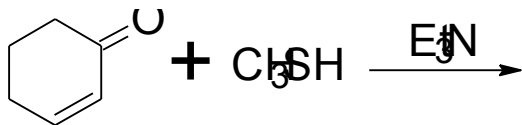
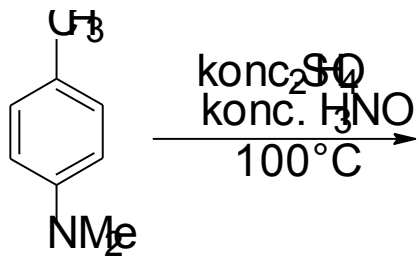




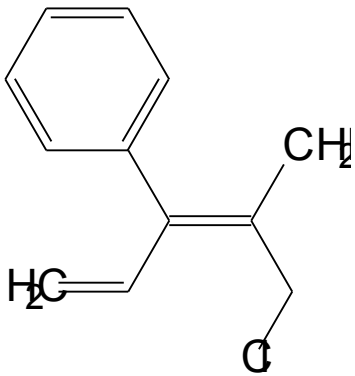




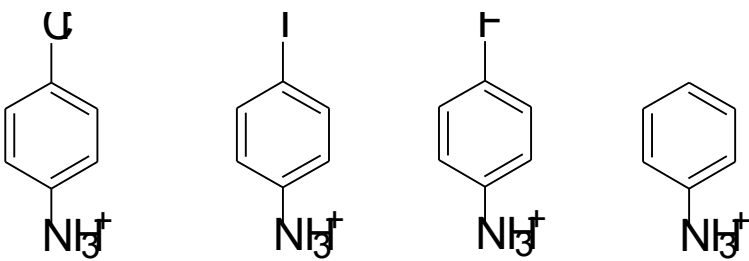


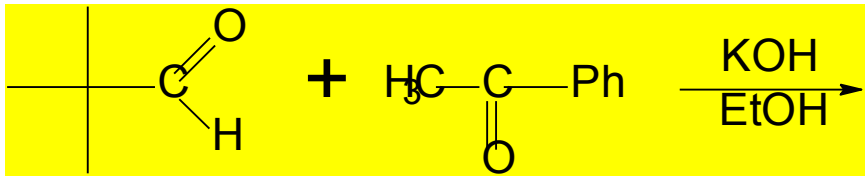
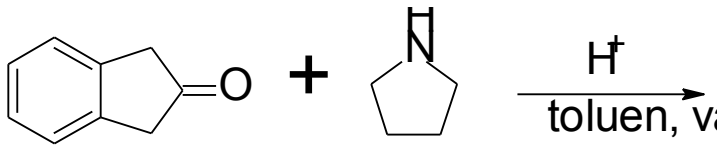
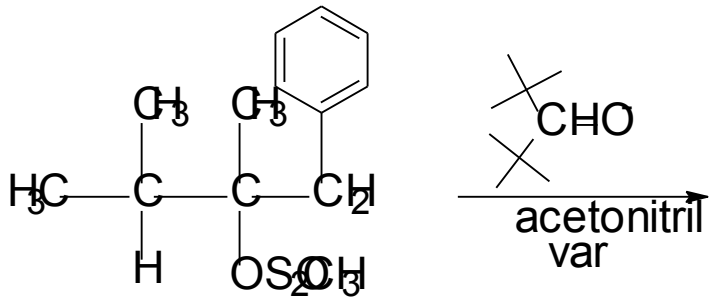


E- nebo Z- ?

