EXERCISES (TO GET +0.5 TO THE FINAL MARK; SEND SOLUTIONS BY EMAIL)

1. Part 1, Exercise 8

2. Prove (C3) of Part 3

Hint for the property (C3), PART 3
Prove that
$X \perp Y \quad \Rightarrow \quad X \perp\!\!\!\perp Y \,|Y$

Start with $P(X \in A, Y \in B \quad | \, Y \in C) = ...TO\,COMPLETE...$
$= P(X \in A \quad | \, Y \in C) P(Y \in B \quad | \, Y \in C)$

3. Prove that (L) $\Rightarrow$ (P), PART 3

Hint: Simplify Lauritzen's proof from the lecture

4. Prove that (F) $\Rightarrow$ (P), PART 3.

Deduce that (F) $\Rightarrow$ (G).