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CSCI 466
HW 2

a. TCP slowstart is operating in the intervals [1,6] and [23,26]. The packets are not being sent in linear time progressions, but rather with a larger amount of time between packets.
b. TCP congestion avoidance is operating in the intervals [6,16] and [17,22]. This is when the packets are being sent in linear time progression.
c. After the 16th transmission round, a packet loss is recognized by a triple duplicate ACK. There was no timeout, and we know that because the congestion window size would have dropped to 1.
d. After the 22nd transmission round, the congestion window size is set to 1, and this indicates a packet loss.
e. 32. This is where the linear-time packet transmission begins.
f. 21. This is where the linear-time packet transmission begins.
g. 13. It could be higher, but the graph cuts off at this point.
h. 7. The 1st packet is sent in the 1st transmission round, the 2nd and 3prd in the 2nd round, the 4th - 7th in the 3rd, 8th-15th in the 4th, 15th-31st in the 5th, 32nd - 63rd in the 6th, and 64th-96th in the 7th. Therefore, the 70th packet is sent in the 7th round.
i. 4. The congestion window and threshold will be set to half the current value of the congestion window when the loss occurred. The new values of the threshold and window will be 8/2.
j. The threshold is 21, and the congestion window size is 1. The thresholds here are higher, and the congestion window will still drop to 1 during a packet loss in Tahoe.