

# CSE 461 24sp Section 2 – Bandwidth, Latency, and Limits

## Exercise 1

Suppose we have a network link with a bandwidth of 10 Mbps. We want to send a 100 KB file to a friend somewhere else in the network, and the RTT from us to our friend is 20 ms. How long does it take for the entire file to be delivered?

## Exercise 2

Consider a point-to-point link 50 km in length. Suppose the propagation speed is  $2 * 10^8$  m/s. At what bandwidth in Mbps would the propagation delay equal the transmit delay for 100 B packets?

What about for 512 B packets?

