Exercise Sheet 12d
Propositional Logic – Natural Deduction

Let F be the formula $(A \to (B \vee C)) \to (B \to C) \to A \to C$
and let G be the formula $(A \vee B \vee C) \to \neg A \to (B \to A) \to (C \to D) \to D$

1. Provide parse trees corresponding to F and G

2. Provide a constructive Natural Deduction proof of F

3. Provide a Constructive Natural Deduction proof of G

4. Are F and G equivalent? Justify your answer.