



# MASTER SUBNETTING WITH 300+ SUBNETTING EXERCISES



**15000+**  
Students Placed

**7+ YEARS**  
Delivering Training Excellence

**13+ Educational**  
Excellence Awards

---

**Q1. Your router has the following IP address on Ethernet0: 172.16.2.1/23. Which of the following can be the valid host IDs on the LAN interface attached to the router?**

- 1. 172.16.1.100
- 2. 172.16.1.198
- 3. 172.16.2.255
- 4. 172.16.3.0

- (A) 1 Only                      (B) 2 and 3 Both  
(c) 3 and 4 Both              (D) None of the above

**Answer : Option C**

**Q2. Which of the two statements describe the IP address 10.16.3.65/23?**

- 1.The subnet address is 10.16.3.0 255.255.254.0.
- 2.The lowest host address in the subnet is 10.16.2.1 255.255.254.0.
- 3.The last valid host address in the subnet is 10.16.2.254 255.255.254.0.
- 4.The broadcast address of the subnet is 10.16.3.255 255.255.254.0.

- (A) 1 and 3                      (B) 2 and 4  
(c) 1, 2 and 4                  (D) 2, 3 and 4

**Answer : Option B**

**Q3. What is the broadcast address of the network 192.168.116.64 255.255.255.224?**

**Answer : 192.168.116.95**

**Q4. What is the first valid host on the subnetwork that the node 172.20.225.111 255.255.255.128 belongs to?**

**Answer : 172.20.225.1**

---

**Q5. What valid host range is the IP address 192.168.187.233/27 a part of?**

**Answer : 192.168.187.225 through to 192.168.187.254**

**Q6. Default network mask for CLASS A is –**

- A. 255.0.0.0**
- B. 255.255.0.0**
- C. 255.255.255.0**
- D. 255.255.255.255**

**Answer : Option A**

**Q7. Default network mask for CLASS B is –**

- A. 255.0.0.0**
- B. 255.255.0.0**
- C. 255.255.255.0**
- D. 255.255.255.255**

**Answer : Option B**

**Q8. Default network mask for CLASS C is –**

- A. 255.0.0.0**
- B. 255.255.0.0**
- C. 255.255.255.0**
- D. 255.255.255.255**

**Answer : Option C**

**Q9. What is the maximum number of IP addresses that can be assigned to hosts on a local subnet that uses the 255.255.255.224 subnet mask?**

- A. 14**
- B. 15**
- C. 30**
- D. 62**

**Answer : Option C**

- 
- Q10. To test the IP stack on your local host, which IP address you will ping –**
- A. 127.0.0.0**
  - B. 1.0.0.127**
  - C. 127.0.0.1**
  - D. 255.255.255.0**

**Answer : Option C**

- Q11. You need to subnet a network that has 5 subnets, each with at least 16 hosts. Which will be your choice?**
- A. 255.255.255.192**
  - B. 255.255.255.224**
  - C. 255.255.255.240**
  - D. 255.255.255.248**

**Answer : Option B**

- Q12. What is the subnet number of a host with an IP address of 172.16.66.0/21?**
- A. 172.16.64.0**
  - B. 172.16.48.0**
  - C. 172.16.36.0**
  - D. 172.16.0.0**

**Answer : Option A**

- Q13. How many subnets and hosts per subnet can you get from the network 192.168.5.0/29?**

**Answer : 32 subnets and 6 hosts**

- Q14. How many subnets and hosts per subnet can you get from the network 192.168.212.0 255.255.255.252?**

**Answer : 64 subnets and 2 hosts**

- Q15. What is the broadcast address of the network 192.168.72.64 255.255.255.192?**

**Answer : 192.168.72.127**

---

**Q16. Which subnet does host 172.23.184.110 255.255.255.224 belongs to?**

**Answer : 172.23.184.96**

**Q17. What is the broadcast address of the network 192.168.79.48/28?**

**Answer : 192.168.79.63**

**Q18. What is the last valid host on the subnetwork 172.19.219.160 255.255.255.240?**

**Answer : 172.19.219.174**

**Q19. What is the broadcast address of the network 172.18.107.0 255.255.255.224?**

**Answer : 172.18.107.31**

**Q20. What is the first valid host on the subnetwork that the node 172.31.148.112/22 belongs to?**

**Answer : 172.31.148.1**

**Q21. What is the broadcast address of the network 172.18.120.0/23?**

**Answer : 172.18.121.255**

**Q22. What is the last valid host on the subnetwork 172.22.232.0 255.255.252.0?**

**Answer : 172.22.235.254**

**Q23. Which subnet does host 192.168.39.227 255.255.255.224 belongs to?**

**Answer : 192.168.39.224**

**Q24. What is the broadcast address of the network 172.18.105.64 255.255.255.224?**

**Answer : 172.18.105.95**

**Q25. What is the first valid host on the subnetwork that the node 172.19.24.234 255.255.240.0 belongs to?**

**Answer : 172.19.16.1**

**Q26. You are designing a subnet mask for the 172.16.0.0 network. You want 80 subnets with up to 300 hosts on each subnet. Which subnet mask should you use?**

**Answer : 255.255.254.0**

---

**Q27. What is the last valid host on the subnetwork 172.16.22.0/24?**

**Answer : 172.16.22.254**

**Q28. What is the last valid host on the subnetwork 172.17.126.0/24?**

**Answer : 172.17.126.254**

**Q29. How many subnets and hosts per subnet can you get from the network 172.28.0.0 255.255.240.0?**

**Answer : 16 subnets and 4094 hosts**

**Q30. What is the broadcast address of the network 10.230.32.0 255.255.240.0?**

**Answer : 10.230.47.255**

**Q31. What valid host range is the IP address 192.168.185.149/27 a part of?**

**Answer : 192.168.185.129 through to 192.168.185.158**

**Q32. What is the broadcast address of the network 10.149.208.0/20?**

**Answer : 10.149.223.255**

**Q33. How many subnets and hosts per subnet can you get from the network 192.168.129.0 255.255.255.252?**

**Answer : 64 subnets and 2 hosts**

**Q34. What is the first valid host on the subnetwork that the node 172.31.128.16 255.255.255.0 belongs to?**

**Answer : 172.31.128.1**

**Q35. How many subnets and hosts per subnet can you get from the network 172.26.0.0/28?**

**Answer : 4096 subnets and 14 hosts**

**Q36. What is the first valid host on the subnetwork that the node 172.30.241.75 255.255.240.0 belongs to?**

**Answer : 172.30.240.1**

**Q37. What is the broadcast address of the network 192.168.121.112 255.255.255.240?**

**Answer : 192.168.121.127**

- 
- Q38. You are designing a subnet mask for the 172.21.0.0 network. You want 10 subnets with up to 3700 hosts on each subnet. Which subnet mask should you use?**
- Answer : 255.255.240.0**
- Q39. What is the first valid host on the subnetwork that the node 172.18.25.59/23 belongs to?**
- Answer : 172.18.24.1**
- Q40. What is the last valid host on the subnetwork 10.17.240.0/20?**
- Answer : 10.17.255.254**
- Q41. Which subnet does host 172.30.74.65 255.255.252.0 belongs to?**
- Answer : 172.30.72.0**
- Q42. What is the broadcast address of the network 192.168.201.144 255.255.255.240?**
- Answer : 192.168.201.159**
- Q43. Which subnet does host 10.121.6.92 255.255.240.0 belongs to?**
- Answer : 10.121.0.0**
- Q44. What is the last valid host on the subnetwork 172.24.254.0/23?**
- Answer : 172.24.255.254**
- Q45. What is the broadcast address of the network 172.25.104.0/21?**
- Answer : 172.25.111.255**
- Q46. What is the last valid host on the subnetwork 172.28.161.0/24?**
- Answer : 172.28.161.254**
- Q47. You are designing a subnet mask for the 172.26.0.0 network. You want 700 subnets with up to 40 hosts on each subnet. Which subnet mask should you use?**
- Answer : 255.255.255.192**
- Q48. What is the broadcast address of the network 172.22.176.0/20?**
- Answer : 172.22.191.255**



