Worksheet - 3.

1. B -> 2

Data should be transmitted at the rate of 500 mbps

transmit time >= 0 propagation time.

=> 10000/(500 x 1000 000) <= 2* length / 200000.

=> length = 2km (max)

S(B) 2km.

2. 255. 255. 255. 254.

A's IP address	10	105	1	01110001
subnet	255	255	255	11100000
o/p network 1	10	105	1	01100000
B's IP address	10	105	1	01011011
subnet	255	255	255	11100000
o/p network 2	10	105	1	01000000

o/p network 1 = 10.105.1.196

o/p network 2 = 10.105.1.64.

2. d) 128.8.129.3 and 128.8.161.55

hence the given subnet mask 255.255.31.0 is a class B network.

4. A) 2.046

subnetting a class B network address

mask = 255.255.248.0

Binary = 11111 000.00000000

host subnet = 2046

). c) 16

Total 16 packet are sent the following table for a sequence of event since go-back-n ARQ control strategy is used after a reset again