Worksheet - 3

1. B -> 2

Data should be transmitted at the rate of 500 mbps transmit time => 2 * length / 200000.

=> 10000 / (500 x 10000000) <= 2 * length.

=> length = 2km (Mass)

S(B) 2km.

2. 255, 255. 255.254

A's IP address	10	105	1	01111001
Subnet	255	255	255	11100000
O/p network	10	105	1	01100000
subnet	255	255	255	11100000
O/p network	10	105	1	01000000

O/p network 1 = 10.105.1.96

O/p network 2 = 10.105.1.64

O/p network 1 and 2 belong different network.

3. (d) 138.8.139.9 and 138.8.161.55

Here the given Subnet Mask 255.255.31.0 is a class B network.

4. (A) 2046

Subnetting a class B network address

Mask = 255.255.248.0

Binary = 11111000. 0000 0000

host Subnet = 2046.

5) c) 16

Total 16 Packet are sent the following time for a sequence event back. nearly (control) Standagy is ever after a sent again.