RIP:

Router(config)# router rip

Router(config-router) # network <network-ID>

Router(config-router) # version 2

Router(config-router) # no auto-summary

Router(config-router) # exit

EIGRP:

Router(config)# router eigrp <process-ID>

Router(config-router) # network <network-ID> <subnet mask>

Router(config-router) # no auto-summary

Router(config-router) # exit

OSPF:

Router(config)# router ospf <process-ID>

Router(config-router) # network <network-ID> <wild card mask> area #

Router(config-router) # router-id <32-bit any unique id>

Router(config-router) # exit

Dedicated DHCP Server:

Router(config)# int <fa0/0, fa0/1, se0/3/0, se0/3/1 etc.>

Router(config-router) # ip helper-address <DHCP_Server_IP>

Router(config-router) # exit

DHCP Server at Router:

Router(config)# ip dhcp pool <pool_name>

Router(config-router) # network <end system's network-ID> <subnet mask>

Router(config-router) # exit

Blockage:

access-list # deny host <ip address in that network> (for host block)

access-list # deny <network-ID> <wild card mask> (for network block)

access-list # permit any

int <from where packet will come or will go from; let's say se0/3/0>

ip access-group # in/out

exit

Redistribution:

For OSPF-OSPF:

(nothing, just follow the area numbers)

For OSPF-RIP:

router ospf <process-ID>

redistribute rip subnets

exit

router rip

redistribute ospf 1 metric 12 (where 12 is hop count)

exit

For OSPF-EIGRP:

router ospf <process-ID>

redistribute eigrp <process-ID> subnets

exit

router eigrp <process-ID>

redistribute ospf <process-ID> metric 1000 33 255 1 1500

no auto-summary

exit

For RIP-EIGRP:

router rip

redistribute eigrp 1 metric 12 (where 12 is hop count)

exit

router eigrp <process-ID>

redistribute rip metric 1000 33 255 1 1500

no auto-summary

exit

metric 1000 33 255 1 1500 – *This command sets the K values that compose the metric bandwidth to 1000 (Kbps), the delay to 33(tens-of-microseconds, or 330 microseconds), reliability to 255 (a value between 1–255 ,255 is best), load to 1 (a value between 1–255, 1 is best), and MTU of 1500.*

NAT:

https://www.geeksforgeeks.org/types-of-network-address-translation-nat/