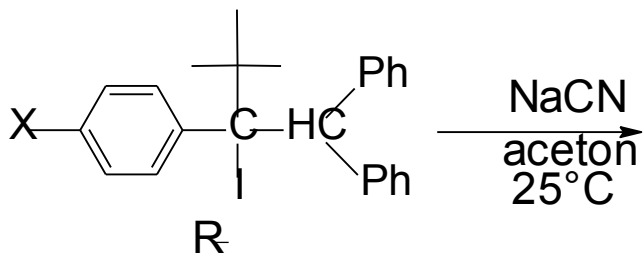


Seřad'te podle rostoucí kyselosti:





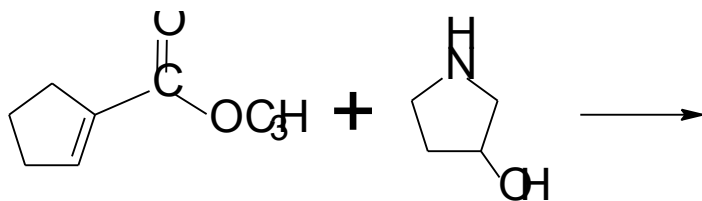
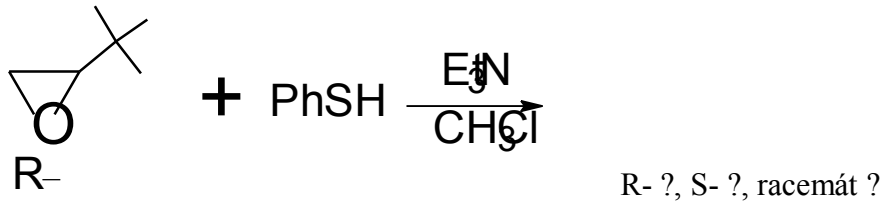
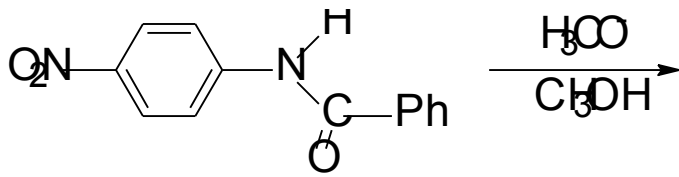
Co vznikne? Pro které X bude reakce probíhat rychleji?



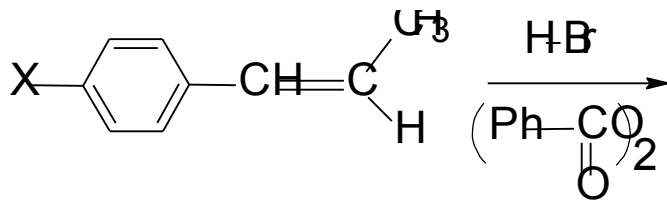
X: -NMe, -COOMe

R-?, S-?, R-/S-?

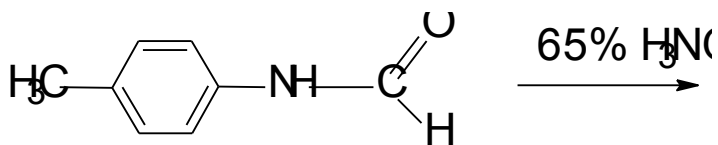




Pro které X bude reakce probíhat rychleji?