- 
- Q49. What is the first valid host on the subnetwork that the node 172.25.192.243 255.255.255.192 belongs to?**  
Answer : 172.25.192.193
- Q50. What is the last valid host on the subnetwork 172.25.130.0/23?**  
Answer : 172.25.131.254
- Q51. What is the last valid host on the subnetwork 172.21.1.96 255.255.255.240?**  
Answer : 172.21.1.110
- Q52. You are designing a subnet mask for the 172.18.0.0 network. You want 1200 subnets with up to 18 hosts on each subnet. Which subnet mask should you use?**  
Answer : 255.255.255.224
- Q53. Which subnet does host 192.168.131.241/29 belongs to?**  
Answer : 192.168.131.240
- Q54. How many subnets and hosts per subnet can you get from the network 172.22.0.0/23?**  
Answer : 128 subnets and 510 hosts
- Q55. What is the last valid host on the subnetwork 172.29.42.160/27?**  
Answer : 172.29.42.190
- Q56. What is the broadcast address of the network 172.19.145.128 255.255.255.192?**  
Answer : 172.19.145.191
- Q57. What valid host range is the IP address 172.17.190.211 255.255.255.240 a part of?**  
Answer : 172.17.190.209 through to 172.17.190.222
- Q58. What is the broadcast address of the network 10.62.16.0 255.255.240.0?**  
Answer : 10.62.31.255
- Q59. What is the first valid host on the subnetwork that the node 172.20.187.175/27 belongs to?**  
Answer : 172.20.187.161



- 
- Q60. What is the last valid host on the subnetwork 172.20.164.0 255.255.254.0?**  
Answer : 172.20.165.254
- Q61. What is the last valid host on the subnetwork 192.168.72.128/25?**  
Answer : 192.168.72.254
- Q62. What valid host range is the IP address 172.19.224.9 255.255.240.0 a part of?**  
Answer : 172.19.224.1 through to 172.19.239.254
- Q63. What is the first valid host on the subnetwork that the node 192.168.119.2 255.255.255.252 belongs to?**  
Answer : 192.168.119.1
- Q64. What is the first valid host on the subnetwork that the node 192.168.10.3 255.255.255.248 belongs to?**  
Answer : 192.168.10.1
- Q65. Which subnet does host 172.18.196.11 255.255.254.0 belongs to?**  
Answer : 172.18.196.0
- Q66. What is the first valid host on the subnetwork that the node 172.29.143.225/23 belongs to?**  
Answer : 172.29.142.1
- Q67. What is the last valid host on the subnetwork 172.23.245.0 255.255.255.128?**  
Answer : 172.27.19.254
- Q68. What is the last valid host on the subnetwork 172.27.18.0 255.255.254.0?**  
Answer : 172.23.245.126
- Q69. What is the last valid host on the subnetwork 10.219.16.0/20?**  
Answer : 172.23.245.126
- Q70. What is the last valid host on the subnetwork 10.99.48.0/20?**  
Answer : 10.99.63.254
- Q71. How many subnets and hosts per subnet can you get from the network 172.23.0.0/25?**  
Answer : 512 subnets and 126 hosts

- 
- Q72. Which subnet does host 172.23.82.126/24 belongs to?**  
Answer : 172.23.82.0
- Q73. What valid host range is the IP address 172.23.254.62 255.255.255.224 a part of?**  
Answer : 172.23.254.33 through to 172.23.254.62
- Q74. How many subnets and hosts per subnet can you get from the network 192.168.175.0/28?**  
Answer : 16 subnets and 14 hosts
- Q75. What is the first valid host on the subnetwork that the node 192.168.123.4/28 belongs to?**  
Answer : 192.168.123.1
- Q76. What is the first valid host on the subnetwork that the node 172.25.85.103 255.255.254.0 belongs to?**  
Answer : 172.25.84.1
- Q77. What is the last valid host on the subnetwork 172.30.67.0/24?**  
Answer : 172.30.67.254
- Q78. What is the first valid host on the subnetwork that the node 172.31.242.158 255.255.255.192 belongs to?**  
Answer : 172.31.242.129
- Q79. What is the last valid host on the subnetwork 172.29.4.0/23?**  
Answer : 172.29.5.254
- Q80. How many subnets and hosts per subnet can you get from the network 172.16.0.0/23?**  
Answer : 128 subnets and 510 hosts
- Q81. What is the last valid host on the subnetwork 172.22.94.144 255.255.255.240?**  
Answer : 172.22.94.158
- Q82. You are designing a subnet mask for the 172.21.0.0 network. You want 100 subnets with up to 400 hosts on each subnet. Which subnet mask should you use?**  
Answer : 255.255.254.0

- 
- Q83. What is the last valid host on the subnetwork 172.29.144.0/20?**  
Answer : 172.29.159.254
- Q84. What valid host range is the IP address 172.19.89.228/24 a part of?**  
Answer : 172.19.89.1 through to 172.19.89.254
- Q85. What is the last valid host on the subnetwork 172.28.99.0/24?**  
Answer : 172.28.99.254
- Q86. Which subnet does host 192.168.69.15 255.255.255.224 belongs to?**  
Answer : 192.168.69.0
- Q87. What is the first valid host on the subnetwork that the node 172.19.102.122/26 belongs to?**  
Answer : 172.19.102.65
- Q88. What is the first valid host for network 172.122.18.0/24?**  
Answer : 172.122.18.1
- Q89. What is the first valid host on the subnetwork that the node 172.28.136.17/25 belongs to?**  
Answer : 172.28.136.1
- Q89. What valid host range is the IP address 172.21.8.25 255.255.255.0 a part of?**  
Answer : 172.21.8.1 through to 172.21.8.254
- Q90. What is the last valid host on the subnetwork 172.16.132.0/23?**  
Answer : 172.16.133.254
- Q91. How many subnets and hosts per subnet can you get from the network 172.18.0.0 255.255.255.240?**  
Answer : 4096 subnets and 14 hosts
- Q92. What valid host range is the IP address 10.2.30.50/20 a part of?**  
Answer : 10.2.16.1 through to 10.2.31.254
- Q93. What is the last valid host on the subnetwork 172.25.56.0 255.255.252.0?**  
Answer : 172.25.59.254

- 
- Q94. What is the broadcast address of the network 172.18.176.0 255.255.252.0?**  
Answer : 172.18.179.255
- Q95. What is the first valid host on the subnetwork that the node 10.151.236.199/20 belongs to?**  
Answer : 10.151.224.1
- Q96. What is the broadcast address of the network 172.28.142.0/23?**  
Answer : 172.28.143.255
- Q97. What is the broadcast address of the network 172.28.108.128 255.255.255.128?**  
Answer : 172.28.108.255
- Q98. What valid host range is the IP address 172.31.207.13 255.255.248.0 a part of?**  
Answer : 172.31.200.1 through to 172.31.207.254
- Q99. You are designing a subnet mask for the 192.168.48.0 network. You want 5 subnets with up to 20 hosts on each subnet. Which subnet mask should you use?**  
Answer : 255.255.255.224
- Q100. What is the first valid host on the subnetwork that the node 192.168.48.231/28 belongs to?**  
Answer : 192.168.48.225
- Q101. Which subnet does host 172.29.172.52/23 belongs to?**  
Answer : 172.29.172.0
- Q102. How many subnets and hosts per subnet can you get from the network 192.168.221.0/28?**  
Answer : 16 subnets and 14 hosts
- Q103. What valid host range is the IP address 172.29.182.3/23 a part of?**  
Answer : 172.29.182.1 through to 172.29.183.254
- Q104. Which subnet does host 192.168.245.129/27 belongs to?**  
Answer : 192.168.245.128
- Q105. What is the last valid host on the subnetwork 172.28.214.0/25?**  
Answer : 172.28.214.126

