HW3

Exercise 1.

1. Reno Version

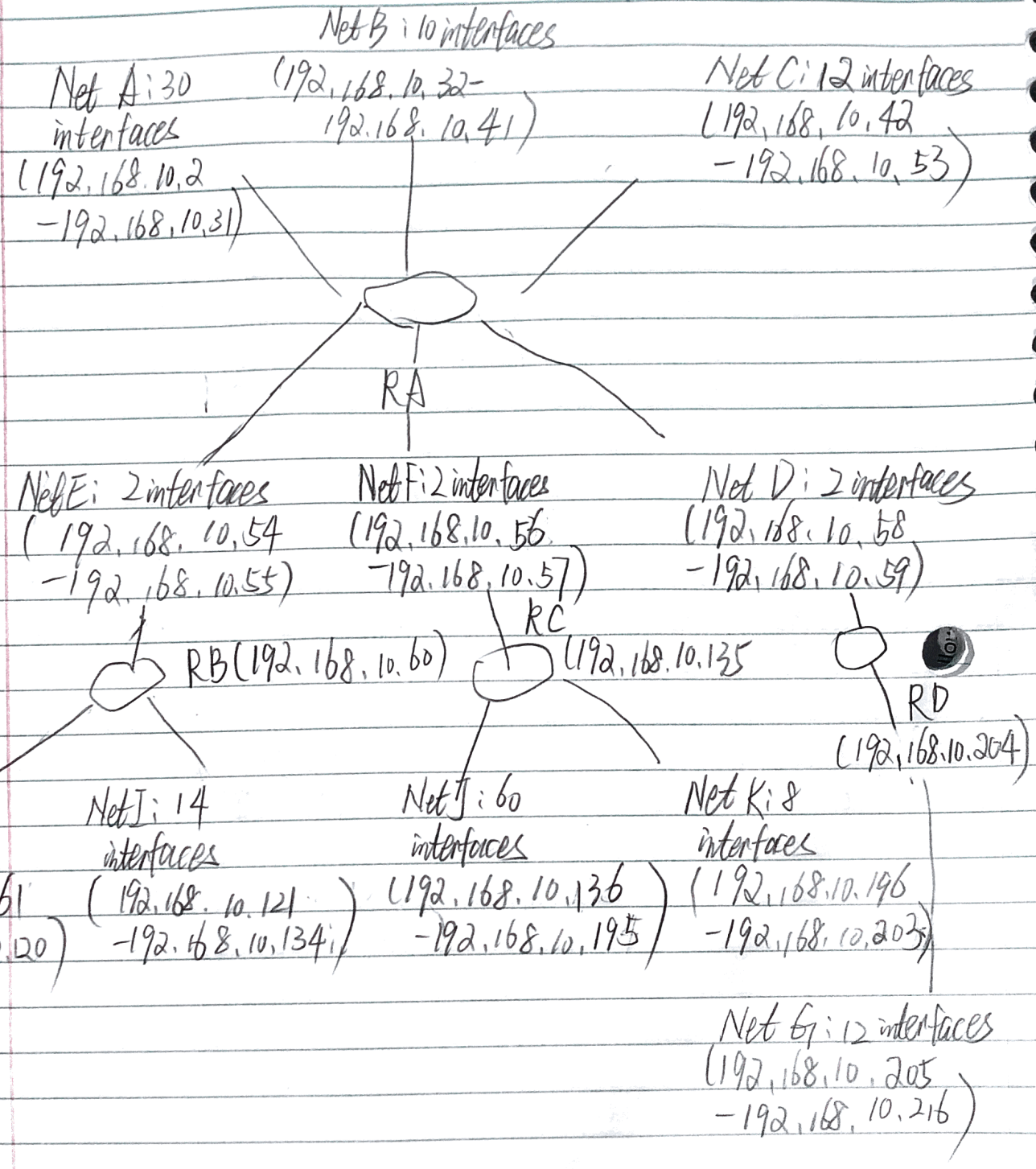
Explain: for the reno version, the window size would be cut in half and then grow linearly

2. interval 0-5, 7-12, 17
3. interval 5-7, 11-12
4. By triple duplicate ACK
5. By Time out
6. it is in the middle between 30 and 35, I Assume it is 32 or 33
7. the threshold is the window size that was half of the initial and it is end of the exponient curve from 7-11, so it is $\frac{32}{2} = 16$

8. the threshold is the window size that was half of the one in front which is the window size at 12th round and I assume it is 20

$\therefore \frac{20}{2} = 10$ as ssthresh at 13th transimission round

Exercise 2:


Net A: 30 interfaces (192.168.10.2 - 192.168.10.31)
Net B: 10 interfaces (192.168.10.32 - 192.168.10.41)
Net C: 12 interfaces (192.168.10.42 - 192.168.10.53)
RA
Net E: 2 interfaces (192.168.10.54 - 192.168.10.55)
Net F: 2 interfaces (192.168.10.56 - 192.168.10.57)
Net D: 2 interfaces (192.168.10.58 - 192.168.10.59)
RB (192.168.10.60)
RC (192.168.10.135)
RD (192.168.10.204)
Net H: 60 interfaces (192.168.10.61 - 192.168.10.120)
Net I: 14 interfaces (192.168.10.121 - 192.168.10.134)
Net J: 60 interfaces (192.168.10.136 - 192.168.10.195)
Net K: 8 interfaces (192.168.10.196 - 192.168.10.203)
Net G: 12 interfaces (192.168.10.205 - 192.168.10.216)

Exercise 3

step	N'	p(E)	p(G)	p(D)	p(H)	p(B)	p(C)	p(A)
0	F	(1,F)	6,F	3,F	∞	∞	∞	∞
1	FE		6,F	(2,E)	∞	∞	4,E	∞
2	FED		3,D		∞	11,D	(3,D)	∞
3	FEDC				∞	(5,C)		7,C
4	FEDCB				7,B			(6,B)
5	FEDCBA							

∴ From node F to all other network shortest

F → A : 6
F → B : 5
F → C : 3
F → D : 2
F → E : 1
F → G : 3
F → H : 7