(**CONFIGURE THE HOSTS**)

**ANSWER**: Yes, the ping was successful from PC1 (attached to router 1) to PC2 (attached to router 2).

(**MANAGING IP ROUTING**)

**STEP 1**

Text, letter

Description automatically generated

**ANSWER**: We cannot tell from this output the exact network between the 2 PCs. We cannot see any PC directly connected to this router (Router 1) as that PC has an IP address of 192.168.1.2. That is not in this output. We also cannot see PC 2 which has an IP address of 192.168.2.2. Since we cannot see either of this IP addresses, we cannot determine the exact path between these PCs. I cannot see any other routes that are not part of this network. **WE CAN SEE THE ROUTE IN THE MIDDLE LINE WHERE 192.168.2.0 VIA 192.168.3.2 IS CONNECTED ON INTERFACE 0/0/1. THAT IS THE ROUTE WORKING WITH RIP.**

**STEP 2**

Text

Description automatically generated

**ANSWER**: The **rip** routing protocol is listed

**ANSWER**: **Sending RIP version 1, receiving any RIP version**

**ANSWER**: The update time is **30** **seconds**

**ANSWER**: The timeout time is **180** **seconds**

**ANSWER**: Suppress time (**hold down time**) is also **180** **seconds**

**ANSWER**: Garbage collection time (**flushed time**) is **240** **seconds**

**STEP 5: DISABLE RIP ON THE ROUTER.**

**ANSWER**: The ping was unsuccessful.

**STEP 6: ENSURE RIP IS NOT ACTIVE.**

**ANSWER**: The show running-conf on Router 1 only shows information about each interface and the IP address we have set. It does not show any of the RIP networks we created in earlier steps. It also does not show any connected interfaces.

Text

Description automatically generated

**STEP 7: ENSURE THERE IS NO RIP ENTRY IN THE ROUTING TABLE.**

**ANSWER**: Router 1 still shows the variably subnetted subnets and masks attached to each gigabit ethernet interface. Port 0/0/0 still has the same IP address we setup and same with port 0/0/1. There is no mention of RIP in the routing table.

Text, letter

Description automatically generated

**STEP 8: RE-ENABLE RIP.**

**ANSWER**: The ping from PC 1 to PC 2 still did not work.

**STEP 9: VIEW THE CURRENT CONFIGURATION.**

**ANSWER**: The main difference is that there is now a router rip line telling us that the router is in RIP mode. We can also see, like before, that the connected interfaces are up because they do not say shutdown. I believe that the PING still did not work because when we removed the use of RIP, we removed the networks to send broadcast. This means that the router does not know what networks to broadcast every 30 seconds. I even skipped time in packet tracer to see if that was the issue and it did not fix the issue, I believe we need to reconfigure the networks of the RIP ROUTER on Router 1.

**STEP 10: RE-ADD RIP ON NETWORKS.**

**ANSWER**: We can now see that router rip has the appropriate networks attached. THE PING IS NOW SUCCESSFUL!!!

Text, letter

Description automatically generated

(**PREVENTING ROUTING UPDATES THROUGH AN INTERFACE**)

**STEP 2: CONFIRM THAT RIP ON BOTH ROUTERS.**

**ANSWER**: We can tell that rip has been disabled because there is now no router rip or networks section in the output.

Graphical user interface, text, application

Description automatically generated

**ANSWER**: The ping was unsuccessful; the host was unreachable.

**STEP 4: VERIFY THE STATIC ROUTE HAS BEEN ADDED.**

**ANSWER**: The corresponding line is 192.168.2.0/24 [1/0] via 192.168.3.2. The destination address is 192.168.2.0/24 and the next hop is 192.168.3.2.

Text, letter

Description automatically generated

**STEP 5: PING FROM BOTH PCS TO VERIFY.**

**ANSWER**: Yes, the pings were successful.