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Spring 2008, 0907422 Computer Networks  
Quiz 2-A (20 minutes)

Node N1 transmits to node N2 the frames: Frame [1], Frame[2], ..., Frame [100]. Frame [1] transmission starts at  $t=0$ . For the time interval  $t=0$  to  $t=4RTT$ , and for the case when Frame [4] is lost, draw a timeline diagram below for the sliding window algorithm with  $SWS = RWS = 3$  frames and a timeout interval of about  $2RTT$  seconds.

The bandwidth is  $10S/RTT$  bps, where  $S$  is the number of bits per frame. Assume that the size of an acknowledgment frame is negligible compared to  $S$ .

In your diagram, label all frames/ acknowledgments transferred and identify the time when each leaves a node and arrives at the other node.

