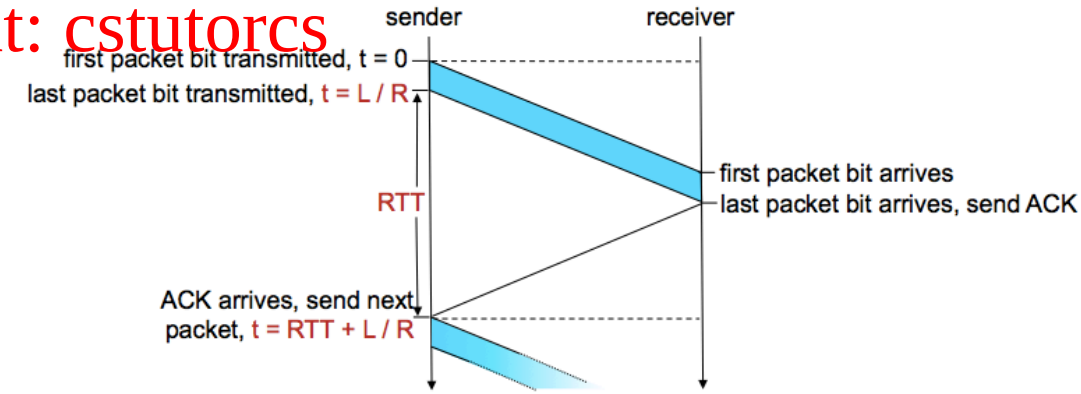
Quiz: Sliding Window Protocols

- Consider a path of bottleneck capacity R, round-trip time T, and maximum segment size L. What is the greatest throughput improvement factor that an ideal pipelined protocol (assuming corruptions and loss are negligible) can provide compared to a stop-and-wait protocol?
  - A. 2L/(RT+L)
  - B. (L/R)/(T+L/R)
  - C. (RT+L)/L
  - D. $(TR/L)^2$

rdt3.0: stop-and-wait operation



$$U = \frac{L/R}{RTT + L/R} = \frac{.008}{30.008} = 0.00027$$