In-class exercise 1

Name:_____ Student ID:_____

Question 1

Suppose there is exactly one packet switch between a sending host and a receiving host. The packet size is 8 Mbits. There are 4 routers between the sending host and the receiving host. Each link has the transmission rate of 1.5 Mbps. Suppose that all routers use store-and-forward packet switching. Assuming zero propagation delay, determine the total end-to-end delay to send the packet.

$d_{end\text{-}to\text{-}end}$ = 5 * 8 / 1.5 sec = 26.67 sec

(2 marks)

Question 2

Repeat Question 1 for 10 packets.

$d_{end\text{-}to\text{-}end}$ = (10 + 5 - 1) * (8 / 1.5) sec = 74.67 sec

(2 marks)