

**CMPSC 381**  
**Data Communications and Networks**  
**Fall 2012**  
**Bob Roos**  
**Lab 8**  
**Due Thursday, 15 November, 1:30 pm**

Create a document with your answers to the problems and upload it to your dropbox.

1. Problem P4, parts (a) and (b) only, page 417.
2. Problem P9, page 418. Note: in my book, at least, it is hard to read the labels on the packets in the diagram. The first input port has a packet labeled “X”, the second has packets labeled “X” and “Y” (left to right), and the third has packets labeled “Z” and “Y” (left to right). The point of this question is to ask whether the amount of time needed to switch packets through the switching fabric is different when “ties” are broken in different ways (since we can switch only one packet to any given output port in a single time unit).
3. Same problem, but this time, the third input port has packets labeled “Z” and “X.”
4. Problem P10, page 419. The reason you need five entries, rather than 4, is that prefix-matching doesn’t permit an “otherwise” clause; things destined for interface 3 must be split up into several table entries when prefix-matching is used.
5. Problem P16, page 421.
6. Problem P20, page 421.
7. Dijkstra demo—will be explained in lab.