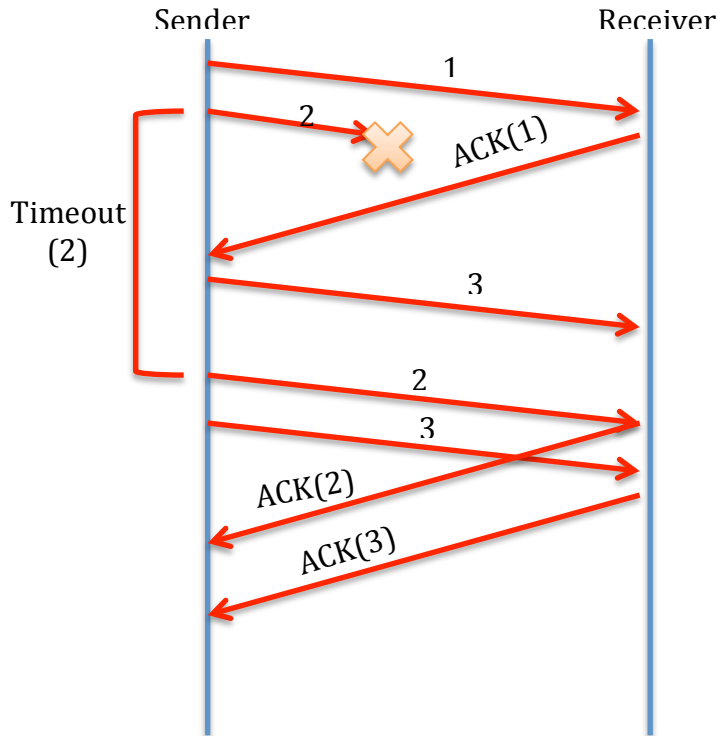


COMP 375 (Computer Networks): Quiz #5

Monday, March 19, 2018

Name: SOLUTIONS

1. Assume we are using GBN and the sender's window size is 2 segments. Draw a diagram showing the transfer of segments 1 to 3, assuming segment 2 gets lost going from the sender to the receiver. Assume that no other segments (or any ACKs) get lost.



2. A TCP receiver will wait up to 500 ms before sending an ACK for a correctly received, in-order segment. **Explain** both the main benefit and the main drawback of this waiting period.

Benefit:

If we get another in-order segment while waiting, we can send a single ACK response for multiple received segments. This reduces the number of segments sent.

Drawback:

Delaying the ACK may result in the sender not getting it before the timeout period. This would mean they would unnecessarily resend the original segment.