

# EECS 325: Assignment 3

Shaochen (Henry) ZHONG, sxz517

Due and submitted on 04/20/2020  
EECS 325, Dr. WANG

## Question 1

a.

$$\frac{5000}{820 - 20} = 6.25 \approx 7$$

The original datagram will be fragmented into 7 datagrams.

b.

It occurs at routers.

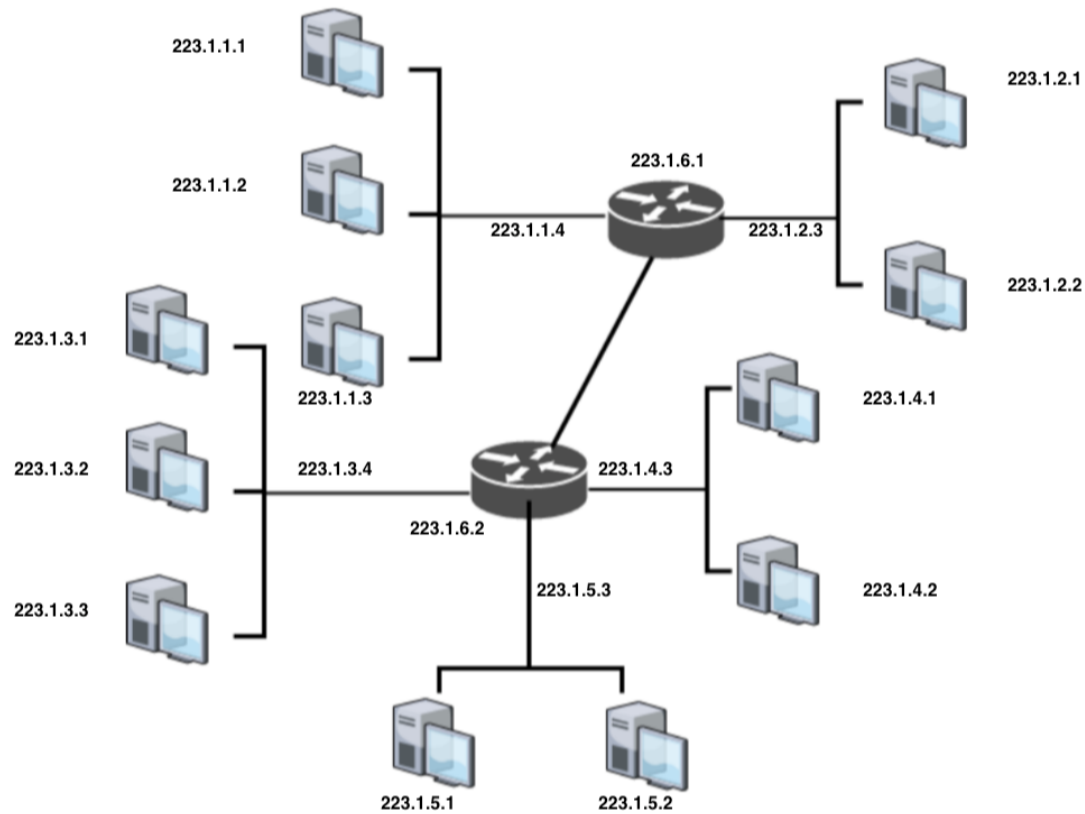
c.

Seg Num	identifier	fragflag	offset	length
1	x	1	0	820
2	x	1	100	820
3	x	1	200	820
4	x	1	300	820
5	x	1	400	820
6	x	1	500	820
7	x	0	600	220

d.

It reassembled at hosts.

## Question 2



There are 6 subnets.

## Question 3

i.

- dst IP: 192.168.2.7
- src IP: 4.3.2.1
- dst Port: 1067
- src Port: 80

ii.

- external IP address of the NAT: 2.2.2.2
- IP address of host A: 192.168.2.7
- IP address of host B: 4.3.2.1

## Question 4

a.

Prefix	Interface
1100000	0
11100001 00000000	1
11100001	2
other	3

b.

- (i) **Interface 3**, since it has no matching prefix with the above chart.
- (ii) **Interface 1**, match with prefix 11100001 00000000.
- (iii) **Interface 2**, match with prefix 11100001.

c.

Prefix	Interface
192.0.0.0 /7	0
225.0.0.0/16	1
225.0.0.0/8	2
other	3