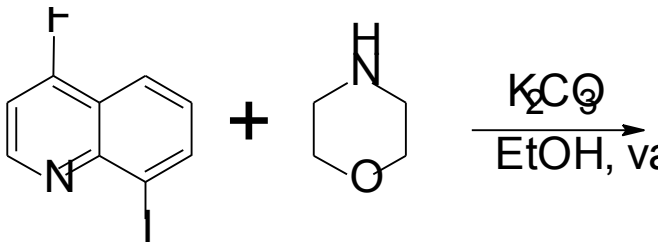
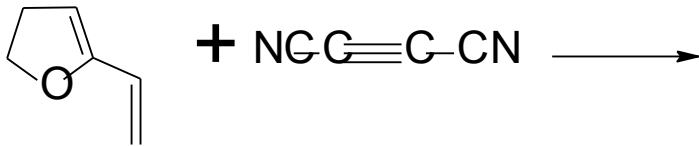
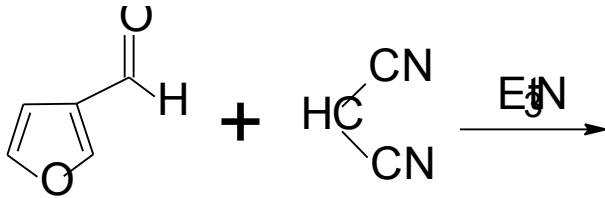
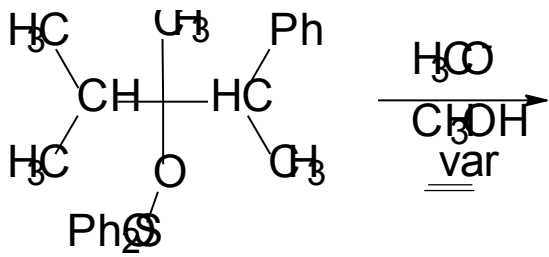


X: - ~~OC~~ -C≡N



Nakreslete vzorec D-glyceraldehydu ve Fischerově projekci a určete absolutní konfiguraci na chirálním uhlíku.

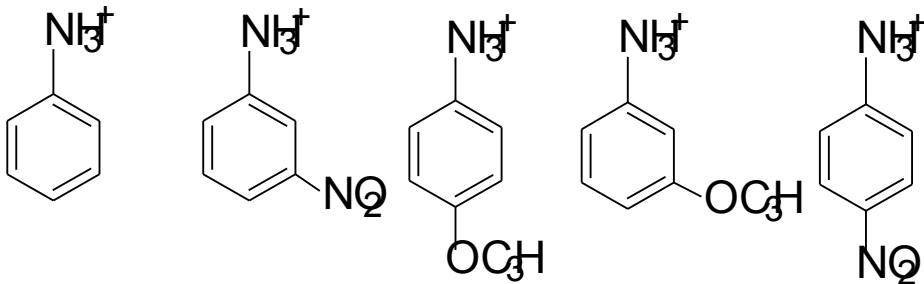
Nakreslete hlavní produkt:

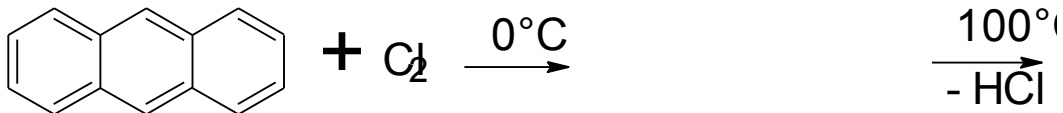
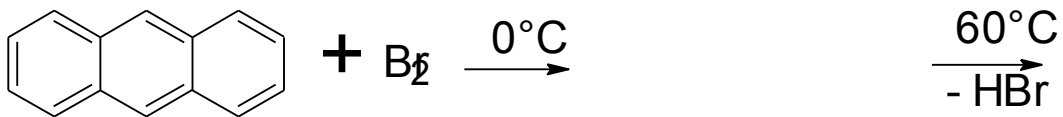
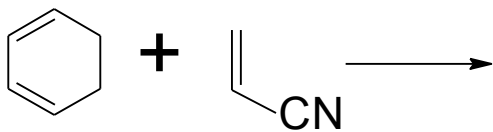
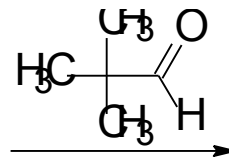
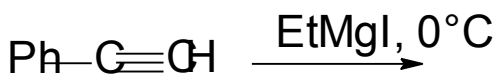
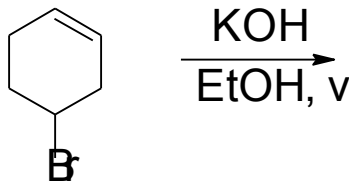
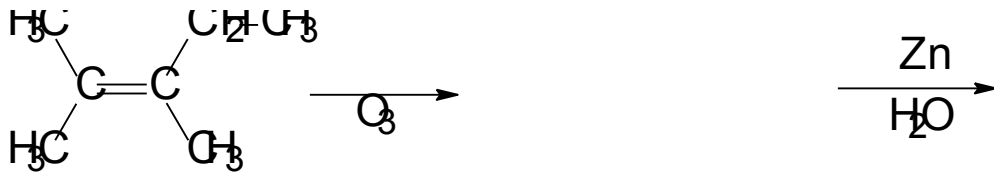


