

Week #6 Exercises

Show by KE Deduction:

① $\vdash (p \rightarrow q) \vee (q \rightarrow p)$

② De Morgan

① $\vdash \neg(p \wedge q) \rightarrow \neg p \vee \neg q$

② $\vdash \neg p \vee \neg q \rightarrow \neg(p \wedge q)$

③ $\vdash ((p \rightarrow q) \wedge (p \vee r)) \vee (p \wedge \neg q) \vee \neg(p \vee r)$