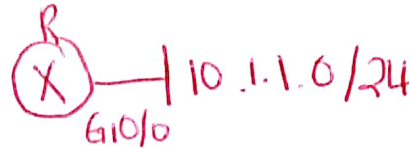


- SOLUTION

Router R1 has a connected route for 10.1.1.0/24 off interface Gi0/0. Interface Gi0/0 has been enabled for OSPF because of a router ospf 1 and network 10.1.1.0 0.0.0.255 area 0 command.

R1 also has EIGRP configured, with the redistribute ospf 1 metric 1000 100 10 1 1500 command configured under EIGRP.

Answer the following question:



Q1. Ayan argue that since the command given is "redistribute ospf", this is a perfect example of redistribution of OSPF into EIGRP. Emily, her lab partner, disagrees. Emily is sure that this is a redistribution of EIGRP into OSPF. Who is correct and why?

10.1.1.0/24 is an OSPF route

EIGRP is redistributing (the one with the redistribute command)

Example @ redistribution of OSPF into EIGRP OSPF → EIGRP

Q2. Hatim says that R1 will not distribute 10.1.1.0/24, because R1 knows it as a connected route and the keyword connected was not used in the redistribute command. Is Hatim correct? Explain.

No. Use keyword connected when you want to redistribute a directly connected network that is NOT participating in the routing protocol.

Q3. Chen mentions that the biggest problem is that 10.1.1.0/24 will not be redistributed since only **classful** routes are redistributed unless the subnet keyword is applied to the redistribute command. Is Chen correct? Explain

No. subnet keyword is used ~~to~~ when redistributing classful protocols (EIGRP/RIP)

OSPF is a classless protocol, it will redistribute all its routes.

Q4. Ryan T is sure that the last 4 arguments<sup>after the metric keyword</sup> of the redistribute command will not be used, as the OSPF metric is only composed on the cumulative bandwidth value. Then, the metric associated with 10.1.1.0/24 will always be seen as 0 E2 with an AD of 110 and a constant metric of 1000. Ryan G argues that "T" is incorrect, as 10.1.1.0/24 is a OSPF route and EIGRP needs to know how to calculate its metric. "G" says that the route will be seen as D EX. Which Ryan is correct? G is correct

① 4 arguments will be used

② Routes will be seen in EIGRP as D EX