



### **Exercise 7, Analog to Digital:**

Consider a scenario where an analog voice sample has to be transmitted via a digital network.

1. Explain how this can be achieved and which steps are necessary.
2. Discuss the errors that can occur.
3. Discuss the sampling theorem in this context.

### **Exercise 8, Base- and Broadband:**

Explain the term baseband and broadband. Why do we need broadband communication? Explain how broadband communication of baseband signals is achieved. Give example application scenarios.