

1) Teil a)

$$N_1 = 226$$

$$\begin{array}{c|c|c} \text{Ord.} & H & M \\ \hline 226/2 & 113 & 0 \end{array}$$

$$113/2 \quad 56 \quad 1$$

$$56/2 \quad 28 \quad 0$$

$$28/2 \quad 14 \quad 0$$

$$14/2 \quad 7 \quad 0$$

$$7/2 \quad 3 \quad 1$$

$$3/2 \quad 1 \quad 1$$

$$1/2 \quad 0 \quad 1$$

$$N_1 = 226_{10} = \cancel{11100010}_2 = 11100010_2$$

$$N_3 = 2025$$

$$2025/2 \quad 1012 \quad 1$$

$$1012/2 \quad 506 \quad 0$$

$$506/2 \quad 253 \quad 0$$

$$253/2 \quad 126 \quad 1$$

$$126/2 \quad 63 \quad 0$$

$$63/2 \quad 31 \quad 1$$

$$31/2 \quad 15 \quad 1$$

$$15/2 \quad 7 \quad 1$$

$$7/2 \quad 3 \quad 1$$

$$3/2 \quad 1 \quad 1$$

$$1/2 \quad 0 \quad 1$$

$$2025_{10} = 11111101001_2$$

$$N_2 = 3950$$

$$3950/2 \quad 1975 \quad 0$$

$$1975/2 \quad 987 \quad 1$$

$$\cancel{493}$$

$$987/2 \quad 493 \quad 1$$

$$493/2 \quad 246 \quad 1$$

$$246/2 \quad 123 \quad 0$$

$$123/2 \quad 61 \quad 1$$

$$61/2 \quad 30 \quad 1$$

$$30/2 \quad 15 \quad 0$$

$$15/2 \quad 7 \quad 1$$

$$7/2 \quad 3 \quad 1$$

$$3/2 \quad 1 \quad 1$$

$$1/2 \quad 0 \quad 1$$

$$3950_{10} = \cancel{11101101111}_2 = 1111011011_2$$

2. Teladat

Decimalis

$$N1 = C3F_{16}$$

$$\cancel{C3F}_{16} = \cancel{(12 \times 16^2 + 3 \cdot 16 + 15 \cdot 16^0)}$$

Binari

$$C3F_{16} = (12 \cdot 16^2) + (3 \cdot 16) + (15 \cdot 16^0)$$

$$C = 12 = 1100_2$$

$$= (12 \cdot 256) + (3 \cdot 16) + (15 \cdot 1)$$

$$3 = 0011_2$$

$$= 3072 + 48 + 15 = \underline{\underline{3135_{10}}}$$

$$F = 15 = 1111_2$$

$$\underline{\underline{110000111111_2}}$$

$$N2 = B7A_{16}$$

Decimalis

Binari

$$B7A_{16} = (11 \cdot 16^2) + (7 \cdot 16) + (10 \cdot 16^0)$$

$$B = 11 = 1011_2$$

$$= (11 \cdot 256) + (7 \cdot 16) + (10 \cdot 1)$$

$$7 = 0111_2$$

$$= 2816 + 112 + 10 = \underline{\underline{2938_{10}}}$$

$$A = 10 = 1010_2$$

$$\underline{\underline{101101111010_2}}$$

$$N3 = FF2_{16}$$

Decimalis

$$FF2_{16} = (15 \cdot 16^2) + (15 \cdot 16) + (2 \cdot 16^0)$$

$$= (15 \cdot 256) + (15 \cdot 16) + (2 \cdot 1)$$

$$= 3840 + 240 + 2 = \underline{\underline{4082_{10}}}$$

Binari

$$F = 15 = 1111$$

$$F = 15 = 1111$$

$$2 = 0010$$

$$\underline{\underline{111111110010_2}}$$