

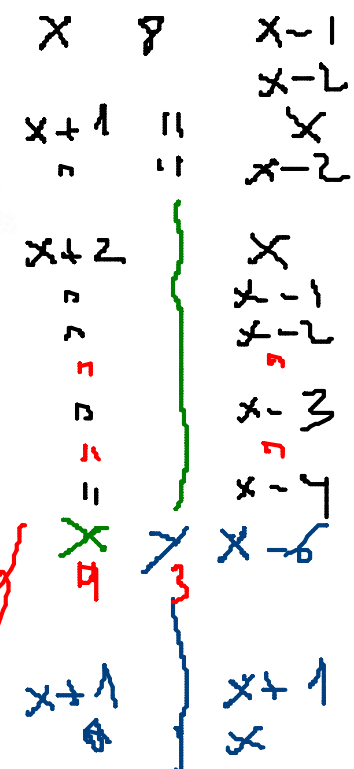
12a)

$\text{cwnd} \leq \text{ssthresh} \rightarrow \text{SS}$
 $\text{cwnd} \geq \text{ssthresh} \rightarrow \text{CA}$

$\text{Ssthresh} = \frac{1}{2} \text{MSS}$

cwnd ssthresh disp

Nº paq	
1	42.852793 IP 130.206.169.222.4319 > 130.206.158.134.80: S 1991692015:1991692015(0) win 5840 <mss 1460>
2	42.852859 IP 130.206.158.134.80 > 130.206.169.222.4319: S 1344552705:1344552705(0) ack 1991692016 win 5792 <mss 1460>
3	42.853229 IP 130.206.169.222.4319 > 130.206.158.134.80: . ack 1 win 5840
4	42.853371 IP 130.206.169.222.4319 > 130.206.158.134.80: P 1:121(120) ack 1 win 5840
5	42.853451 IP 130.206.158.134.80 > 130.206.169.222.4319: . ack 121 win 362
6	42.856103 IP 130.206.158.134.80 > 130.206.169.222.4319: . 1:1449(1448) ack 121 win 362
7	42.856161 IP 130.206.158.134.80 > 130.206.169.222.4319: . 1449:2897(1448) ack 121 win 362
8	42.857213 IP 130.206.169.222.4319 > 130.206.158.134.80: . ack 1449 win 8688
9	42.857220 IP 130.206.158.134.80 > 130.206.169.222.4319: . 4345:5793(1448) ack 121 win 362
10	42.857219 IP 130.206.169.222.4319 > 130.206.158.134.80: . ack 2897 win 11584
11	42.857380 IP 130.206.158.134.80 > 130.206.169.222.4319: . 5793:7241(1448) ack 121 win 362
12	42.857406 IP 130.206.158.134.80 > 130.206.169.222.4319: . 7241:8689(1448) ack 121 win 362
13	42.858215 IP 130.206.169.222.4319 > 130.206.158.134.80: . ack 2897 win 11584
14	42.858341 IP 130.206.158.134.80 > 130.206.169.222.4319: . 8689:10137(1448) ack 121 win 362
15	42.858222 IP 130.206.169.222.4319 > 130.206.158.134.80: . ack 2897 win 11584
16	42.858416 IP 130.206.158.134.80 > 130.206.169.222.4319: P 10137:11585(1448) ack 121 win 362
17	42.858703 IP 130.206.169.222.4319 > 130.206.158.134.80: . ack 2897 win 11584
18	42.858785 IP 130.206.158.134.80 > 130.206.169.222.4319: P 2897:4345(1448) ack 121 win 362
19	42.859202 IP 130.206.169.222.4319 > 130.206.158.134.80: . ack 2897 win 11584
20	42.859706 IP 130.206.169.222.4319 > 130.206.158.134.80: . ack 2897 win 11584
21	42.859712 IP 130.206.169.222.4319 > 130.206.158.134.80: . ack 11585 win 14480
22	42.860017 IP 130.206.158.134.80 > 130.206.169.222.4319: P 13033:14310(1277) ack 121 win 362
23	42.860359 IP 130.206.158.134.80 > 130.206.169.222.4319: F 14310:14310(0) ack 121 win 362
24	42.861202 IP 130.206.169.222.4319 > 130.206.158.134.80: . ack 11585 win 14480
25	42.861208 IP 130.206.169.222.4319 > 130.206.158.134.80: . ack 11585 win 14480
26	43.063480 IP 130.206.158.134.80 > 130.206.169.222.4319: P 11585:13033(1448) ack 121 win 362
27	43.064698 IP 130.206.169.222.4319 > 130.206.158.134.80: . ack 14311 win 17376
28	43.068611 IP 130.206.169.222.4319 > 130.206.158.134.80: R 121:121(0) ack 14311 win 17376



$$y = \frac{\min(x+2, 11584)}{2}$$

$$x-4 \geq 0 \rightarrow x = 4 \text{ MSS}$$

$$\frac{\min(4+2, 11584)}{2} = 3 \text{ MSS}$$