Seřad'te podle rostoucí kyselosti:

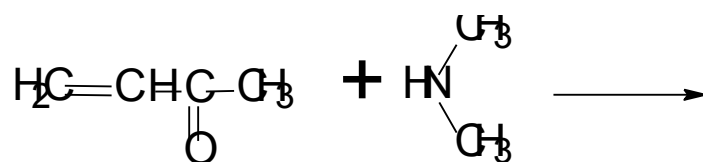
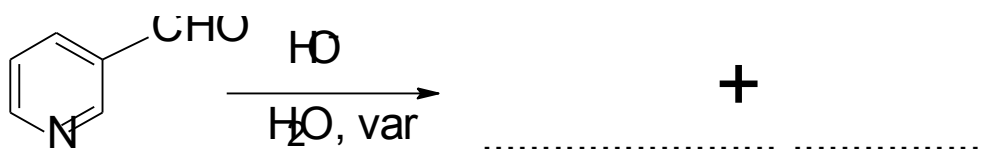
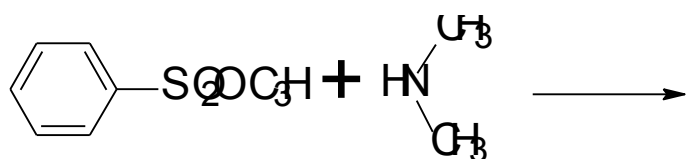
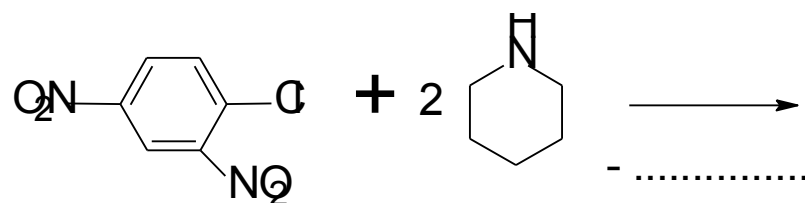
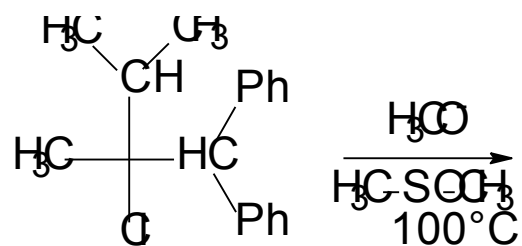
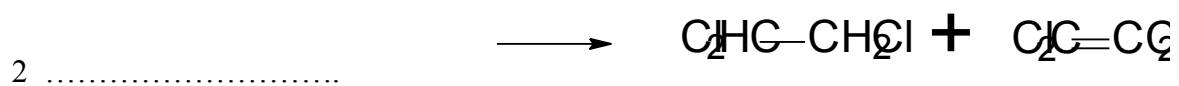
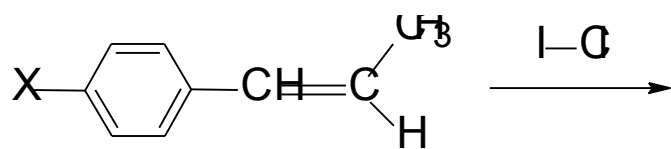


Seřad'te podle rostoucí kyselosti:



