2.4.x. Exercise questions

Use the basic system of derivations along with the attachment rule Adj to establish the following. These repeat entailments from earlier exercises and examples (specifically, **b** and **d** of exercise 2.2.x.2 , exercises **2** and **4** of 2.3.x , and the example of 2.4.2). They will work best as exercises in the use of Adj if you avoid using Cnj.

1. $A \Rightarrow A \wedge A$
2. $A \wedge B, B \wedge C, C \wedge D \Rightarrow A \wedge D$
3. $A \wedge B \Rightarrow A \wedge (B \wedge A)$
4. $A, B \wedge C, D \Rightarrow (C \wedge (B \wedge A)) \wedge B$
5. $A \wedge B \Rightarrow (B \wedge A) \wedge (A \wedge (B \wedge A))$