---

**Q106. You are designing a subnet mask for the 172.30.0.0 network. You want 400 subnets with up to 70 hosts on each subnet. Which subnet mask should you use?**

**Answer : 255.255.255.128**

**Q107. How many subnets and hosts per subnet can you get from the network 192.168.15.0/26?**

**Answer : 4 subnets and 62 hosts**

**Q108. What is the last valid host on the subnetwork 172.31.54.160 255.255.255.224?**

**Answer : 172.31.54.190**

**Q109. How many subnets and hosts per subnet can you get from the network 172.20.0.0 255.255.255.192?**

**Answer : 1024 subnets and 62 hosts**

**Q110. How many subnets and hosts per subnet can you get from the network 192.168.242.0 255.255.255.240?**

**Answer : 16 subnets and 14 hosts**

**Q111. What is the last valid host on the subnetwork 172.27.24.0/21?**

**Answer : 172.27.31.254**

**Q112. You are designing a subnet mask for the 192.168.179.0 network. You want 7 subnets with up to 27 hosts on each subnet. Which subnet mask should you use?**

**Answer : 255.255.255.224**

**Q113. What is the last valid host on the subnetwork 192.168.141.128/27?**

**Answer : 192.168.141.158**

**Q114. What is the last valid host on the subnetwork 172.21.194.0/23?**

**Answer : 172.21.195.254**

**Q115. What is the broadcast address of the network 172.19.19.0/24?**

**Answer : 172.19.19.255**

**Q116. Which subnet does host 172.22.79.175 255.255.252.0 belongs to?**

**Answer : 172.22.76.0**

- 
- Q116. What is the last valid host on the subnetwork 172.31.128.0/20?**  
Answer : 172.31.143.254
- Q117. What valid host range is the IP address 172.17.252.114 255.255.255.224 a part of?**  
Answer : 172.17.252.97 through to 172.17.252.126
- Q118. What is the last valid host on the subnetwork 172.16.64.0 255.255.254.0?**  
Answer : 172.16.65.254
- Q119. What is the first valid host on the subnetwork that the node 172.24.237.103 255.255.254.0 belongs to?**  
Answer : 172.24.236.1
- Q120. How many subnets and hosts per subnet can you get from the network 172.26.0.0/28?**  
Answer : 4096 subnets and 14 hosts
- Q121. What is the first valid host on the subnetwork that the node 172.30.253.12/24 belongs to?**  
Answer : 172.30.253.1
- Q122. How many subnets and hosts per subnet can you get from the network 192.168.159.0/27?**  
Answer : 8 subnets and 30 hosts
- Q123. What is the first valid host on the subnetwork that the node 172.25.123.55/23 belongs to?**  
Answer : 172.25.122.1
- Q124. What valid host range is the IP address 172.17.35.40/23 a part of?**  
Answer : 172.17.34.1 through to 172.17.35.254
- Q125. How many subnets and hosts per subnet can you get from the network 192.168.21.0/27?**  
Answer : 8 subnets and 30 hosts

---

**Q126. What is the first valid host on the subnetwork that the node 172.17.173.212/28 belongs to?**

**Answer : 172.17.173.209**

**Q127. Which subnet does host 172.17.196.244 255.255.255.0 belongs to?**

**Answer : 172.17.196.0**

**Q128. Which subnet does host 192.168.114.212 255.255.255.248 belongs to?**

**Answer : 192.168.114.208**

**Q129. What is the broadcast address of the network 192.168.65.112/29?**

**Answer : 192.168.65.119**

**Q130. What is the broadcast address of the network 192.168.166.244 255.255.255.252?**

**Answer : 192.168.166.247**

**Q131. What is the last valid host on the subnetwork 10.27.208.0 255.255.240.0?**

**Answer : 10.27.223.254**

**Q132. What valid host range is the IP address 172.29.232.89/22 a part of?**

**Answer : 172.29.232.1 through to 172.29.235.254**

**Q133. How many subnets and hosts per subnet can you get from the network 192.168.54.0 255.255.255.192?**

**Answer : 4 subnets and 62 hosts**

**Q134. What is the broadcast address of the network 172.21.246.224 255.255.255.224?**

**Answer : 172.21.246.255**

**Q135. What is the first valid host on the subnetwork that the node 172.20.207.125/25 belongs to?**

**Answer : 172.20.207.1**

**Q136. What is the first valid host on the subnetwork that the node 172.24.176.32 255.255.248.0 belongs to?**

**Answer : 172.24.176.1**



---

**Q137. What is the last valid host on the subnetwork 172.25.43.96/27?**

**Answer : 172.25.43.126**

**Q138. What is the broadcast address of the network 172.31.137.64 255.255.255.192?**

**Answer : 172.31.137.127**

**Q139. How many subnets and hosts per subnet can you get from the network 172.28.0.0/28?**

**Answer : 4096 subnets and 14 hosts**

**Q140. What is the last valid host on the subnetwork 172.16.240.0 255.255.254.0?**

**Answer : 172.16.241.254**

**Q141. What is the broadcast address of the network 172.20.56.0 255.255.254.0?**

**Answer : 172.20.57.255**

**Q142. How many subnets and hosts per subnet can you get from the network 172.19.0.0 255.255.248.0?**

**Answer : 32 subnets and 2046 hosts**

**Q143. What is the broadcast address of the network 172.26.120.0 255.255.252.0?**

**Answer : 172.26.123.255**

**Q144. How many subnets and hosts per subnet can you get from the network 172.29.0.0/28?**

**Answer : 4096 subnets and 14 hosts**

**Q145. What is the first valid host on the subnetwork that the node 172.28.210.197 255.255.248.0 belongs to?**

**Answer : 172.28.208.1**

**Q146. How many subnets and hosts per subnet can you get from the network 192.168.214.0/28?**

**Answer : 16 subnets and 14 hosts**

- 
- Q147. What valid host range is the IP address 172.25.155.9 255.255.254.0 a part of?**  
Answer : 172.25.154.1 through to 172.25.155.254
- Q148. What valid host range is the IP address 172.17.162.239/26 a part of?**  
Answer : 172.17.162.193 through to 172.17.162.254
- Q149. What valid host range is the IP address 172.28.71.136 255.255.255.128 a part of?**  
Answer : 172.28.71.129 through to 172.28.71.254
- Q150. What is the last valid host on the subnetwork 10.162.240.0/20?**  
Answer : 10.162.255.254
- Q151. What is the broadcast address of the network 10.41.144.0 255.255.240.0?**  
Answer : 10.41.159.255
- Q152. How many subnets and hosts per subnet can you get from the network 172.29.0.0/28?**  
Answer : 4096 subnets and 14 hosts
- Q153. What is the first valid host on the subnetwork that the node 192.168.16.9/27 belongs to?**  
Answer : 192.168.16.1
- Q154. What is the broadcast address of the network 192.168.68.228/30?**  
Answer : 192.168.68.231
- Q155. Which subnet does host 172.18.148.119/23 belongs to?**  
Answer : 172.18.148.0
- Q156. What is the last valid host on the subnetwork 172.30.194.0/25?**  
Answer : 172.30.194.126
- Q157. What is the broadcast address of the network 172.31.240.0/21?**  
Answer : 172.31.247.255