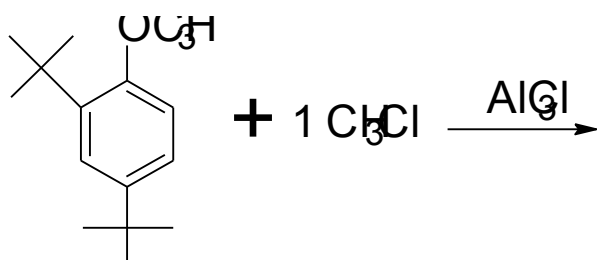
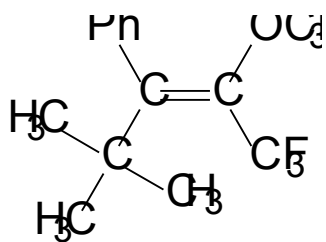


Co vznikne a pro které X bude reakce probíhat rychleji?



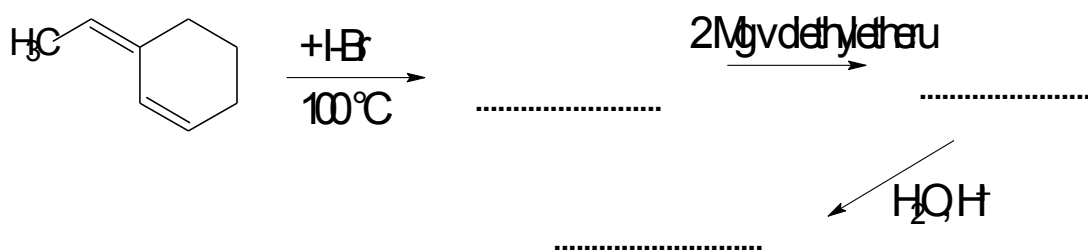


E- nebo Z- ?



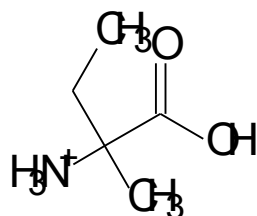
hlavní pr

Doplňte reakční schéma

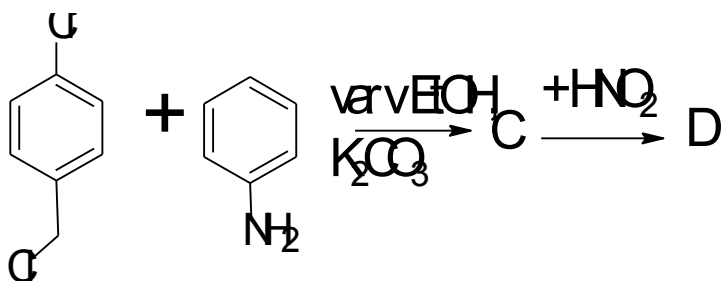
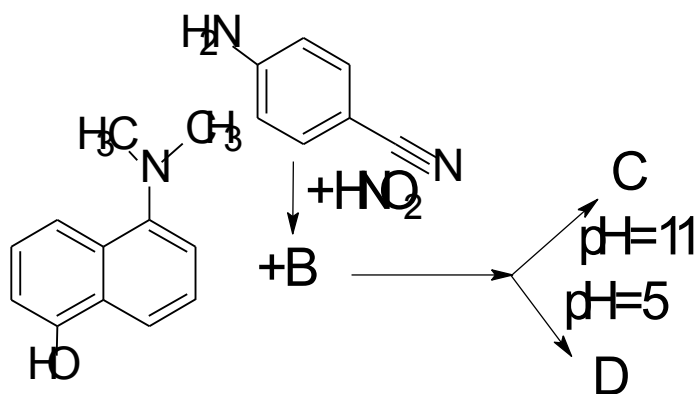


Nakreslete reakční schéma pro následující chemickou syntézu

- 1,2-dimethylcyklohexanon jako produkt A
- 1,2-dimethylcyklohexanon jako produkt B
- produkt B je podoben kyselé hydrolyze vzniká produktu C, jehož vzorec je uveden níže:



## Doplňovací schéma



Pojmenujte oba hlavní produkty vznikající monosulfonací 1-nitronaftalenu při teplotě  $200\text{ }^\circ\text{C}$  po době delší, než je 12 h (podmínky pro termodynamicky kontrolovaný průběh reakce!). Napište schéma reakce včetně vznikajících meziproduktů.

