

ВОЙТЕНКО-1-ИВТ
N1.

$$1011_2 + 11_2 + 111,1_2 = 11 + 3 + 7,5 = 21,5_{10}$$

$$^{3210}_{1011_2} = 1 \cdot 2^3 + 0 \cdot 2^2 + 1 \cdot 2^1 + 1 \cdot 2^0 = 8 + 0 + 2 + 1 = 11_{10}$$

$$^{10}_{11_2} = 1 \cdot 2^1 + 1 \cdot 2^0 = 2 + 1 = 3_{10}$$

$$^{210-1}_{111,1_2} = 1 \cdot 2^2 + 1 \cdot 2^1 + 1 \cdot 2^0 + 1 \cdot 2^{-1} = 4 + 2 + 1 + 0,5 = 7,5_{10}$$

ответ: $21,5_{10}$ N2.

$$a) 256_8 + 10110,1_2 + (60_8 + 12_{10}) =$$

$$= 174 + 22,5 + 48 + 12 = 256,5$$

$$^{210}_{256_8} = 2 \cdot 8^2 + 5 \cdot 8^1 + 6 \cdot 8^0 = 128 + 40 + 6 = 174_{10}$$

$$^{43210-1}_{10110,1_2} = 1 \cdot 2^4 + 0 \cdot 2^3 + 1 \cdot 2^2 + 1 \cdot 2^1 + 0 \cdot 2^0 + 1 \cdot 2^{-1} =$$

$$= 16 + 0 + 4 + 2 + 0 + 0,5 = 22,5_{10}$$

$$^{10}_{60_8} = 6 \cdot 8^1 + 0 \cdot 8^0 = 48_{10}$$

ответ: $256,5$

$$b) 1AD_{16} + 100101100_2 + 217_8 = 429 + 300 + 143 = 872_{10}$$

$$^{210}_{1AD_{16}} = 1 \cdot 16^2 + 10 \cdot 16^1 + 13 \cdot 16^0 = 256 + 160 + 13 = 429_{10}$$

$$^{876543210}_{100101100_2} = 1 \cdot 2^8 + 0 \cdot 2^7 + 0 \cdot 2^6 + 1 \cdot 2^5 + 0 \cdot 2^4 + 1 \cdot 2^3 + 1 \cdot 2^2 + 0 \cdot 2^1 + 0 \cdot 2^0 =$$

$$= 256 + 0 + 0 + 32 + 0 + 8 + 4 + 0 + 0 = 300_{10}$$

$$^{210}_{217_8} = 2 \cdot 8^2 + 1 \cdot 8^1 + 7 \cdot 8^0 = 128 + 8 + 7 = 143_{10}$$

ответ: 872_{10}

$$b) 1011_2 + 1100_2 + (14_8 + 40_8) = 11 + 12 + 12 + 32 = 67_{10}$$

$$^{3210}1011_2 = 1 \cdot 2^3 + 0 \cdot 2^2 + 1 \cdot 2^1 + 1 \cdot 2^0 = 8 + 0 + 2 + 1 = 11_{10}$$

$$^{3210}1100_2 = 1 \cdot 2^3 + 1 \cdot 2^2 + 0 \cdot 2^1 + 0 \cdot 2^0 = 8 + 4 + 0 + 0 = 12_{10}$$

$$^{10}14_8 = 1 \cdot 8^1 + 4 \cdot 8^0 = 8 + 4 = 12_{10}$$

$$^{10}40_8 = 4 \cdot 8 + 0 \cdot 8^0 = 32_{10}$$

Answer: 67_{10}

