

1.  $\vdash (P \rightarrow Q) \vee (Q \rightarrow P)$

2.  $\vdash P \rightarrow Q$   $\vee \vdash 1$

3.  $\vdash Q \rightarrow P$   $\vee \vdash 1$

4.  $\vdash P$   $\rightarrow \vdash 2$

5.  $\vdash Q$   $\rightarrow \vdash 2$