

Data and Computer Communications

Chapter 8 Assignments

8.8. In the DS-1 format, what is the control signal data rate for each voice channel?

8.9. Six channels, each with a bandwidth of 150 kHz, have to be multiplexed together using FDM. A guard band of 10 kHz is needed between any two adjacent channels to prevent interference. What should be the minimum bandwidth of the link in order to enable the communication?

8.10. Four channels are multiplexed using TDM. If the input bit rate of each channel is 600 kbps and the multiplexer uses a time slot of 4 bits, what will be the frame duration and the bit duration in the output channel?