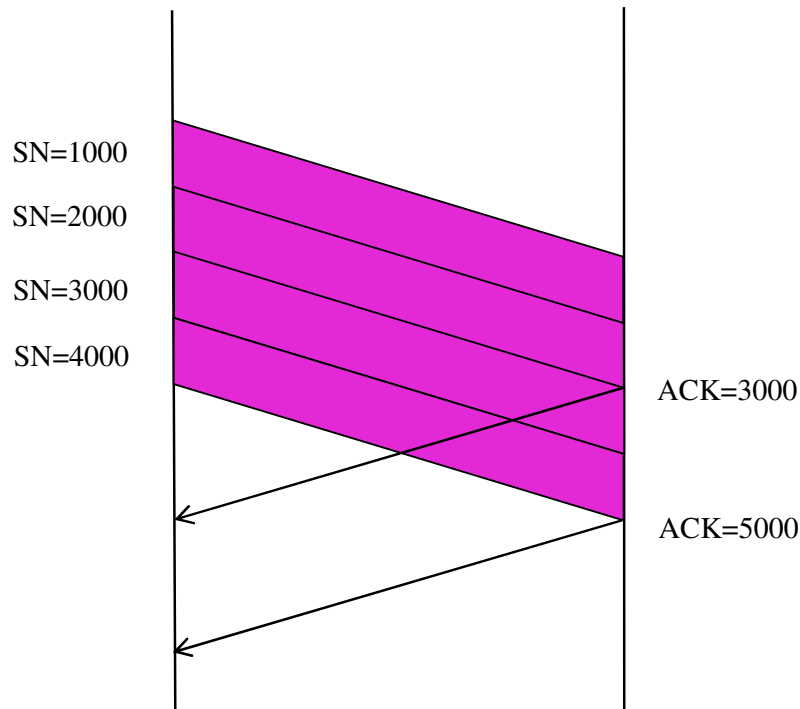# EE3009 Tutorial 4 (Solution)

Question 1
a) 20 bytes
b) 90

Question 2
a)

b) Transmission delay of one segment = 1000 bytes / 8 Mbps = 1 msec.
c) Total delay = 4 msec + 6 msec = 10 msec.

Question 3
a) Host B will reply with a SYNACK, but host A, who had not sent a SYN before, will reject this connection.
b) When B receives the old SYN, it will reply with a SYNACK with an initial sequence number. Since the acknowledgement number in the old ACK from A would not match with that number, the connection will not be established.

Question 4
a) 172.16.255.254 (an interface of R2-Central)
b) 10.10.10.4/30 and 172.16.0.0/16
c) The packet would be forwarded to the default gateway with IP address 10.10.10.6.