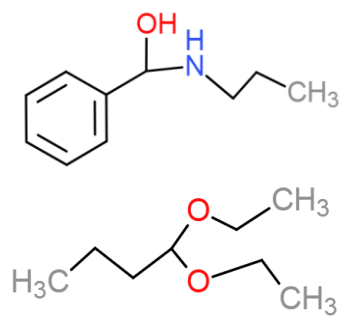
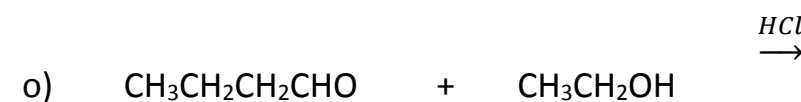
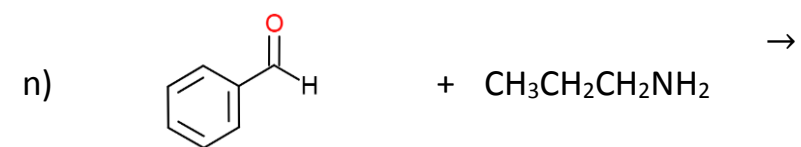
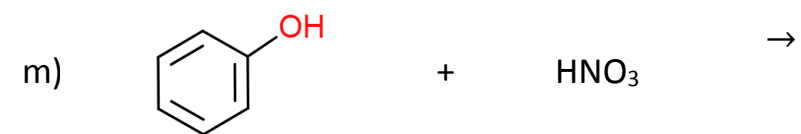
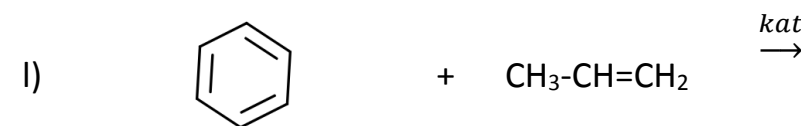
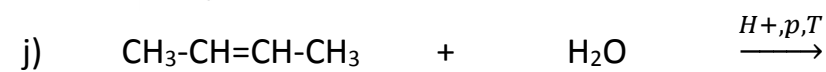
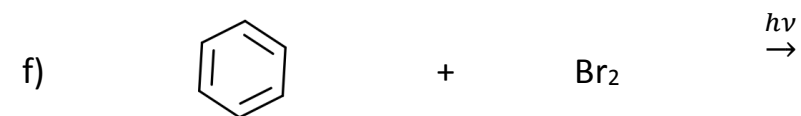
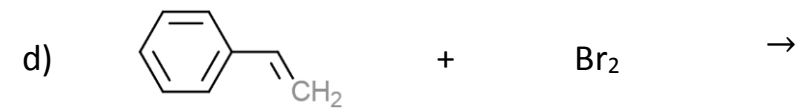
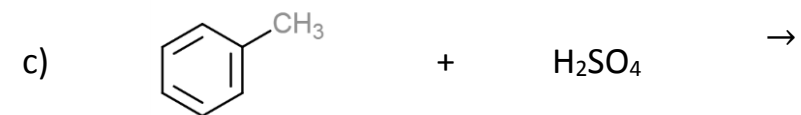
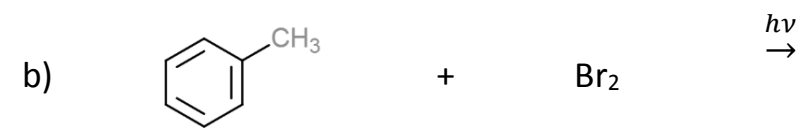
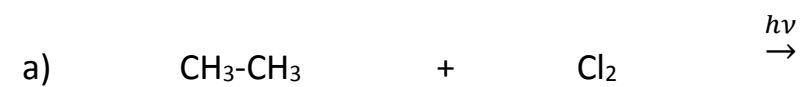
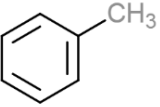
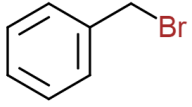
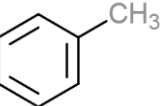
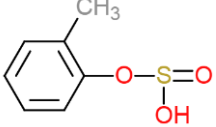
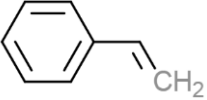
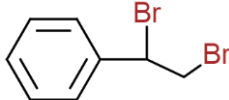
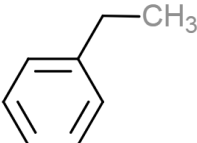
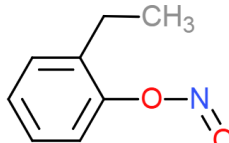
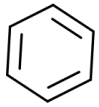

