Chapter 3: Summary

- principles behind transport layer services:
  - multiplexing/demultiplexing
  - reliable data transfer
  - flow control
  - congestion control
- instantiation and implementation in the Internet
  - UDP
  - TCP
- Contents of
  - UDP Header
  - TCP Header
- TCP Connection mgmt.
  - Connection protocol
  - Termination protocol
- Reliable data transfer
  - Bandwidth-delay product
  - Protocol types
    - Go-back-N
    - Selective Repeat

Chapter 3 Summary:

- RTT and Timeout calculation
- Congestion
  - Congestion behavior with different load scenarios
  - Costs of congestion
    - Delay
    - Dropped packets
    - Wasted bandwidth
- Congestion Control
  - Network-assisted
    - ATM ABR example
  - End-to-end
- TCP Congestion Control Algorithms
  - Slow start
  - Congestion avoidance
  - AIMD
  - How are CongWin and threshold updated in response to different events?