Exercise for the lecture

## Algorithms for Radio Networks

## Winter 2011/12

Sheet 5

## EXERCISE 5:

Consider for the Distance Vector Routing protocol the following network with four routers with the given distances:


The routing tables of the routers A and B have the following entries:

| from A | via B | via C | route |
| :---: | :---: | :---: | :---: |
| to B | 9 | 7 | C |
| to C | 14 | 2 | C |
| to D | 10 | 6 | C |


| from B | via A | via C | via D | route |
| :---: | :---: | :---: | :---: | :---: |
| to A | 9 | 12 | 7 | D |
| to C | 11 | 10 | 5 | D |
| to D | 15 | 14 | 1 | D |

1. Calculate the routing table entries for the routers $C$ and $D$.
2. Now router C becomes inoperative. What happens? Calculate the new routing table entries.
