Convert those hexadecimal numbers to Decimal:

12A4 – 1C35 - 100 - 115C

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| NUM | FIRST | SECOND | THIRD | FOUR | RESUALT |
| 12A4 | 4\*1=4 | A\*16=>10\*16=160 | 2\*256 = 512 | 1\*4096 | 4+160+512+4096=4772 |
| 1C35 | 5\*1=5 | 3\*16=48 | C(12)\*256=3072 | 1\*4096 | 5+48+3072+4096=7221 |
| 100 | 0\*1=0 | 0\*16=0 | 1\*256=256 | - | 256 |
| 115C | 12\*1=12 | 5\*16=80 | 1\*256=256 | 1\*4096 | 12+80+256+4096=4444 |

12A4 = 4\*1 = 4, A\*16=>10\*16=160, 2\*256 = 512 , 1 \* 4096 = 4096;

4+160+512+4096=4772

Convert those Decimal numbers to hexadecimal:

4722 - 7221 - 256 - 4444

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| NUM | RESULT | INT | Fraction | \*16 |  |
| 4722 | 295.125 | 295 | .125 | .125\*16=2 | 1272 |
| 295 / 16 | 18.4375 | 18 | . 4375 | .4375\*16=7 | 1272 |
| 18/16 | 1.125 | 1 | .125 | .125\*16=2 | 1272 |
| 1/16 |  |  |  | 1 | 1272 |
| 7221 | 451.3125 | 451 | .3125 | .3125\*16=5 | 1C35 |
| 451/16 | 28.1875 | 28 | .1875 | .1875\*16=3 | 1C35 |
| 28/16 | 1.75 | 1 | .75 | .75\*16=12:C | 1C35 |
| 1/16 |  |  |  | 1 | 1C35 |
| 256 | 16 | 16 | 0 | 0 | 100 |
| 16/16 | 1 | 1 | 0 | 0 | 100 |
| 1 |  |  |  | 1 | 100 |
| 4444 | 277.75 | 277 | .75 | .75\*16=12:C | 115C |
| 277/16 | 17.3125 | 17 | .3125 | .3125\*16=5 | 115C |
| 17/16 | 1.0625 | 1 | .0625 | .0625\*16=1 | 115C |
| 1/16 |  |  |  | 1 | **115C** |

4722\16 = 295.125, .125\*16=2,

Convert those hexadecimal numbers to binary:

13B4 - A5

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| NUM | FIRST | SECOND | THIRD | FOUR | RESUALT |
| 13B4 | 4\*1=4 | B\*16=>11\*16=176 | 3\*256 = 768 | 1\*4096 | 4+176+768+4096=5044 |
| A5 | 5\*1=5 | A\*16=>10\*16=160 |  | - | 165 |

تحويل من عشري الى بيناري

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| الرقم | 4096 | 2048 | 1024 | 512 | 256 | 128 | 64 | 32 | 16 | 8 | 4 | 2 | 1 |
| 5044 | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 0 |
| 165 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 1 |