**Worksheet 11 - TCP Scenarios**

Draw the timeline for TCP transmissions assuming you start at sequence number 45 and you send 5 packets forward (pkt 1 - 10B, pkt 2 - 13B, pkt3 - 8B, pkt 4 - 25B, pkt 5 - 45B). Assume you receive the ACK for 1st packet only after your send all 5 packets.

1. No packet losses or delays
   1. pkt 2 is lost and timeout is set to occur after all remaining acks arrive (fast retransmit is not used)
   2. pkt 2 is lost and pkt 5 is lost too
   3. pkt 2 is lost and fast retransmit is used
   4. ack 3 is lost and timeout occurs after all remaining acks arrive
   5. ack 3 is lost and timeout occurs before ack 4 arrives
   6. ack 3 is lost and timeout occurs after ack 4 arrives but before ack 5 arrives