



## HKUSTx: ELEC1200.3x A System View of Communications: From Signals to Packets (Part 3)

  
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 Bookmark**6.2 QUIZ QUESTION 1** (1/1 point)

Suppose that we have a connection using the stop and wait protocol. Assume that the round trip time is constant at 1 second and the retransmission time out is set to 1.1 seconds.

If there are no packet losses, what is the throughput of this connection? Give your answer to two decimal places (e.g. 2.45).

packets per second  **Answer: 1****EXPLANATION**

RTT = 1 sec

Throughput = 1.00 (packets per second)

*You have used 1 of 3 submissions*

### 6.1 Stop-and-Wait Protocol

Week 3 Quiz due Feb 15, 2016 at 15:30 UTC



### 6.2 Throughput of Stop-and-Wait

Week 3 Quiz due Feb 15, 2016 at 15:30 UTC



### 6.3 Sliding Window Protocol

Week 3 Quiz due Feb 15, 2016 at 15:30 UTC



### 6.4 Lab 3: Transport Layer

Lab due Feb 15, 2016 at 15:30 UTC



► MATLAB download and tutorials

## 6.2 QUIZ QUESTION 2 (1 point possible)

Suppose that we have a connection using the stop and wait protocol. Assume that the round trip time is constant at 1 second and the retransmission time out is set to 1.1 seconds.

If the round trip segment loss probability is 0.1, what is the throughput of this connection? Give your answer to two decimal places.

packets per second **✗** Answer: 0.89

#### EXPLANATION

RTT = 1 sec

RTO = 1.1 sec

L = 0.1

$T = TRR + (L/(1-L)) * RTO = 1 + (0.1/0.9) * 1.1 = 1.12 \text{ sec}$

Throughput =  $1/T = 0.89$  (packets per second)

*You have used 3 of 3 submissions*



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