- 
- Q158. What valid host range is the IP address 172.31.240.231 255.255.254.0 a part of?**  
Answer : 172.31.240.1 through to 172.31.241.254
- Q159. What is the broadcast address of the network 172.24.176.0 255.255.248.0?**  
Answer : 172.24.183.255
- Q160. Which subnet does host 192.168.253.41/29 belongs to?**  
Answer : 192.168.253.40
- Q161. How many subnets and hosts per subnet can you get from the network 192.168.216.0 255.255.255.240?**  
Answer : 16 subnets and 14 hosts
- Q162. What valid host range is the IP address 172.22.72.166 255.255.255.192 a part of?**  
Answer : 172.22.72.129 through to 172.22.72.190
- Q163. What is the broadcast address of the network 172.21.106.0 255.255.255.128?**  
Answer : 172.21.106.127
- Q164. What valid host range is the IP address 172.29.159.239/23 a part of?**  
Answer : 172.29.158.1 through to 172.29.159.254
- Q165. What is the first valid host on the subnetwork that the node 10.221.30.29 255.255.240.0 belongs to?**  
Answer : 10.221.16.1
- Q166. What is the last valid host on the subnetwork 192.168.51.48 255.255.255.248?**  
Answer : 192.168.51.54
- Q167. What is the first valid host on the subnetwork that the node 172.26.26.114 255.255.254.0 belongs to?**  
Answer : 172.26.26.1

- 
- Q168. What is the broadcast address of the network 192.168.203.128 255.255.255.128?**  
Answer : 192.168.203.255
- Q169. What valid host range is the IP address 192.168.183.147/29 a part of?**  
Answer : 192.168.183.145 through to 192.168.183.150
- Q170. How many subnets and hosts per subnet can you get from the network 192.168.240.0/28?**  
Answer : 16 subnets and 14 hosts
- Q171. What valid host range is the IP address 192.168.240.201/30 a part of?**  
Answer : 192.168.240.201 through to 192.168.240.202
- Q172. What is the last valid host on the subnetwork 172.17.84.0/23?**  
Answer : 172.17.85.254
- Q173. What is the last valid host on the subnetwork 172.31.96.0/20?**  
Answer : 172.31.111.254
- Q174. What is the last valid host on the subnetwork 192.168.191.192/26?**  
Answer : 192.168.191.254
- Q175. How many subnets and hosts per subnet can you get from the network 10.0.0.0 255.255.240.0?**  
Answer : 4096 subnets and 4094 hosts
- Q176. What is the last valid host on the subnetwork 172.30.42.160/28?**  
Answer : 172.30.42.174
- Q177. You are designing a subnet mask for the 172.18.0.0 network. You want 13 subnets with up to 2800 hosts on each subnet. Which subnet mask should you use?**  
Answer : 255.255.240.0
- Q178. What valid host range is the IP address 192.168.64.61/25 a part of?**  
Answer : 192.168.64.1 through to 192.168.64.126

- 
- Q179. What is the last valid host on the subnetwork 192.168.128.0 255.255.255.128?**  
Answer : 192.168.128.126
- Q180. How many subnets and hosts per subnet can you get from the network 172.26.0.0 255.255.254.0?**  
Answer : 128 subnets and 510 hosts
- Q181. What is the last valid host on the subnetwork 192.168.251.0/26?**  
Answer : 192.168.251.62
- Q182. What is the last valid host on the subnetwork 172.25.62.0/23?**  
Answer : 172.25.63.254
- Q183. How many subnets and hosts per subnet can you get from the network 192.168.68.0 255.255.255.192?**  
Answer : 4 subnets and 62 hosts
- Q184. What is the first valid host on the subnetwork that the node 172.28.236.55/25 belongs to?**  
Answer : : 172.28.236.1
- Q185. Which subnet does host 172.29.5.75 255.255.254.0 belongs to?**  
Answer : 172.29.4.0
- Q186. What is the first valid host on the subnetwork that the node 172.27.15.192/23 belongs to?**  
Answer : 172.27.14.1
- Q187. What is the last valid host on the subnetwork 172.20.23.128/25?**  
Answer : 172.20.23.254
- Q188. Which subnet does host 192.168.234.52/29 belongs to?**  
Answer : 192.168.234.48
- Q189. How many subnets and hosts per subnet can you get from the network 172.26.0.0 255.255.254.0?**  
Answer : 128 subnets and 510 hosts

- 
- Q190. What valid host range is the IP address 172.31.75.3 255.255.254.0 a part of?**  
Answer : 172.31.74.1 through to 172.31.75.254
- Q191. What is the broadcast address of the network 172.27.28.0 255.255.254.0?**  
Answer : 172.27.29.255
- Q192. What is the last valid host on the subnetwork 172.27.148.0 255.255.254.0?**  
Answer : 172.27.149.254
- Q193. What is the last valid host on the subnetwork 172.19.144.0/21?**  
Answer : 172.19.151.254
- Q194. What valid host range is the IP address 10.199.143.236/20 a part of?**  
Answer : 10.199.128.1 through to 10.199.143.254
- Q195. What is the last valid host on the subnetwork 10.182.112.0 255.255.240.0?**  
Answer : 10.182.127.254
- Q196. Which subnet does host 192.168.9.122/25 belongs to?**  
Answer : 192.168.9.0
- Q197. What is the first valid host on the subnetwork that the node 172.31.108.124/28 belongs to?**  
Answer : 172.31.108.113
- Q198. What valid host range is the IP address 172.24.201.10/23 a part of?**  
Answer : 172.24.200.1 through to 172.24.201.254
- Q199. Which subnet does host 172.31.114.5 255.255.254.0 belongs to?**  
Answer : 172.31.114.0
- Q200. What is the last valid host on the subnetwork 172.28.153.128 255.255.255.128?**  
Answer : 172.28.153.254
- Q201. What is the first valid host on the subnetwork that the node 172.28.202.207/23 belongs to?**  
Answer : 172.28.202.1

- 
- Q202. What is the first valid host on the subnetwork that the node 172.18.104.106 255.255.255.192 belongs to?**  
Answer : 172.18.104.65
- Q203. What is the first valid host on the subnetwork that the node 172.25.91.27 255.255.255.0 belongs to?**  
Answer : 172.25.91.1
- Q204. Which subnet does host 192.168.250.225/28 belongs to?**  
Answer : 192.168.250.224
- Q205. What valid host range is the IP address 172.19.71.122/23 a part of?**  
Answer : 172.19.70.1 through to 172.19.71.254
- Q206. What valid host range is the IP address 172.19.71.122/23 a part of?**  
Answer : 172.19.70.1 through to 172.19.71.254
- Q207. What is the last valid host on the subnetwork 192.168.39.144 255.255.255.248?**  
Answer : 192.168.39.150
- Q208. What is the broadcast address of the network 172.23.90.0 255.255.254.0?**  
Answer : 172.23.91.255
- Q209. How many subnets and hosts per subnet can you get from the network 172.21.0.0 255.255.254.0?**  
Answer : 128 subnets and 510 hosts
- Q210. What is the last valid host on the subnetwork 172.16.108.0 255.255.252.0?**  
Answer : 172.16.111.254
- Q211. What is the first valid host on the subnetwork that the node 172.27.46.16/25 belongs to?**  
Answer : 172.27.46.1
- Q212. What valid host range is the IP address 172.23.119.5 255.255.252.0 a part of?**  
Answer : 172.23.116.1 through to 172.23.119.254



---

**Q213. Which subnet does host 192.168.70.130/28 belongs to?**

**Answer :** 192.168.70.128

**Q214. What is the last valid host on the subnetwork 172.24.152.0 255.255.254.0?**

**Answer :** 172.24.153.254

**Q215. What valid host range is the IP address 192.168.31.154/25 a part of?**

**Answer :** 192.168.31.129 through to 192.168.31.254

**Q216. Which subnet does host 192.168.129.50/25 belongs to?**

**Answer :** 192.168.129.0

**Q217. What is the first valid host on the subnetwork that the node 172.27.47.183/28 belongs to?**

**Answer :** 172.27.47.177

**Q218. What is the last valid host on the subnetwork 192.168.142.64/26?**

**Answer :** 192.168.142.126

**Q219. You are designing a subnet mask for the 192.168.128.0 network. You want 12 subnets with up to 12 hosts on each subnet. Which subnet mask should you use?**

