

NAME: _____

EE444 Introduction to Computer Networks

March 29, 2018
Quiz #4 GROUP A

CLEARLY STATE YOUR ASSUMPTIONS, SHOW ALL YOUR WORK

Stop and Wait Reliable transmission is applied for the reliable data transmission from sender device A to receiver device B.

The transmission rate of A is 100Kbps. The transmission rate of B is 1Kbps. The data packets from A are 1000 bits long. The ACK packets from B are 10 bits long. The one way time to send from A to B is (tsr) 20 msec. The one way time to send from B to A is (trs) 20 msec. All processing delays are negligible.

- a) Complete the timing diagram below to show the events for completing the transmission of a single data packet until the sender is allowed to send the following data packet. Clearly indicate all time components.

A _____→

B _____→

- b) What is the efficiency of this transmission?

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Quiz #4 GROUP B

CLEARLY STATE YOUR ASSUMPTIONS, SHOW ALL YOUR WORK

Stop and Wait Reliable transmission is applied for the reliable data transmission from sender device A to receiver device B.

The transmission rate of A is 50Kbps. The transmission rate of B is 1Kbps. The data packets from A are 250 bits long. The ACK packets from B are 10 bits long. The one way time to send from A to B is (tsr) 65 msec. The one way time to send from B to A is (trs) 20 msec. All processing delays are negligible.

- a) Complete the timing diagram below to show the events for completing the transmission of a single data packet until the sender is allowed to send the following data packet. Clearly indicate all time components.

A _____→

B _____→

- b) What is the efficiency of this transmission?