Computer Networks - Assignment 7

Jannis Kühl, Henri Heyden
stu241399, stu240825

Task 3

a) and b)

The full table should look like this:

No.	Time	Source	Destination	Protocol	Info
1	0.0000	0.0.0.0:68	255.255.255.255:67	DHCP	DISCOVER
2	0.0003	10.44.12.33:67	255.255.255.255:68	DHCP	OFFER
3	0.0005	10.44.0.10:67	255.255.255.255:68	DHCP	OFFER
4	0.0701	0.0.0.0:68	255.255.255.255:67	DHCP	REQUEST
5	0.0702	10.44.12.33:67	255.255.255.255:68	DHCP	ACK

The two DHCP servers are 10.44.12.33 and 10.44.0.10.

c)

The obvious reason is that the client doesn't have an address yet, so the server messages have to be broadcast.
It could also be useful, because there are two DHCP servers:
When the first server ACK's the request, the other server knows that this address is taken, so it can remove this address from their pool.
This of course only makes sense if the two DHCP servers share some addresses of their pool of possible addresses.