**Answer :** 255.255.255.240

**Q220. How many subnets and hosts per subnet can you get from the network 192.168.222.0/27?**

**Answer :** 8 subnets and 30 hosts

**Q221. What is the broadcast address of the network 192.168.140.64/27?**

**Answer :** 192.168.140.95

**Q222. What is the first valid host on the subnetwork that the node 172.18.139.60/20 belongs to?**

**Answer :** 172.18.128.1

**Q223. What is the broadcast address of the network 172.21.150.0 255.255.254.0?**

**Answer :** 172.21.151.255

- 
- Q224. Which subnet does host 172.20.78.180 255.255.254.0 belongs to?**  
Answer : 172.20.78.0
- Q225. What valid host range is the IP address 192.168.2.136/25 a part of?**  
Answer : 192.168.2.129 through to 192.168.2.254
- Q226. What is the broadcast address of the network 172.19.208.0/22?**  
Answer : 172.19.211.255
- Q227. Which subnet does host 172.21.215.111/21 belongs to?**  
Answer : 172.21.208.0
- Q228. You are designing a subnet mask for the 10.0.0.0 network. You want 3100 subnets with up to 4000 hosts on each subnet. Which subnet mask should you use?**  
Answer : 255.255.240.0
- Q229. You are designing a subnet mask for the 172.22.0.0 network. You want 40 subnets with up to 700 hosts on each subnet. Which subnet mask should you use?**  
Answer : 255.255.252.0
- Q230. What is the last valid host on the subnetwork 172.28.128.0/25?**  
Answer : 172.28.128.126
- Q231. Which subnet does host 172.23.212.130 255.255.240.0 belongs to?**  
Answer : 172.23.208.0
- Q232. What valid host range is the IP address 192.168.118.238/30 a part of?**  
Answer : 192.168.118.237 through to 192.168.118.238
- Q233. How many subnets and hosts per subnet can you get from the network 192.168.17.0 255.255.255.240?**  
Answer : 16 subnets and 14 hosts
- Q234. What is the broadcast address of the network 172.22.220.0 255.255.255.0?**  
Answer : 172.22.220.255

---

**Q235. What valid host range is the IP address 172.30.202.174 255.255.255.192 a part of?**

**Answer :** 172.30.202.129 through to 172.30.202.190

**Q236. What is the first valid host on the subnetwork that the node 10.71.180.18 255.255.240.0 belongs to?**

**Answer :** 10.71.176.1

**Q237. Which subnet does host 172.17.26.177 255.255.255.0 belongs to?**

**Answer :** 172.17.26.0

**Q238. Which subnet does host 10.229.116.20 255.255.240.0 belongs to?**

**Answer :** 10.229.112.0

**Q239. What is the broadcast address of the network 172.18.115.0/24?**

**Answer :** 172.18.115.255

**Q240. How many subnets and hosts per subnet can you get from the network 192.168.171.0 255.255.255.240?**

**Answer :** 16 subnets and 14 hosts

**Q241. What is the broadcast address of the network 172.16.232.0/21?**

**Answer :** 172.16.239.255

**Q242. How many subnets and hosts per subnet can you get from the network 172.18.0.0/26?**

**Answer :** 1024 subnets and 62 hosts

**Q243. What valid host range is the IP address 172.17.38.166/26 a part of?**

**Answer :** 172.17.38.129 through to 172.17.38.190

**Q244. What valid host range is the IP address 172.29.89.47/21 a part of?**

**Answer :** 172.29.88.1 through to 172.29.95.254

**Q245. What is the last valid host on the subnetwork 172.26.73.128 255.255.255.240?**

**Answer :** 172.26.73.142

---

**Q246. How many subnets and hosts per subnet can you get from the network 172.22.0.0 255.255.254.0?**

**Answer :** 128 subnets and 510 hosts

**Q247. Which subnet does host 172.19.183.7 255.255.252.0 belongs to?**

**Answer :** 172.19.180.0

**Q248. How many subnets and hosts per subnet can you get from the network 192.168.236.0/28?**

**Answer :** 16 subnets and 14 hosts

**Q249. What is the first valid host on the subnetwork that the node 192.168.142.47 255.255.255.128 belongs to?**

**Answer :** 192.168.142.1

**Q250. Which subnet does host 192.168.133.203/27 belongs to?**

**Answer :** 192.168.133.192

**Q251. What is the broadcast address of the network 172.26.42.0 255.255.254.0?**

**Answer :** 172.26.43.255

**Q252. Which subnet does host 172.27.45.12/26 belongs to?**

**Answer :** 172.27.45.0

**Q253. What is the last valid host on the subnetwork 172.29.28.160/27?**

**Answer :** 172.29.28.190

**Q254. What is the last valid host on the subnetwork 172.25.80.0 255.255.248.0?**

**Answer :** 172.25.87.254

**Q255. What is the last valid host on the subnetwork 192.168.165.0/26?**

**Answer :** 192.168.165.62

**Q256. How many subnets and hosts per subnet can you get from the network 172.25.0.0/22?**

**Answer :** 64 subnets and 1022 hosts

**Q257. What is the broadcast address of the network 192.168.204.32 255.255.255.248?**

**Answer :** 192.168.204.39

---

**Q258. What is the broadcast address of the network 172.22.2.224 255.255.255.224?**

**Answer : 172.22.2.255**

**Q259. What is the first valid host on the subnetwork that the node 172.17.143.75/27 belongs to?**

**Answer : 172.17.143.65**

**Q260. What valid host range is the IP address 172.30.37.116/22 a part of?**

**Answer : 172.30.36.1 through to 172.30.39.254**

**Q261. What is the last valid host on the subnetwork 172.23.72.0/24?**

**Answer : 172.23.72.254**

**Q262. Which subnet does host 172.26.253.29/25 belongs to?**

**Answer : 172.26.253.0**

**Q263. Which subnet does host 192.168.142.54 255.255.255.240 belongs to?**

**Answer : 192.168.142.48**

**Q264. What is the first valid host on the subnetwork that the node 192.168.82.146 255.255.255.240 belongs to?**

**Answer : 192.168.82.145**

**Q265. What is the last valid host on the subnetwork 172.25.164.0/23?**

**Answer : 172.25.165.254**

**Q266. What is the last valid host on the subnetwork 172.25.164.0/23?**

**Answer : 172.25.165.254**

**Q267. What is the last valid host on the subnetwork 192.168.173.64 255.255.255.240?**

**Answer : 192.168.173.78**

**Q268. What is the broadcast address of the network 172.28.0.0 255.255.240.0?**

**Answer : 172.28.15.255**

**Q269. What is the broadcast address of the network 172.26.225.128/27?**

**Answer : 172.26.225.159**

- 
- Q270. What is the broadcast address of the network 172.16.144.0 255.255.240.0?**  
Answer : 172.16.159.255
- Q271. What is the broadcast address of the network 172.24.242.128 255.255.255.128?**  
Answer : 172.24.242.255
- Q272. Which subnet does host 172.17.87.191/23 belongs to?**  
Answer : 172.17.86.0
- Q273. What is the first valid host on the subnetwork that the node 172.30.89.114 255.255.254.0 belongs to?**  
Answer : 172.30.88.1
- Q274. What is the last valid host on the subnetwork 172.21.32.0/22?**  
Answer : 172.21.35.254
- Q275. What is the broadcast address of the network 172.26.60.0 255.255.252.0?**  
Answer : 172.26.63.255
- Q276. Which subnet does host 172.24.190.180 255.255.255.0 belongs to?**  
Answer : 172.24.190.0
- Q277. How many subnets and hosts per subnet can you get from the network 172.28.0.0 255.255.254.0?**  
Answer : 128 subnets and 510 hosts
- Q278. What is the broadcast address of the network 172.27.205.48/28?**  
Answer : 172.27.205.63
- Q279. What valid host range is the IP address 172.16.6.78/20 a part of?**  
Answer : 172.16.0.1 through to 172.16.15.254
- Q280. What is the first valid host on the subnetwork that the node 192.168.30.46/27 belongs to?**  
Answer : 192.168.30.33
- Q281. What valid host range is the IP address 172.18.138.83/21 a part of?**  
Answer : 172.18.136.1 through to 172.18.143.254

