

Assignment Week 5

Philosophy 305

Due February 19, 5pm

Proofs

Provide proofs of each of the following arguments. You should enter these in <http://carnap.io>, and make a note in Canvas when you are done.

1. $A \rightarrow B, A \rightarrow C \vdash A \rightarrow (B \wedge C)$
2. $(A \wedge B) \rightarrow C \vdash A \rightarrow (B \rightarrow C)$
3. $A \rightarrow (B \rightarrow C) \vdash (A \wedge B) \rightarrow C$
4. $A \vee (B \wedge C) \vdash (A \vee B) \wedge (A \vee C)$
5. $(A \vee B) \wedge (A \vee C) \vdash A \vee (B \wedge C)$
6. $A \vee C, A \rightarrow C, B \rightarrow D \vdash C \vee D$
7. $B \vdash \neg(A \wedge \neg A)$
8. $(A \rightarrow C) \wedge (B \rightarrow C) \vdash (A \vee B) \rightarrow C$
9. $\neg A \rightarrow \neg B \vdash B \rightarrow A$
10. $A \rightarrow (B \vee C) \vdash (A \rightarrow B) \vee (A \rightarrow C)$