**N = 745751**

**1)**

**745751 in base 4 = 2312010113**

**745751 / 4 = r 3**

**186437 / 4 = r 1**

**46609 / 4 = r 1**

**11652 / 4 = r 0**

**2913 / 4 = r 1**

**728 / 4 = r 0**

**182 / 4 = r 2**

**45 / 4 = r 1**

**11 / 4 = r 3**

**2 / 4 = r 2**

**0**

**2)**

**751 in binario = 1011101111 10 bit**

**512 + 239 = 2^9**

**128 + 111 = 2^7**

**64 + 47 = 2^6**

**32 + 15 = 2^5**

**16 – 1 = 2^4 -1**

**754 in binario = 751 + 3 = 1011101111 + 11 = 1011110010 10 bit**

**751 – 754 in complemento a 2 a 11 bit**

**01011101111 = 751**

**01011110010 = 754 → 10100001101 complemento a 1 → 10100001110 = complemento a 2**

**01011101111 +**

**10100001110 =**

**11111111101 = -3 complemento a 2 → 11111111101 – 1 = 11111111100 complemento a 1 → 00000000011 = 3**

**4)**

**745751 % 256 = 23**

**745751 / 2 = 372875 r 1 / 128**

**372875 / 2 = 186437 r 1 / 64**

**186437 / 2 = 93218 r 1 / 32**

**93218 / 2 = 46609 r 0 / 16**

**46609 / 2 = 23304 r 1 / 8**

**23304 / 2 = 11652 r 0 / 4**

**11652 / 2 = 5826 r 0 / 2**

**5826 / 2 = 2913 r 0**

**2913 in binario = 101101100001**

**2048 + 865 2^11**

**512 + 353 2^9**

**256 + 97 2^8**

**64 + 33 2 ^ 6**

**32 + 1 2^5 + 2^0**

**101101100001 \* 100000000 = 10110110000100000000 = 2913 \* 256 = 745728**

**745751 - 745728 = 23 = 745751 % 256**

**23 in binario = 16 + 7 = 16 + 4 + 2 + 1 = 00010111**

**TABELLA**

**000 1**

**001 1**

**010 1**

**011 0**

**100 1**

**101 0**

**110 0**

**111 0**

**MAPPA KARNAUGH**