- 
- Q282. What valid host range is the IP address 172.28.126.110 255.255.255.128 a part of?**  
Answer : 172.28.126.1 through to 172.28.126.126
- Q283. How many subnets and hosts per subnet can you get from the network 172.25.0.0/23?**  
Answer : 128 subnets and 510 hosts
- Q284. How many subnets and hosts per subnet can you get from the network 192.168.148.0/27?**  
Answer : 8 subnets and 30 hosts
- Q285. What is the last valid host on the subnetwork 172.22.64.0 255.255.240.0?**  
Answer : 172.22.79.254
- Q286. What is the broadcast address of the network 172.23.39.0/24?**  
Answer : 172.23.39.255
- Q287. Which subnet does host 192.168.60.148 255.255.255.248 belongs to?**  
Answer : 192.168.60.144
- Q288. What is the broadcast address of the network 172.17.200.0 255.255.248.0?**  
Answer : 172.17.207.255
- Q289. What is the last valid host on the subnetwork 192.168.55.128 255.255.255.192?**  
Answer : 192.168.55.190
- Q290. What is the first valid host on the subnetwork that the node 192.168.127.104 255.255.255.192 belongs to?**  
Answer : 192.168.127.65
- Q291. Which subnet does host 172.16.11.9 255.255.254.0 belongs to?**  
Answer : 172.16.10.0
- Q292. How many subnets and hosts per subnet can you get from the network 172.19.0.0/27?**  
Answer : 2048 subnets and 30 hosts
- Q293. How many subnets and hosts per subnet can you get from the network 192.168.15.0/29?**  
Answer : 32 subnets and 6 hosts



- 
- Q294. What is the last valid host on the subnetwork 172.21.216.0 255.255.254.0?**  
Answer : 172.21.217.254
- Q295. What is the first valid host on the subnetwork that the node 172.23.12.34/27 belongs to?**  
Answer : 172.23.12.33
- Q296. What is the last valid host on the subnetwork 172.20.2.0 255.255.254.0?**  
Answer : 172.20.3.254
- Q297. What is the broadcast address of the network 172.24.208.0/20?**  
Answer : 172.24.223.255
- Q298. Which subnet does host 172.21.128.225/27 belongs to?**  
Answer : 172.21.128.224
- Q299. What valid host range is the IP address 172.21.175.56/23 a part of?**  
Answer : 172.21.174.1 through to 172.21.175.254
- Q300. Which subnet does host 192.168.243.21 255.255.255.252 belongs to?**  
Answer : 192.168.243.20
- Q301. What is the first valid host on the subnetwork that the node 172.20.184.211 255.255.254.0 belongs to?**  
Answer : 172.20.184.1
- Q302. What is the first valid host on the subnetwork that the node 172.27.96.123 255.255.254.0 belongs to?**  
Answer : 172.27.96.1
- Q303. What is the first valid host on the subnetwork that the node 172.19.233.40 255.255.254.0 belongs to?**  
Answer : 172.19.232.1
- Q304. How many subnets and hosts per subnet can you get from the network 172.21.0.0/28?**  
Answer : 4096 subnets and 14 hosts

- 
- Q305. What is the first valid host on the subnetwork that the node 192.168.101.236/29 belongs to?**  
Answer : 192.168.101.233
- Q306. What is the broadcast address of the network 192.168.165.64 255.255.255.192?**  
Answer : 192.168.165.127
- Q307. What is the first valid host on the subnetwork that the node 192.168.161.51 255.255.255.248 belongs to?**  
Answer : 192.168.161.49
- Q308. Which subnet does host 172.26.197.145/23 belongs to?**  
Answer : 172.26.196.0
- Q309. Which subnet does host 10.95.98.72 255.255.240.0 belongs to?**  
Answer : 10.95.96.0
- Q310. What is the first valid host on the subnetwork that the node 192.168.50.88 255.255.255.192 belongs to?**  
Answer : 192.168.50.65
- Q311. Which subnet does host 192.168.230.90/27 belongs to?**  
Answer : 192.168.230.64
- Q312. What valid host range is the IP address 192.168.48.222 255.255.255.224 a part of?**  
Answer : 192.168.48.193 through to 192.168.48.222
- Q313. What is the broadcast address of the network 192.168.48.0 255.255.255.192?**  
Answer : 192.168.48.63
- Q314. What is the last valid host on the subnetwork 172.20.248.0/23?**  
Answer : 172.20.249.254
- Q315. How many subnets and hosts per subnet can you get from the network 172.31.0.0/24?**  
Answer : 256 subnets and 254 hosts

- 
- Q316. What is the last valid host on the subnetwork 192.168.3.208/28?**  
Answer : 192.168.3.222
- Q317. What is the last valid host on the subnetwork 172.21.146.0 255.255.254.0?**  
Answer : 172.21.147.254
- Q318. What is the last valid host on the subnetwork 172.30.108.0/23?**  
Answer : 172.30.109.254
- Q319. What is the first valid host on the subnetwork that the node 172.22.209.219 255.255.254.0 belongs to?**  
Answer : 172.22.208.1
- Q320. How many subnets and hosts per subnet can you get from the network 10.0.0.0 255.255.240.0?**  
Answer : 4096 subnets and 4094 hosts
- Q321. Which subnet does host 172.26.53.171/28 belongs to?**  
Answer : 172.26.53.160
- Q322. What valid host range is the IP address 172.27.148.164/27 a part of?**  
Answer : 172.27.148.161 through to 172.27.148.190
- Q323. What is the first valid host on the subnetwork that the node 172.27.42.110 255.255.254.0 belongs to?**  
Answer : 172.27.42.1
- Q324. How many subnets and hosts per subnet can you get from the network 172.30.0.0 255.255.254.0?**  
Answer : 128 subnets and 510 hosts
- Q325. What is the last valid host on the subnetwork 192.168.89.144/29?**  
Answer : 192.168.89.150
- Q326. You are designing a subnet mask for the 172.23.0.0 network. You want 110 subnets with up to 400 hosts on each subnet. Which subnet mask should you use?**  
Answer : 255.255.254.0

