

علیرضا بابایی ستا، داسنوی ۹۹۴۷۳۱۱۵

(الف)

$$(11001001)_2 \Rightarrow (00110110)_2 \Rightarrow$$

-54

$$(00110110)_2 \Rightarrow 0 + 1 + 4 + 0 + 1 + 4 + 16 = 26$$

+4

(ب)

$$(11001001)_2 \Rightarrow (00110001)_2 \Rightarrow$$

-55

$$(00110001)_2 \Rightarrow 1 + 4 + 16 = 21$$

-4

$$(11001001)_2 = (2^7 + 2^6 + 2^3 + 2^0)_{10}$$

(ج)

-6.28125

$$(1100)_2 = 2^3 \times 1 + 2^2 \times 1 = (12)_{10}$$

-6

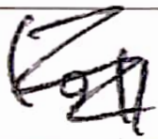
$$(01001)_2 = 2^{-1} \times 1 + 2^{-5} \times 1 = \frac{1}{2} + \frac{1}{32} = \frac{17}{32} \Rightarrow$$

$$(01001)_2 = (0.265625)_{10}$$

b

$$(1100, 1001) \Rightarrow (\underbrace{0011}, 0110) \Rightarrow$$

$$V^0 + V^1 = V^u$$



$$(010110) \Rightarrow V^{-1} \alpha 1 + V^{-1} \alpha 1 = \frac{1}{2} \frac{1}{2}$$

$$= \frac{V}{V} = 0/1 \vee \vee \vee$$

-6.875

-6