Homework 5 P91 Gariel Emerson Due 19/28 R12: Yes, there is one for every interface R13: 11011111 00000001 00000011 00011100 RIS: Travel over 8 interfaces and 3 forwarding RIT: The 8-bit protocol field in the IP detegram contains information about which transport protocol the destination host should pass the segment to P13: 223.1, 17.0 /26 223.1.17.128 /25 223. 1.17.192 /28 Plb: Any IP 128.119.40.128->128.119.40.191 Four subnets of equal size: 128.119.40.64/28 128.119.40.80/28 28.119.40.96/28 128.119.40.112/28 P17: a.) Subret A: 214.97.255. /24 Subret B: 214.97, 254.0 /25-214.97, 254.0/29 Subret C: 214.97.254.128/25

Homework 5

2g 2

P17: Subnet D: 214.97.254.0 /31

Subnet F: 214.97.254.2 /31

Subnet F: 214.97.254.4 /30

b.) To simplify, assure no datagrams
have souted interferes as destinations.

have router interfaces as destinations.

Also Label DEF for interior subnets.

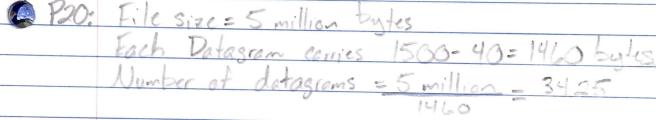
Router 1 11010110 01100001 1111111 Sub A 11010110 01100001 11111110 0000000 Sub I 11010110 01100001 11111110 0000000 Sub F

Router 2
11010110 01100001 11111111 000000000 Sub D
11010110 01100001 11111110 0 Sub B
11010110 01100001 11111110 000000001 Sub E

11010110 01100001 11111111 000001 Sub F 11010110 01100001 11111110 0000001 Sub E 11010110 01100001 1111110 1 Sub E

Honework 5 P19: Max size data fagment = 680

Required fragments = 2400-20 = 4 Each fragment will have Id number 422. Each fragment (except last) will have size 700 bytes. Last will be 360 bytes 3ffsets = 0, 85, 170,255 Each of first 3 fragments will set Flag = 1, Last fragment flag = 0.



All but last datagram = 1500 bytes 10st = 960 + 40 = 1880 bytes

> Host does not create datagrams over 1503 bytes, which is smaller than the MTU's. # No Fragmentation.