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Question one

Claim: $(A \rightarrow B) \vee C \equiv (A \rightarrow C) \vee B$

$$\begin{aligned}(A \rightarrow B) \vee C &\equiv (\neg A \vee B) \vee C \text{ (impl.)} \\ &\equiv (\neg A \vee C) \vee B \text{ (\vee associativity)} \\ &\equiv (A \rightarrow C) \vee B \text{ (impl.)}\end{aligned}$$