---

**Q326. What valid host range is the IP address 172.24.125.64/22 a part of?**

**Answer :** 172.24.124.1 through to 172.24.127.254

**Q327. How many subnets and hosts per subnet can you get from the network 172.21.0.0 255.255.255.0?**

**Answer :** 256 subnets and 254 hosts

**Q328. Which subnet does host 192.168.173.140/27 belongs to?**

**Answer :** 192.168.173.128

**Q329. What is the broadcast address of the network 172.20.16.0/23?**

**Answer :** 172.20.17.255

**Q330. What is the last valid host on the subnetwork 172.31.118.0/23?**

**Answer :** 172.31.119.254

**Q331. How many subnets and hosts per subnet can you get from the network 192.168.167.0 255.255.255.240?**

**Answer :** 16 subnets and 14 hosts

**Q332. What is the last valid host on the subnetwork 172.16.152.0 255.255.252.0?**

**Answer :** 172.16.155.254

**Q333. What is the first valid host on the subnetwork that the node 172.29.80.242 255.255.254.0 belongs to?**

**Answer :** 172.29.80.1

**Q334. What is the last valid host on the subnetwork 172.20.92.64/28?**

**Answer :** 172.20.92.78

**Q335. What is the last valid host on the subnetwork 172.21.131.0 255.255.255.0?**

**Answer :** 172.21.131.254

**Q336. Which subnet does host 192.168.61.218 255.255.255.252 belongs to?**

**Answer :** 192.168.61.216

**Q337. What is the broadcast address of the network 172.21.80.0/23?**

**Answer :** 172.21.81.255

- 
- Q338. What is the first valid host on the subnetwork that the node 172.16.85.152/23 belongs to?**  
Answer : 172.16.84.1
- Q339. What valid host range is the IP address 172.24.145.24/28 a part of?**  
Answer : 172.24.145.17 through to 172.24.145.30
- Q340. You are designing a subnet mask for the 172.31.0.0 network. You want 50 subnets with up to 600 hosts on each subnet. Which subnet mask should you use?**  
Answer : 255.255.252.0
- Q341. What valid host range is the IP address 172.28.32.197 255.255.254.0 a part of?**  
Answer : 172.28.32.1 through to 172.28.33.254
- Q342. What is the last valid host on the subnetwork 172.21.199.0 255.255.255.0?**  
Answer : 172.21.199.254
- Q343. What is the broadcast address of the network 192.168.252.208/28?**  
Answer : 192.168.252.223
- Q344. What is the last valid host on the subnetwork 10.242.160.0 255.255.240.0?**  
Answer : 10.242.175.254
- Q345. How many subnets and hosts per subnet can you get from the network 192.168.130.0/28?**  
Answer : 16 subnets and 14 hosts
- Q346. Which subnet does host 10.171.80.161/20 belongs to?**  
Answer : 10.171.80.0
- Q347. What is the broadcast address of the network 172.17.138.0 255.255.255.0?**  
Answer : 172.17.138.255
- Q348. You are designing a subnet mask for the 192.168.61.0 network. You want 7 subnets with up to 29 hosts on each subnet. Which subnet mask should you use?**  
Answer : 255.255.255.224

---

**Q349. How many subnets and hosts per subnet can you get from the network 172.18.0.0 255.255.255.0?**

**Answer : 256 subnets and 254 hosts**

**Q350. What is the first valid host on the subnetwork that the node 172.16.130.180 255.255.252.0 belongs to?**

**Answer : 172.16.128.1**

**Q351. What is the broadcast address of the network 172.22.121.0 255.255.255.0?**

**Answer : 172.22.121.255**

**Q352. What is the last valid host on the subnetwork 172.17.64.0/20?**

**Answer : 172.17.79.254**

**Q353. What is the first valid host on the subnetwork that the node 10.38.63.176 255.255.240.0 belongs to?**

**Answer : 10.38.48.1**

**Q354. How many subnets and hosts per subnet can you get from the network 172.31.0.0 255.255.248.0?**

**Answer : 32 subnets and 2046 hosts**

**Q355. What is the last valid host on the subnetwork 172.19.56.0/21?**

**Answer : 172.19.63.254**

**Q356. Which subnet does host 172.18.240.148 255.255.248.0 belongs to?**

**Answer : 172.18.240.0**

**Q357. What is the last valid host on the subnetwork 192.168.251.0 255.255.255.128?**

**Answer : 192.168.251.126**

**Q358. What is the last valid host on the subnetwork 192.168.251.0 255.255.255.128?**

**Answer : 192.168.251.126**

**Q359. What is the last valid host on the subnetwork 192.168.63.64/27?**

**Answer : 192.168.63.94**

- 
- Q360. What is the broadcast address of the network 172.19.104.0/23?**  
Answer : 172.19.105.255
- Q361. What is the first valid host on the subnetwork that the node 172.25.163.207 255.255.254.0 belongs to?**  
Answer : 172.25.162.1
- Q362. What is the first valid host on the subnetwork that the node 172.19.10.11/21 belongs to?**  
Answer : 172.19.8.1
- Q363. What is the last valid host on the subnetwork 172.31.246.0/23?**  
Answer : 172.31.247.254
- Q364. Which subnet does host 172.17.76.193 255.255.252.0 belongs to?**  
Answer : 172.17.76.0
- Q365. What is the broadcast address of the network 192.168.10.128 255.255.255.224?**  
Answer : 192.168.10.159
- Q366. How many subnets and hosts per subnet can you get from the network 10.0.0.0 255.255.240.0?**  
Answer : 4096 subnets and 4094 hosts
- Q367. What is the broadcast address of the network 192.168.20.4 255.255.255.252?**  
Answer : 192.168.20.7
- Q368. How many subnets and hosts per subnet can you get from the network 172.17.0.0 255.255.254.0?**  
Answer : 128 subnets and 510 hosts
- Q369. How many subnets and hosts per subnet can you get from the network 192.168.109.0 255.255.255.248?**  
Answer : 32 subnets and 6 hosts
- Q370. What is the last valid host on the subnetwork 192.168.152.96/27?**  
Answer : 192.168.152.126



---

**Q371. Which subnet does host 172.28.98.135/23 belongs to?**

**Answer : 172.28.98.0**

**Q372. Which subnet does host 192.168.203.209 255.255.255.240 belongs to?**

**Answer : 192.168.203.208**

**Q373. Which subnet does host 172.17.41.153 255.255.255.192 belongs to?**

**Answer : 172.17.41.128**

**Q374. What is the broadcast address of the network 172.24.199.0/25?**

**Answer : 172.24.199.127**

**Q375. What valid host range is the IP address 172.23.211.211/21 a part of?**

**Answer : 172.23.208.1 through to 172.23.215.254**

# ROAD AHEAD AFTER CCNA?

"Once done with CCNA, Your Next & Big Goal Should be CCNP & CCIE"

CCIE ENGINEERS ARE  
**WORLD'S**  
**MOST DEMANDED**  
**HIGHEST PAID**  
**IT PROFESSIONALS!!**

## 2 MOST DEMANDED & HIGHEST PAID

100% JOB GUARANTEED COURSES FROM NB



CCIE R&S  
INTEGRATED

Starting package of 4-5 Lacs INR



CCIE SECURITY  
INTEGRATED

Starting package of 5-6 Lacs INR

# CCIE R&S INTEGRATED

## Shortcut to Success Program

CCIE R&S is **Highest Level of Certification** in Routing & Switching track offered by **Cisco Systems**. CCIE R&S integrated course is perfect combination of **CCNA R&S + CCNP R&S + CCIE R&S Certifications** making you eligible for job roles related to Cisco Networking.

**There are around 35,000 CCIE R&S Certified Engineers worldwide**

**Whereas IT Industry needs over 300,000 CCIE R&S**

**Certified Engineers right now!**

### COURSES COVERED

**CCNA  
R&S**

**CCNP  
R&S**

**CCIE  
R&S**

**Advanced  
BGP/MPLS**

**CISCO  
Nexus**



## 100% JOB

**PLACEMENT GUARANTEE**

at Starting package 4-5 Lacs/Yr.



## EXTRA CLASSES TO MAKE YOU JOB READY!

Spoken English, Group Discussion, Presentation Skills, CV Writing, Interview Preparation, Industrial Seminars, Mock Interviews.

# JOB ROLES

Post completion of this Program you will be eligible for

✓ **Network  
Engineer**

✓ **Network  
Administrator**

✓ **Network  
Specialist**

✓ **Sr. Network  
Engineer**

✓ **IT  
Manager**

✓ **Principal Network  
Architect**

# CCIE SECURITY INTEGRATED

**Most Demanded IT Certification on Planet**

CCIE Security is **World's Most Prestigious, Most demanded** and **Highest paid IT Certification**.  
This is the most recommended course to build an amazing career in IT.

