

**Zadatak 17.** U kojem sustavu vrijede jednakosti

1)  $101_{(x)} + 1001_{(x)} = 1110_{(x)}$ ;

2)  $1211_{(x)} - 1120_{(x)} = 21_{(x)}$ ?

*Rješenje.*

1) Jednakost glasi

$$(x^2 + 1) + (x^3 + 1) = x^3 + x^2 + x$$

$$x^3 + x^2 + 2 = x^3 + x^2 + x$$

$$x - 2 = 0$$

odakle slijedi  $x = 2$ .

2) Jednakost glasi

$$(x^3 + 2x^2 + x + 1) - (x^3 + x^2 + 2x) = 2x + 1$$

$$x^2 - x + 1 = 2x + 1$$

$$x^2 - 3x = 0$$

$$x - 3 = 0$$

odakle slijedi  $x = 3$ .