(*R*)-1-Brom-1-fenylethan reaguje s jodidem draselným v acetonu. Napište mechanismus reakce a organický produkt správně pojmenujte.

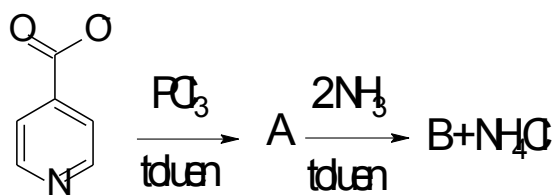
Nakreslete strukturální vzorec kterékoliv reálně existující aminokarboxylové kyseliny.

Pojmenujte oba hlavní produkty vznikající monosulfonací 1-*N,N*-dimethylaminonaftalenu při teplotě  $200\text{ }^\circ\text{C}$  po době delší, než je 12 h (podmínky pro

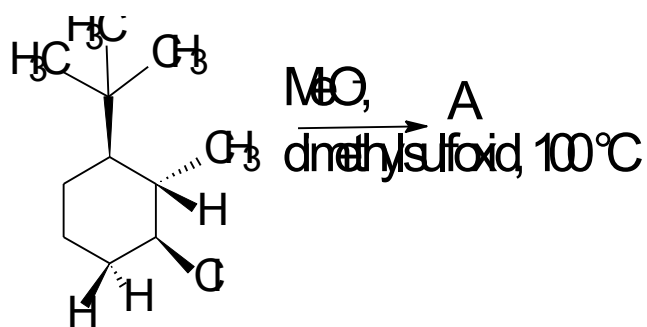
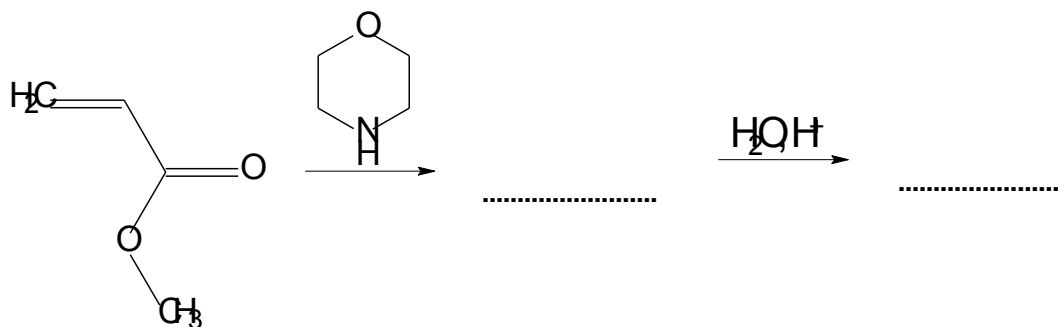
termodynamicky kontrolovaný průběh reakce!). Napište schéma reakce včetně vznikajících meziproductů.

Seřadte následující aminy od nejméně k nejvíce bazickému ve vodném prostředí: methylamin, tributylamin, 4-(trifluormethyl)-2-nitroanilin, di(dodec-1-yl)amin.

