

Lösung

a) 132_{ten}

5^2	5^1	5^0
25	5	1

$$1 \cdot 25 + 3 \cdot 5 + 2 \cdot 1 = 42_{\text{fiv}}$$

b) 24_{ten}

$$2 \cdot 5 + 4 \cdot 1 = 14_{\text{fiv}}$$

c) 321_{ten}

$$3 \cdot 25 + 2 \cdot 5 + 1 \cdot 1 = 86_{\text{fiv}}$$

d) 1101_{ten}

5^3	5^2	5^1	5^0
125	25	5	1

$$1 \cdot 125 + 1 \cdot 25 + 0 \cdot 5 + 1 \cdot 1 = 151_{\text{fiv}}$$

②

2^5	2^4	2^3	2^2	2^1	2^0
32	16	8	4	2	1

a) 101_{two}

$$1 \cdot 4 + 0 \cdot 2 + 1 \cdot 1 = 5_{\text{fiv}}$$

b) 1101_{two}

$$1 \cdot 8 + 1 \cdot 4 + 0 \cdot 2 + 1 \cdot 1 = 13_{\text{fiv}}$$

c) 111_{two}

$$1 \cdot 4 + 1 \cdot 2 + 1 \cdot 1 = 7_{\text{fiv}}$$

d) 110011_{two}

$$1 \cdot 32 + 1 \cdot 16 + 0 \cdot 8 + 0 \cdot 4 + 1 \cdot 2 + 1 \cdot 1 = 51_{\text{fiv}}$$

③

a) 32_{four}

4^1	4^0
4	1

$$3 \cdot 4 + 2 \cdot 1 = 14_{\text{fiv}}$$

b) 32-se

6^1	6^0
6	1

$$3 \cdot 6 + 2 \cdot 1 = 20_{10}$$

c) 32-se

8^1	8^0
8	1

$$3 \cdot 8 + 2 \cdot 1 = 26_{10}$$

(4) 5-se part

(5) g) 13₁₀ → bas 2

Sifferna 0, 1

2^3	2^2	2^1	2^0
8	4	2	1

1 1 0 1₂

$$13 - 8 = 5$$

$$5 - 4 = 1$$

$$1 - 1 = 0$$

b) 13₁₀ → bas 3 fem

Sifferna 0, 1, 2, 3

3^1	3^0
3	1

1 2 3₃

$$13 - 2 \cdot 3 = 7$$

$$7 - 3 \cdot 1 = 4$$

c) 13₁₀ → bas 7 sj

Sifferna 0, 1, 2, 3, 4, 5, 6

7^1	7^0
7	1

1 6₇

$$13 - 7 = 6$$

$$6 - 6 \cdot 1 = 0$$

d) 13_{tr} → tol_v

sil/num 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11

12 ¹	12 ⁰
12	1

$$13 - 12 = 1$$

$$1 - 1 = 0$$

1 1 tol_v

6)

40_{tr} → tr_v

a)

2 ⁵	2 ⁴	2 ³	2 ²	2 ¹	2 ⁰
32	16	8	4	2	1

$$40 - 32 = 8$$

$$8 + 8 = 16$$

1 0 1 0 0 0 tr_v

b)

40_{tr} → ferm

5 ²	5 ¹	5 ⁰
25	5	1

$$40 - 25 = 15$$

$$15 - 3 \cdot 5 = 0$$

1 3 0 ferm

c)

40_{tr} → tol_v

12 ¹	12 ⁰
12	1

$$40 - 3 \cdot 12 = 4$$

$$4 - 4 \cdot 1 = 0$$

3 4 tol_v

⑤ Bot first full bus tie

31 fyra \rightarrow tio

4	4 ⁰
4	1

$$3 \cdot 4 + 1 \cdot 1 = 13 \text{ tio}$$

13 tio \rightarrow sju

7	7 ⁰
7	1

$$13 - 7 = 6$$

$$6 - 6 \cdot 1 = 0$$

1 6 sju

svart: $31 \text{ fyra} = 13 \text{ tio} = 16 \text{ sju}$