Problem 6

a) Link utilization $= \frac{T_{pkt}}{RTT+T_{pkt}} \geq 0.6$. Verify that $L \geq 240$ bits.

b) $RTT = 0.036$ sec, $T_{pkt} = 0.0003316$ sec, the protocol's throughput is maximized when $N \geq 1 + 2a$, where $a = \frac{RTT/2}{T_{pkt}}$. So, $N = 110$. For GBN, it is safe to set the sequence space size M to $N + 1 = 111$. So, $\log_2\lceil 111 \rceil = 7$ bits suffice.
