Homework #5

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For all questions, choose the **best** answer.

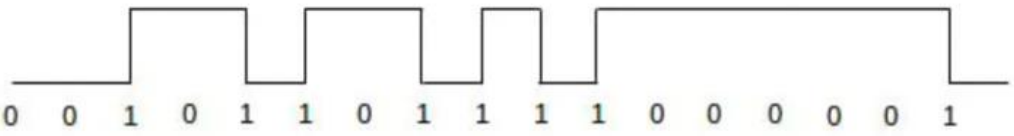
1. A transcontinental channel with a one-way latency of 24 ms and a bandwidth of 52 Mbps can hold _____ Mbps at a given instant.
    a. 2.25
    b. 1.25
    c. 3.5
    d. 0.75

2. Let's say you have a sender, a receiver, a round trip time of 25 ms, and the bandwidth is 100 Mbps. Let's say the receiver tells the sender to stop transmitting. Which of the below statements is true:
    a. No data will be sent to the receiver the moment the receiver tells the sender to stop transmitting.
    b. The receiver may receive up to 312,500 bytes of data from the sender before the sender stops transmitting.
    c. The receiver may receive up to 3.125 Megabytes (MB) from the sender before the sender stops transmitting.
    d. The receiver may receive to 100 Megabits from the sender before the sender stops transmitting.

3. A 650-Hz wave traveling through copper would have a wavelength of _____ (rounded to the nearest kilometer).
    a. 308
    b. 300
    c. 210
    d. 156

4. 

    What is the NRZ encoding of the above stream?
    a. 011010010
    b. 100001011
    c. 011110100
    d. 111001011

5. 

What type of encoding is the above stream?

a. NRZ
b. NRZI
c. Manchester
d. 4B/5B