

problem 7  
class B

lab 1

i) 255.255.0.0

ii) 255.255.255.224

iii) 2048

iv) 32

v) 30

vi) 11

problem 15

class B

i) 255.255.0.0

ii) 255.255.255.192

iii) 1024

iv) 64

v) 62

vi) 10

i) Problem II  
class B

8000  
135.70.0.0

ii) 255.255.255.0

iii) 255.255.255.224

iv) 8

v) 8,192

vi) 8,190

vii) 13 8 bits

viii) ~~135.70.0.48 to 135.70.0.55~~ ~~135.70.0.56 to 135.70.0.63~~  
135.70.0.56

ix) 135.70.0.56

x) 135.70.0.31

xi) 135.70.0.41 to

135.70.0.46

(0)	0000
(1)	0001
(2)	0010
(3)	0011
(4)	0100
(5)	0101
(6)	0111
(7)	1000

Practical Subnetting 4  
Address class: Class B

Custom subnet mask: 255.255.255.240

Minimum number of subnets need: 5

Extra subnets require for 70% growth: 4

Total number of subnet needed: 9

number of host addresses in largest <sup>Subnet</sup> group: 32

number of addresses needed for 70% growth in the largest subnet: 228

Total needed: 553

IP Address range for New York 135.126.0.0 to 135.126.15.255

IP Address range for ~~Atlanta~~ Washington D.C. 135.126.16.255 to 135.126.31.255

IP address range for Dallas

135.126.32.0 to 135.126.47.255  
135.126.16.0 to 135.126.31.255

IP Address range Router A to B 135.126.32.0 to 135.126.47.255  
135.126.48.0 to 135.126.63.255  
135.126.64.0 to 135.126.79.255

IP Address range Router A to C

135.126.64.0 to 135.126.79.255

# Practical Subnetting C

i) Class A

ii) 255.240.0.0

iii) 7

iv) 3 7.x.0

v) 9

vi) 10.0.0.0 to 10.15.255.255

vii) 10.16.0.0 to 10.31.255.255 ~~10.0.0.0 to 10.15.255.255~~

viii) 10.32.0.0 to 10.47.255.255 ~~10.16.0.0 to 10.31.255.255~~

ix) 10.48.0.0 to 10.63.255.255 ~~10.32.0.0 to 10.47.255.255~~

x) 10.64.0.0 to 10.79.255.255 ~~10.48.0.0 to 10.63.255.255~~

xi) 10.80.0.0 to 10.95.255.255 ~~10.64.0.0 to 10.79.255.255~~

xii) 10.96.0.0 to 10.111.255.255 ~~10.80.0.0 to 10.95.255.255~~