

* a) 82913

$$82913_{10} = 65,536_{10} + 16,584_{10} + 512_{10} + 256_{10} + 16_{10} + 8_{10} + 1_{10}$$

$$82913_{10} = \underbrace{00010}_{1} \underbrace{000011}_{4} \underbrace{00011}_{3} \underbrace{00011}_{1} \underbrace{001}_{9} 2$$

$$82913_{10} = 14319_{16}$$

$$82913_{10} = 241431_8$$

* b) 3313

$$3313_{10} = 2048_{10} + 1024_{10} + 128_{10} + 64_{10} + 32_{10} + 16_{10} + 1_{10}$$

$$3313_{10} = \underbrace{1100}_{12} \underbrace{1111}_{15} \underbrace{0001}_{11} 2$$

$$3313 = F1_{16}$$

$$3313 = 6361_8$$

* c) 482

$$482_{10} = 256_{10} + 128_{10} + 64_{10} + 32_{10} + 2_{10}$$

$$482_{10} = \underbrace{0001}_{1} \underbrace{1110}_{14} \underbrace{0010}_{3} 2$$

$$482_{10} = 1E3_{16} \quad 482_{10} = 742_8$$

* d) 10, 249

$$10249_{10} = 8192_{10} + 2048_{10} + 8_{10} + 1_{10}$$

$10249_{10} = \underbrace{00}_{2}\underbrace{1000}_8\underbrace{0000}_0\underbrace{1001}_9$

$$10249_{10} = 2809_{16}, \quad 10249_{10} = 24011_8$$

*e) 297781

$$297781_{10} = 262_{10} + 144_{10} + 32768_{10} + 2048_{10} + 512_{10} + 256_{10} + 32_{10} + 16_{10} + 4_{10} + 1_{10}$$

$297781_{10} = 01001000101100110101_2$

$$297781_{19} = 48B35_{16}, \quad 297781 = 1105465_8$$

*f) 2347

$$2347_{10} = 2048_{10} + 256_{10} + 32_{10} + 8_{10} + 2_{10} + 1_{10}$$

$2347_{10} = 1001\ 0010\ 1011_2$

$$2347_{10} = 92B_{16}, \quad 2347 = 4453_8$$

* g) 9837

$$9837_{10} = 8192_{10} + 1024_{10} + 512_{10} + 164_{10} + 32_{10} + 8_{10} + 4_{10} + 1_{10}$$

$$9837_{10} = 0010011001101101_2$$

$\underbrace{\hspace{1cm}}_2 \quad \underbrace{\hspace{1cm}}_6 \quad \underbrace{\hspace{1cm}}_6 \quad \underbrace{\hspace{1cm}}_{13}$
 $\underbrace{\hspace{1cm}}_2 \quad \underbrace{\hspace{1cm}}_3 \quad \underbrace{\hspace{1cm}}_1 \quad \underbrace{\hspace{1cm}}_5 \quad \underbrace{\hspace{1cm}}_5$

$$9837_{10} = 266D_{16}, \quad 9837_{10} = 23155_8$$

* h) 783273

$$783273_{10} = 524288_{10} + 131072_{10} + 65536_{10} + 32768_{10} + 16384_{10} + 8192_{10} + 4096_{10} + 512_{10} + 256_{10} + 128_{10} + 32_{10} + 8_{10} + 1_{10}$$

$$783273_{10} = 10111111001110101001_2$$

$\underbrace{\hspace{1cm}}_{11} \quad \underbrace{\hspace{1cm}}_{15} \quad \underbrace{\hspace{1cm}}_3 \quad \underbrace{\hspace{1cm}}_{10} \quad \underbrace{\hspace{1cm}}_9$
 $\underbrace{\hspace{1cm}}_2 \quad \underbrace{\hspace{1cm}}_7 \quad \underbrace{\hspace{1cm}}_7 \quad \underbrace{\hspace{1cm}}_1 \quad \underbrace{\hspace{1cm}}_6 \quad \underbrace{\hspace{1cm}}_5 \quad \underbrace{\hspace{1cm}}_1$

