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| Name: | **LAZARTE, ANDY G** | Subject Code: | **IT0916C** |
| Topic: | **Subnet Masks 1** | Date: |  |

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| Network Address: **218.35.50.0** | | 128 | 64 | 32 | 16 | 8 | 4 | 2 | 1 |
| Number of Usable Hosts: **25** | | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 |
| Address class | **C** | 128+64+32 = 224  23 = 8  25 = 32 | | | | | | | |
| Default subnet mask | **255.255.255.0** |
| Custom subnet mask | **255.255.255.224** |
| Total number of subnets | **8** |
| # IP Addresses (Usable) | **32 (30)** |
| # of bits borrowed | **3** |

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| Network Address: **190.35.0.0** | | 128 | 64 | 32 | 16 | 8 | 4 | 2 | 1 |
| Number of Usable Hosts: **750** | | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 |
| Address class | **B** | 128+64+32+16+8+4+ = 252  2^6 = 64  2^10 = 1024 | | | | | | | |
| Default subnet mask | **255.255.0.0** |
| Custom subnet mask | **255.255.252.0** |
| Total number of subnets | **64** |
| # IP Addresses (Usable) | **1024 (1022)** |
| Number of bits borrowed | **6** |

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| Network Address: **198.100.10.0** | | 128 | 64 | 32 | 16 | 8 | 4 | 2 | 1 |
| Number of Usable Hosts: **60** | | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| Address class | **C** | 128+64 = 192  2^2 = 4  2^6 = 64 | | | | | | | |
| Default subnet mask | **255.255.255.0** |
| Custom subnet mask | **255.255.255.192** |
| Total number of subnets | **4** |
| # IP Addresses (Usable) | **64 (62)** |
| Number of bits borrowed | **2** |

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| Name: | **LAZARTE, ANDY G** | Subject Code: | **IT0916C** |
| Topic: | **Subnet Masks 2** | Date: |  |

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| Network Address: **220.100.100.0** | | 128 | 64 | 32 | 16 | 8 | 4 | 2 | 1 |
| Number of Usable Hosts: **45** | | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| Address class | **C** | 128+64 = 192  2^2 = 4  2^6 = 64 | | | | | | | |
| Default subnet mask | **255.255.255.0** |
| Custom subnet mask | **255.255.255.192** |
| Total number of subnets | **4** |
| # IP Addresses (Usable) | **64 (62)** |
| Number of bits borrowed | **2** |

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| Network Address: **101.0.0.0** | | 128 | 64 | 32 | 16 | 8 | 4 | 2 | 1 |
| Number of Usable Hosts: **250** | | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Address class | **A** | 128 = 128  2^1 = 2  2^8 = 256 | | | | | | | |
| Default subnet mask | **255.0.0.0** |
| Custom subnet mask | **255.128.0.0** |
| Total number of subnets | **2** |
| # IP Addresses (Usable) |  |
| Number of bits borrowed | **1** |

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| Network Address: **172.59.0.0** | | 128 | 64 | | 32 | 16 | 8 | | 4 | 2 | 1 |
| Number of Usable Hosts: **50** | | 1 | 1 | | 0 | 0 | 0 | | 0 | 0 | 0 |
| Address class | **B** | 128+64 = 192  2^2= 4  2^6 = 64 | | | | | | | | | |
| Default subnet mask | **255.255.0.0** |
| Custom subnet mask | **255.255.192.0** |
| Total number of subnets | **4** |
| # IP Addresses (Usable) | **64 (62)** |
| Number of bits borrowed | **2** |
| Name: | **LAZARTE ANDY G** | | | Subject Code: | | | | **IT0916C** | | | |
| Topic: | **IP Subnetting 1** | | | Date: | | | |  | | | |

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| Network Address: **93.0.62.0 /19** | | **93.0.62.0**  .0  .32  .64  32-19 = 13  213 = 8192 |
| Network ID | **93.0.32.0** |
| Broadcast IP | **93.0.63.255** |
| First Host IP | **93.0.32.1** |
| Last Host IP | **93.0.63.254** |
| Next Network | **93.0.64.0** |
| # IP Addresses (Usable) | **8,192 (8,190)** |
| CIDR/Subnet | **255.255.224.0** |

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| Network Address: **200.10.10.0 /20** | | 200.10.10.0  .0  .10  .16  10-20 =10  2^(13-20) - 2 =4094 |
| Network ID | **200.10.10.0** |
| Broadcast IP | **200.10.15.255** |
| First Host IP | **200.10.10.1** |
| Last Host IP | **200.10.15.254** |
| Next Network | **200.10.16.0** |
| # IP Addresses (Usable) | **4094** |
| CIDR/Subnet | **255.255.255.0** |

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| Network Address: **172.50.0.0 /13** | | **172.50.0.0**  **.0**  **.0**  **.0**  **0-13 =13** |
| Network ID | **172.50.0.0** |
| Broadcast IP | **172.57.255.255** |
| First Host IP | **172.50.0.1** |
| Last Host IP | **172.57.255.254** |
| Next Network | **172.58.0.0** |
| # IP Addresses (Usable) | **524,286** |
| CIDR/Subnet | **255.248.0.0** |

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| Name: | **LAZARTE, ANDY G.** | Subject Code: | **IT0916C** |
| Topic: | **IP Subnetting 2** | Date: |  |

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| Network Address: **165.200.0.0 /26** | | 165.200.0.0  .0  .0  .0 |
| Network ID | **165.200.0.0** |
| Broadcast IP | **165.200.0.63** |
| First Host IP | **165.200.0.1** |
| Last Host IP | **165.200.0.62** |
| Next Network | **165.200.0.64** |
| # IP Addresses (Usable) | **62** |
| CIDR/Subnet | **/26** |

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| --- | --- | --- |
| Network Address: **198.125.50.0 /27** | | **198.125.50.0**  **.0**  **.50**  **.50**  **50-27=23**  **2^5 - 2= 30** |
| Network ID | **198.125.50.0** |
| Broadcast IP | **198.125.50.31** |
| First Host IP | **198.125.50.1** |
| Last Host IP | **198.125.50.30** |
| Next Network | **198.125.50.32** |
| # IP Addresses (Usable) | **30** |
| CIDR/Subnet | **198.125.50.0** |

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| Network Address: **10.0.0.0 /16** | | **10.0.0.0**  .0  .0  .0 |
| Network ID | **10.0.0.0** |
| Broadcast IP | **10.0.255.255** |
| First Host IP | **10.0.0.1** |
| Last Host IP | **10.0.255.254** |
| Next Network | **10.1.0.0** |
| # IP Addresses (Usable) | **65534** |
| CIDR/Subnet | **10.0.0.0/16** |