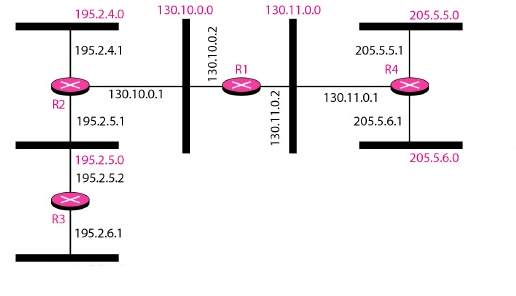
Question#1:

In the networks Below, assume all routers run RIP and all link costs are 1. Show the initial state tables and the routing tables after convergence.

.



If the link to Network 205.5.5.0 failed and R4 set the cost to infinity , what will be happen into the folowing situations:

* R1 send updates first to R4.
* R4 send the updates to R1.

Question#2: A router has the following RIP routing table:

|  |  |  |
| --- | --- | --- |
| Des | Hop count | Next hop |
| Net1 | 4 | B |
| Net2 | 3 | C |
| Net3 | 1 | - |
| Net4 | 5 | G |

What would be the contents of the table if the router received the following RIP message from router C?

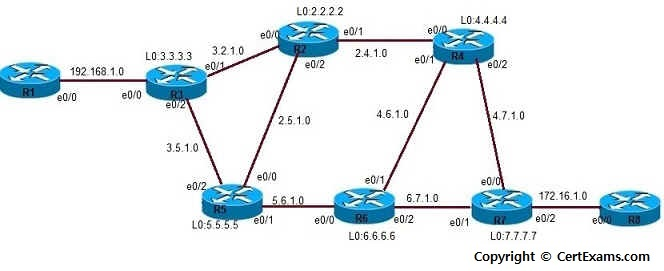
|  |  |
| --- | --- |
| Net1 | 6 |
| Net2 | 5 |
| Net5 | 3 |
| Net4 | 4 |

Question#3:A router has the following RIP routing table:

|  |  |  |
| --- | --- | --- |
| 170.3.0.0 | 4 | B |
| 100.0.0.0 | 1 | - |
| 200.12.12.0 | 5 | G |

Show the response message format sent by this router assuming RIP v1 is used.

Question#4: For the following network



a- What are the initial tables of routers R1, R2, R3 and R5?

b- Show the routing table of R1 and R3 after a first update?