$$783273_{10} = BF3A9_{16}, \quad 783273_{10} = 2771651_8$$

* i) 87283

$$87283_{10} = 65536_{10} + 16384_{10} + 4096_{10} + 1024_{10} + 128_{10} + 64_{10} + 32_{10} + 16_{10} + 2_{10} + 1_{10}$$

$$87283_{10} = 00010101010011110011_2$$

$\underbrace{\hspace{1cm}}_1 \quad \underbrace{\hspace{1cm}}_5 \quad \underbrace{\hspace{1cm}}_4 \quad \underbrace{\hspace{1cm}}_{15} \quad \underbrace{\hspace{1cm}}_3$
 $\underbrace{\hspace{1cm}}_2 \quad \underbrace{\hspace{1cm}}_5 \quad \underbrace{\hspace{1cm}}_2 \quad \underbrace{\hspace{1cm}}_3 \quad \underbrace{\hspace{1cm}}_6 \quad \underbrace{\hspace{1cm}}_3$

$$87283_{10} = 154F3_{16}$$

$$87283_{10} = 252363_8$$

* j) 26262

$$26262_{10} = 16384_{10} + 8192_{10} + 1024_{10} + 512_{10} + 128_{10} + 16_{10} + 4_{10} + 2_{10}$$

$$26262_{10} = \underbrace{0110011010010110}_{\substack{6 \quad 6 \quad 9 \quad 6 \\ 6 \quad 3 \quad 2 \quad 2 \quad 6}}$$

$$26262_{10} = 6696_{16}, \quad 26262_{10} = 63226_8$$

* k) 050695

$$050695_{10} = 32768_{10} + 16384_{10} + 1024_{10} + 512_{10} + 4_{10} + 2_{10} + 1_{10}$$

$$050695_{10} = \underbrace{1109011000000111}_2_{\substack{12 \quad 6 \quad 0 \quad 7 \\ 1 \quad 4 \quad 3 \quad 0 \quad 0 \quad 7}}$$

$$050695_{10} = C607_{16}, \quad 050695 = 143007_8$$

* l) 55263

$$55263_{10} = 32768_{10} + 16384_{10} + 4096_{10} + 1024_{10} + 512_{10} + 256_{10} + 128_{10} + 64_{10} + 16_{10} + 8_{10} + 4_{10} + 2_{10} + 1_{10}$$

$$55263_{10} = \underbrace{1101011111011111}_2_{\substack{13 \quad 7 \quad 13 \quad 15 \\ 1 \quad 5 \quad 3 \quad 7 \quad 3 \quad 7}}$$

$$55263_{10} = D7DF_{16}$$

$$55263_{10} = 153737_8$$

* m) 43720

$$43720_{10} = 32768_{10} + 8192_{10} + 2048_{10} + 512_{10} + 128_{10} + 64_{10} + 8_{10}$$

$$43720_{10} = \underbrace{10101010}_{10} \underbrace{11001000}_8$$

1	2	5	3	1	0
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$$43720_{10} = AAC8_{16} \quad 43720_{10} = 125310_8$$

* n) 6713

$$6713_{10} = 4096_{10} + 2048_{10} + 512_{10} + 32_{10} + 16_{10} + 8_{10} + 1_{10}$$

$$6713_{10} = \underbrace{00011010}_{10} \underbrace{00111001}_9$$

1	5	0	7	1
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$$6713_{10} = 1A39_{16} \quad , \quad 6713_{10} = 15071_8$$

* o) 662

$$662_{10} = 512_{10} + 128_{10} + 16_{10} + 4_{10} + 2_{10}$$

$$662_{10} = \underbrace{001010010110}_2$$

1	2	2	6
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$$662_{10} = 296_{16} \quad , \quad 662_{10} = 1226_8$$