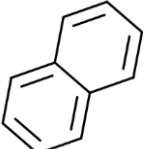
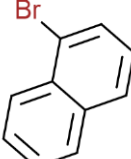
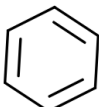
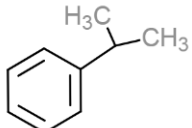
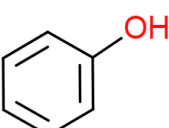
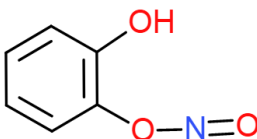
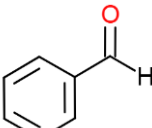
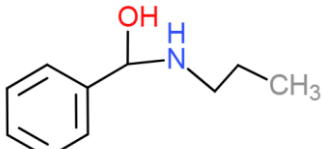
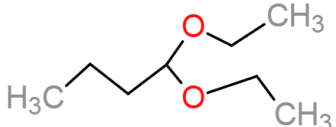


Dokończ poniższe reakcje i podaj typ i mechanizm każdej z nich:



a)	$\text{CH}_3\text{-CH}_3$	+	Cl_2	$\xrightarrow{h\nu}$	$\text{CH}_3\text{-CH}_2\text{Cl}$	+	HCl	Substytucja rodnikowa
b)		+	Br_2	$\xrightarrow{h\nu}$		+	HBr	Substytucja rodnikowa
c)		+	H_2SO_4	\rightarrow		+	H_2O	Substytucja elektrofilowa
d)		+	Br_2	\rightarrow				Addycja elektrofilowa
e)		+	HNO_3	$\xrightarrow{\text{H}_2\text{SO}_4}$		+	H_2O	Substytucja elektrofilowa
f)		+	Br_2	$\xrightarrow{h\nu}$				Addycja rodnikowa
g)	$\text{CH}_3\text{CH}_2\text{OH}$	+	HCl	\rightarrow	$\text{CH}_3\text{CH}_2\text{Cl}$	+	H_2O	Substytucja nukleofilowa
h)	CH_3Cl	+	Na	\rightarrow	$\text{CH}_3\text{-CH}_3$	+	NaCl	Substytucja nukleofilowa
i)		+	Br_2	$\xrightarrow{\text{Fe}}$		+	HBr	Substytucja elektrofilowa
j)	$\text{CH}_3\text{-CH=CH-CH}_3$	+	H_2O	$\xrightarrow{\text{H}^+, p, T}$	$\text{CH}_3\text{-CH}_2\text{-CH(OH)-CH}_3$			Addycja elektrofilowa
k)	$\text{CH}_3\text{CH}_2\text{Cl}$	+	KOH	$\xrightarrow{\text{H}_2\text{O}}$	$\text{CH}_3\text{CH}_2\text{OH}$	+	KCl	Substytucja nukleofilowa
l)		+	$\text{CH}_3\text{-CH=CH}_2$	$\xrightarrow{\text{kat}}$				Addycja elektrofilowa
m)		+	HNO_3	\rightarrow		+	H_2O	Substytucja elektrofilowa
n)		+	$\text{CH}_3\text{CH}_2\text{CH}_2\text{NH}_2$	\rightarrow				Addycja nukleofilowa
o)	$\text{CH}_3\text{CH}_2\text{CH}_2\text{CHO}$	+	$\text{CH}_3\text{CH}_2\text{OH}$	$\xrightarrow{\text{HCl}}$				Addycja nukleofilowa