TCP: review

- Connection-oriented, reliable Layer 4 protocol
- Header is 20 bytes + options
- Receive window size is negotiated at connection establishment
- All data is acknowledged

Connection establishment

- “3-way handshake”
- Client does “active open”
- Server does “passive open”
- MSS negotiated (default: 536 bytes)
- Window sizes exchanged

Today

- Connection establishment process
- Connection tear-down process
- Lab stuff!
Connection tear-down

- One side sends FIN
  - may contain data and/or ack
- Other side responds with FIN/ACK
- Originating side sends ACK
- Notes:
  - data may be send by other side before it sends its FIN
  - this data must be acked before the FIN is sent
  - host must wait 2*MSL seconds before closing the connection (typically 120 seconds)