

Problem

Consider the coding and decoding functions E and D defined in Example 7.1.9.

- a. Find $E(0110)$ and $D(111111000111)$.
- b. Find $E(1010)$ and $D(000000111111)$.

Step-by-step solution

Step 1 of 3

E is the encoding function and D is the decoding function

Step 2 of 3

$$(a) \ E(0110) = 000111111000$$

$$D(111111000111) = 1101$$

Step 3 of 3

$$(b) \ E(1010) = 111000111000$$

$$D(000000111111) = 0011$$