<u>Tutorial 6</u>

Solutions should be given till 3th December 2007, 16:00

Exercise 1 Markov equivalence (19 points + 6 bonus points)

- a) [7 pts.] How can you interpret Markov equivalence? Why is it interesting (important) whether two graphs are Markov equivalent or not? How is it related to causal interpretation of DAG-representation of independence models?
- b) [6 pts.] Are the following graphs Markov equivalent? If your answer is yes, depict the DAG-pattern of the Markov equivalence class they belong to? If your answer is no, justify your answer!



c) [6 pts.] Are the following graphs Markov equivalent? If your answer is yes, depict the DAG-pattern of the Markov equivalence class they belong to? If your answer is no, justify your answer!



d) [bonus, 7 pts.] Are the following graphs Markov equivalent? Justify your answer!