**There are around 6,000 CCIE Security Certified Engineers worldwide**

**Whereas IT Industry needs over 200,000 CCIE Security**

**Certified Engineers right now!**

## COURSES COVERED



**100% JOB**

**PLACEMENT GUARANTEE**

at Starting package 5-6 Lacs/Yr.



**EXTRA CLASSES TO  
MAKE YOU JOB READY!**

Spoken English, Group Discussion, Presentation Skills, CV Writing, Interview Preparation, Industrial Seminars, Mock Interviews.

## JOB ROLES

**Post completion of this Program you will be eligible for**

✓ **Network Engineer**

✓ **Network Administrator**

✓ **Network Security Administrator**

✓ **Sr. Network Engineer**

✓ **Network Security Engineer**

✓ **Network Security Specialist**

# GET CISCO CERTIFIED & GET 100% PLACEMENTS

LIKE OUR **15000+** HAPPY STUDENTS



**Pritam**

CCIE R&S Integrated

NBT



**Sanjeev**

CCIE Security Integrated

British Telecom



**Praful**

CCIE R&S Integrated

CSS Corp



**Karan Deep**

CCIE R&S Integrated

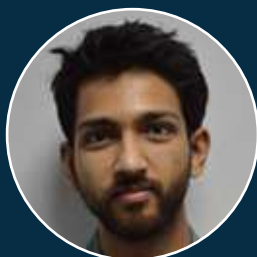
DSM Infocom



**Abhishek**

CCIE R&S Integrated

RailTel



**Sumit**

CCIE R&S Integrated

British Telecom



**Gaurav**

CCIE R&S Integrated

CSS Corp



**Saurabh**

CCIE R&S Integrated

British Telecom



**Chanchala**

CCIE R&S Integrated

British Telecom



**Sagar**

CCIE Security Integrated

NBT



**Kartik**

CCIE Security Integrated

British Telecom



**Amit**

MVTE

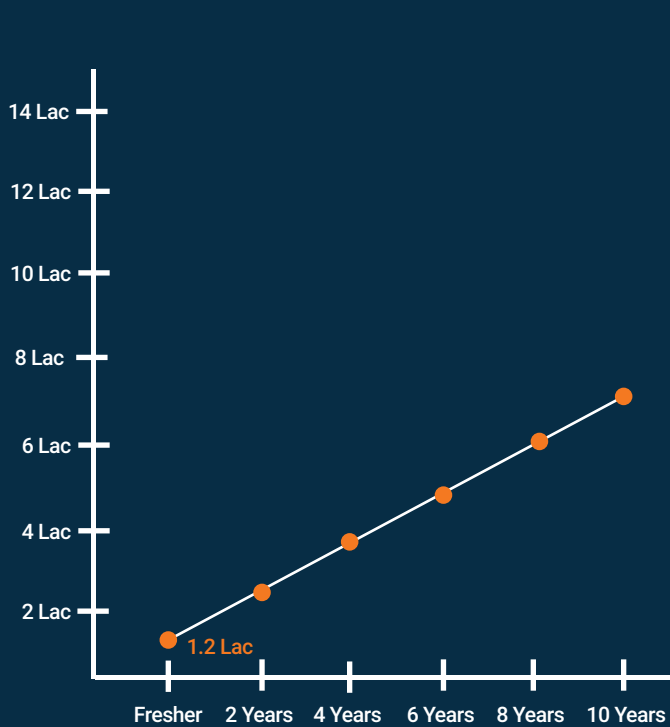
British Telecom

## STUDENTS PLACED IN **25+ MNCs**

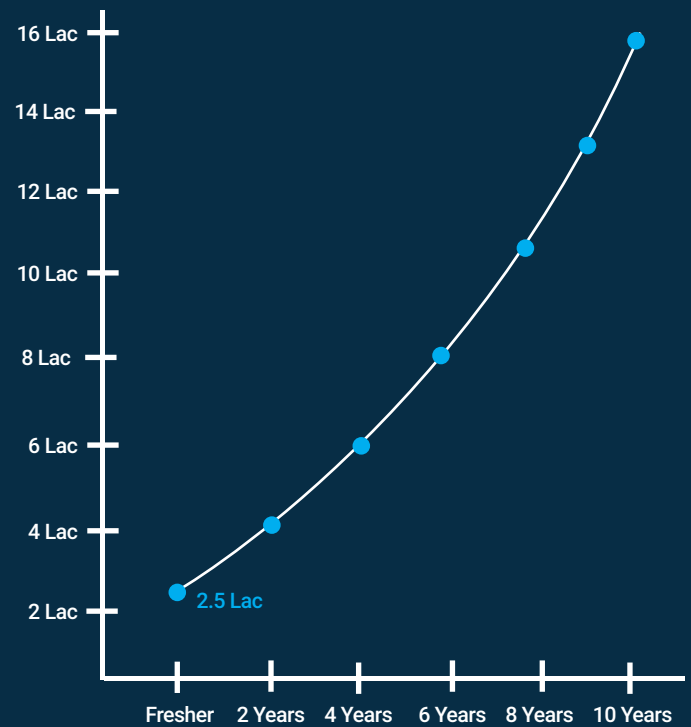


+ Many More...

## YOUR 10 YEAR GROWTH CHART AFTER CCNA, CCNP & CCIE?

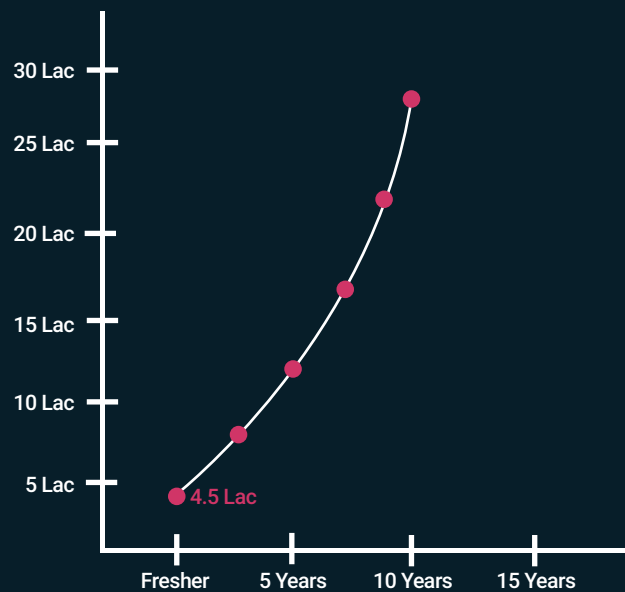


**STUDENT WITH CCNA OR CCNP  
LEVEL KNOWLEDGE**



**STUDENT WITH CCIE WRITTEN  
CERTIFICATION**

## CAREER PATH OF CCIE LAB CERTIFIED STUDENT



“ CCIE Lab Certified Students get 2x career growth compared to students who have CCIE written Certification and 5x career growth compared to students with CCNA, CCNP level knowledge. So,

**Go for CCIE Lab Certification & Make your Career FLY! ,,**

# NETWORK BULLS LAUNCHES CISCO DATA CENTER TRAINING

CCNA  
DATA  
CENTER

CCNP  
DATA  
CENTER

CCIE  
DATA  
CENTER

\*We are the Only Training company to offer  
**Cisco Data Center Training in India with updated V2 Racks!**



[www.networkbulls.com/ask](http://www.networkbulls.com/ask)

INDIA'S 1ST AND ONLY

**NETWORKING Q&A PLATFORM**



**Ask any question**  
related to Networking



**Get Answers from**  
Industry Experts



**Earn real World**  
knowledge



**Stay updated with**  
latest trends



**Locate us**

SCO-9,10,11,12 - 2nd & 3rd Floor, Above Vishal Mega Mart, Old Delhi Road,  
Sector-14, Gurgaon-122001, Haryana



**Call us**

1800-3070-7628 (Toll Free)