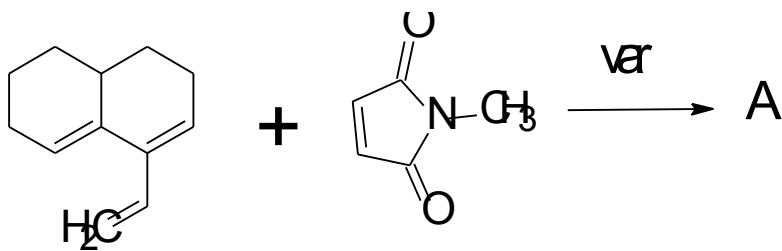
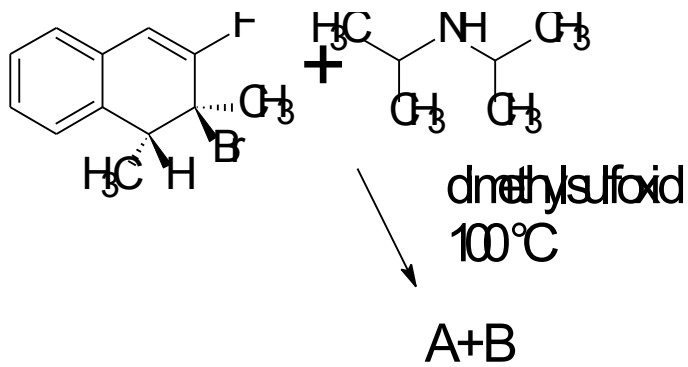
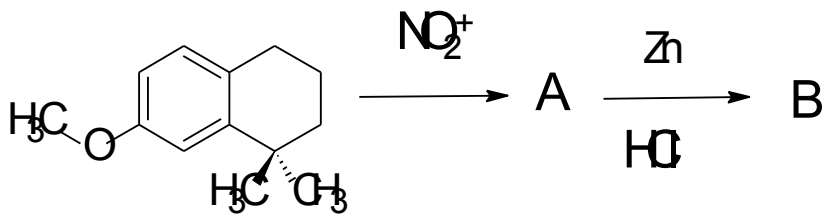
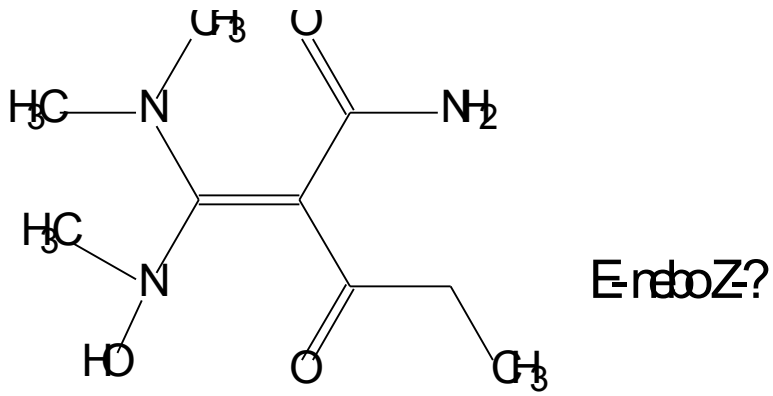
Doplňte reakční schéma



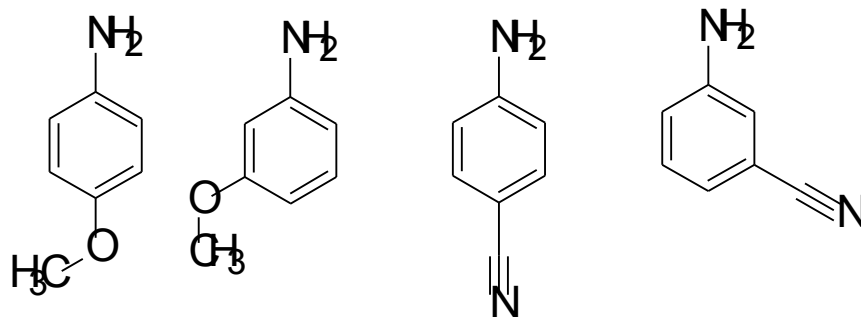
Doplňte schéma







Seřadte podle rostoucí basicity



Seřadte podle rostoucí basicity

