

1. If the bandwidth of the line is 1.5 Mbps, RTT is 45 ms and packet size is 1 KB, then find the link utilization in stop and wait protocol.
2. What is the throughput achievable in stop and wait protocol by a maximum packet size of
  - a. 10 KM
  - b. 5000 KM

Assume that the speed of light in the cable is 70% that of speed of light in the vacuum.

3. If the packet size is 1KB and propagation time is 15ms, the channel capacity is  $10^9$  bits/sec, then find the transmission time and utilization of the sender in stop and wait protocol.