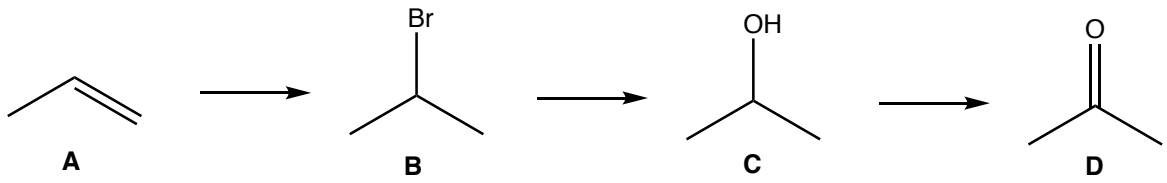
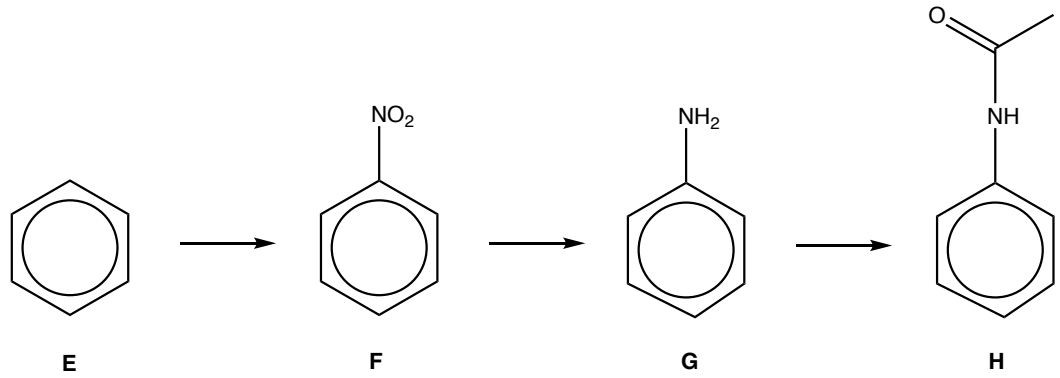
SYNTHESIS (A)

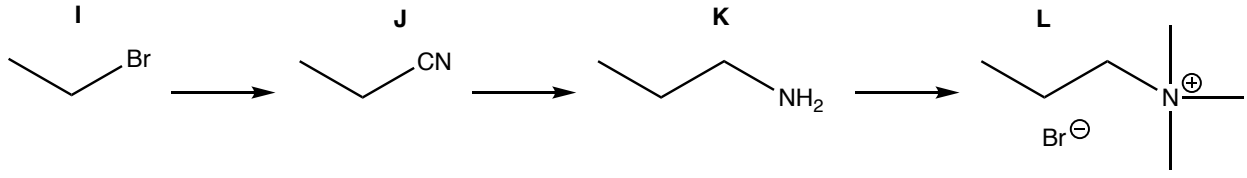
Complete the table about each of the following synthetic paths.



conversion	A → B	B → C	C → D
reaction type	**addition**	**substitution**	**oxidation**
mechanism name (if taught)	**electrophilic addition**	**nucleophilic substitution**	
reagents & conditions	**HBr**	**NaOH, warm, aqueous**	**$K_2Cr_2O_7$, H_2SO_4**



conversion	E → F	F → G	G → H
reaction type	**nitration**	**reduction**	**acylation**
mechanism name (if taught)	**electrophilic substitution**		**nucleophilic addition-elimination**
reagents & conditions	**conc HNO_3, conc H_2SO_4, warm**	**Sn, HCl (followed by NaOH)**	**ethanoyl chloride or ethanoic anhydrode**



conversion	I → J	J → K	K → L
reaction type	**substitution**	**reduction**	**substitution**
mechanism name (if taught)	**nucleophilic substitution**		**nucleophilic substitution**
reagents & conditions	**KCN, alcoholic, warm**	**$LiAlH_4$ (or Ni + H_2)**	**excess CH_3Br**