

CLASS SUBNETTING

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COURSE & SECTION: BSIT III-1

1.) 170.10.0.0 / 16 with 5 Subnets

A. Determine the Class

Class B

B. Determine the Old Subnet Mask

255.255.0.0 / 16

C. Get the Borrowed Bits $2^N \geq N$

$2^3 \geq 8$

D. Get the New Subnet Mask

Old subnet mask + borrowed bits = New subnet Mask

$16 + 3 = 19$ 255.255. 224.0 / 19 11111111 . 11111111 . 11100000 . 00000000
1st Octet 2nd Octet 3rdOctet 4thOctet

E. Get the number of Usable Hosts (count the zeros) $2^N - 2 = N$

$2^{13} - 2 = 8190$

F. The value of the last one's

Delta: 32 (increment this in which octet you found 32)

	Network Address	First Usable Host	Last Usable Host	Broadcast Address
Subnet 0	170.10.0.0	170.10.0.1	170.10.31.254	170.10.31.255
Subnet 1	170.10.32.0	170.10.32.1	170.10.63.254	170.10.63.255
Subnet 2	170.10.64.0	170.10.64.1	170.10. 95.254	170.10. 95.255
	170.10.96.0			