CprE 489
Homework 6

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1)
    (a) 1-6 and 23-26
    (b) 6-22
    (c) 32
    (d) 41
    (e) $26/2 = 13$
    (f) 3rd duplicate, as cwnd is only /2, not set to 1
    (g) Round 5
    (h) Round 9
    (i) Round 11
    (j) cwnd = 1, ssthresh = 4

Time	Packet Received	Action Taken	List of unACKs packets	Total # dup ACKs	Estimated # outstanding packets	ssthresh value	cwnd size	cwnd range	# new packets to send
4 RTT	A9		9, 10, 11, 12			4	5+1/5	9, 10, 11, 12, 13	1:#13
	A10		10, 11, 12, 13			4	5+2/5	10, 11, 12, 13, 14	1:#14
	A11		11, 12, 13, 14			4	5+3/5	11, 12, 13, 14, 15	1:#15
	A12		12, 13, 14, 15			4	5+4/5	12, 13, 14, 15, 16	1:#16
5 RTT	A12	Fast Recovery	12, 13, 14, 15, 16			4	5+4/5	12, 13, 14, 15, 16	
	A12	Send	12, 13, 14, 15, 16			4	5+4/5	12, 13, 14, 15, 16	
	A12	12 and 17	12, 13, 14, 15, 16	3	16 - 12 + 1 - 3 = 2	2	2	12, 13, 14, 15, 16	1:#18
6 RTT	A16	Fast Recovery	16, 17, 18			2	2	16, 17, 18	
	A16	Send 16, 18	16, 17, 18	2	18 - 16 + 1 - 2 = 1	2	2	16, 17, 18	1:#20
7 RTT	A19	Switch to	20, 21			2	2+1/2	20, 21	1:#21
	A20	Congest. Avoid	21, 22			2	3	21, 22, 23	1:#22