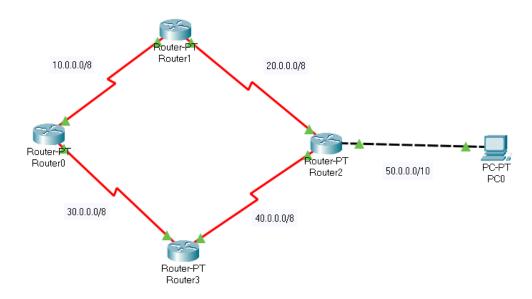
Name: Muhammad Nasir Lab: DCN Roll #: 19B-054-CS Section: B (Group B)

Task:



Ro:

```
Router#show ip route
Codes: C - connected, S - static, I - IGRP, R - RIP, M - mobile, B - BGP
       D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area
       N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
      E1 - OSPF external type 1, E2 - OSPF external type 2, E - EGP
       i - IS-IS, L1 - IS-IS level-1, L2 - IS-IS level-2, ia - IS-IS inter
area
       * - candidate default, U - per-user static route, o - ODR
       P - periodic downloaded static route
Gateway of last resort is not set
     10.0.0.0/8 is directly connected, Serial2/0
    20.0.0.0/8 [90/21024000] via 10.0.0.2, 00:26:48, Serial2/0
D
     30.0.0.0/8 is directly connected, Serial3/0
D
     40.0.0.0/8 [90/21024000] via 30.0.0.2, 00:26:18, Serial3/0
D
     50.0.0.0/8 [90/21026560] via 10.0.0.2, 00:24:39, Serial2/0
                [90/21026560] via 30.0.0.2, 00:24:39, Serial3/0
```

R1:

```
Router>en
Router#show ip route
Codes: C - connected, S - static, I - IGRP, R - RIP, M - mobile, B - BGP
       D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area
       N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
       El - OSPF external type 1, E2 - OSPF external type 2, E - EGP i - IS-IS, L1 - IS-IS level-1, L2 - IS-IS level-2, ia - IS-IS inter
area
       * - candidate default, U - per-user static route, o - ODR
       P - periodic downloaded static route
Gateway of last resort is not set
     10.0.0.0/8 is directly connected, Serial2/0
     20.0.0.0/8 is directly connected, Serial3/0
D
     30.0.0.0/8 [90/21024000] via 10.0.0.1, 00:28:02, Serial2/0
     40.0.0.0/8 [90/21024000] via 20.0.0.2, 00:26:44, Serial3/0
D
     50.0.0.0/8 [90/20514560] via 20.0.0.2, 00:25:42, Serial3/0
```

Name: Muhammad Nasir Lab: DCN Roll #: 19B-054-CS Section: B (Group B)

R2:

```
Router>en
Router#show ip route
Codes: C - connected, S - static, I - IGRP, R - RIP, M - mobile, B - BGP
       D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area
       N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
      E1 - OSPF external type 1, E2 - OSPF external type 2, E - EGP
       i - IS-IS, L1 - IS-IS level-1, L2 - IS-IS level-2, ia - IS-IS inter
area
       * - candidate default, U - per-user static route, o - ODR
       P - periodic downloaded static route
Gateway of last resort is not set
     10.0.0.0/8 [90/21024000] via 20.0.0.1, 00:27:28, Serial2/0
D
     20.0.0.0/8 is directly connected, Serial2/0
     30.0.0.0/8 [90/21024000] via 40.0.0.1, 00:27:13, Serial3/0
D
C
    40.0.0.0/8 is directly connected, Serial3/0
    50.0.0.0/8 is directly connected, FastEthernet0/0
```

R3:

```
Router>en
Router#show ip route
Codes: C - connected, S - static, I - IGRP, R - RIP, M - mobile, B - BGP
      D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area
      N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
      E1 - OSPF external type 1, E2 - OSPF external type 2, E - EGP
       i - IS-IS, L1 - IS-IS level-1, L2 - IS-IS level-2, ia - IS-IS inter
area
       * - candidate default, U - per-user static route, o - ODR
       P - periodic downloaded static route
Gateway of last resort is not set
    10.0.0.0/8 [90/21024000] via 30.0.0.1, 00:28:13, Serial2/0
    20.0.0.0/8 [90/21024000] via 40.0.0.2, 00:27:28, Serial3/0
    30.0.0.0/8 is directly connected, Serial2/0
C
     40.0.0.0/8 is directly connected, Serial3/0
     50.0.0.0/8 [90/20514560] via 40.0.0.2, 00:26:26, Serial3/0
D
```

Metric Calculation:

