Homework Questions on Transport Layer Part 2

Q1. Figure 1 traces congestion window of a particular TCP implementation. Would it be a TCP Tahoe or Reno and why?

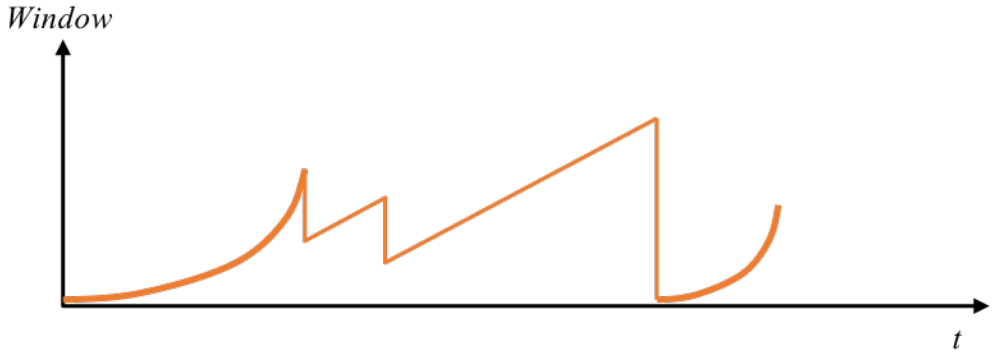

Figure 1 TCP congestion window traces

Q2. In Figure 2, what would be the value of congestion window at point B

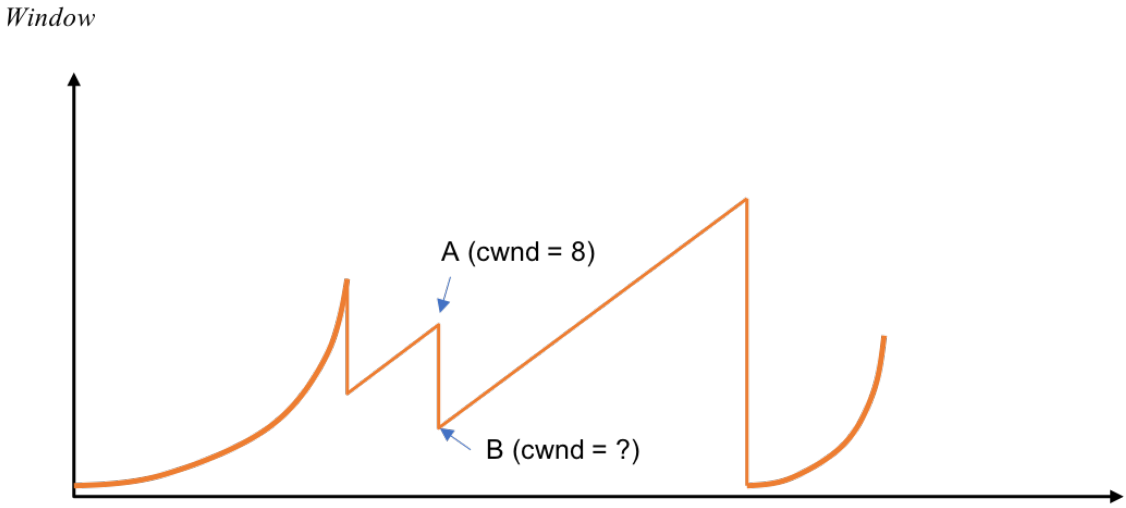

Figure 2 TCP congestion window trace

Q3. Figure 3 shows congestion window traces for both TCP tahoe and TCP Reno where up to transmission round of 8, both follow the same blue curve, but after than TCP Tahoe follows the blue curve and TCP Reno follow the black curve.

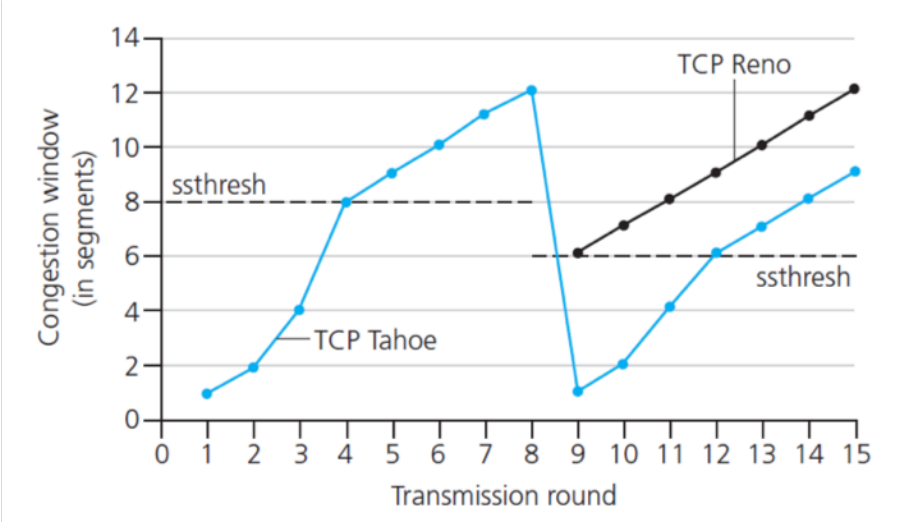

Figure 3 Congestion window traces for both TCP Tahoe and TCP Reno

Answer the following questions:

(a) At t=8 (t is along x-axis), was the loss event a Triple Duplicate ACK (TD) or Time Out (TO) and why?

(b) If there was a TD at t=6, what would be the value of congestion window at t=7 for TCP Reno?

(c) If there was a TO at t=6, what would be the value of congestion window at t=7 for TCP Reno?

End of homework