Parcial 2

1)

A) 29 | 2
1 14 | 2
0 7 → 71

B) 35 | 6
5 5 → 55

C) 409 | 8
1 51 | 8
6 5 → 561

D) 1026 | 8
2 128 | 8
0 16 | 8
0 2 → 2002

2)

A) $10110011_2 = (1\times2^7)+(0\times2^6)+(1\times2^5)+(1\times2^4)+(0\times2^3)+(0\times2^2)+(1\times2^1)+(1\times2^0) = 179_{10}$

B) $10_{46} = (1\times6^3)+(0\times6^2)+(4\times6^1)+(6\times6^0) = 246_{10}$

C) $480_8 = (4\times8^2)+(8\times8^1)+(0\times8^0) = 320_{10}$

D) $EB8 = (14\times16^2)+(11\times16^1)+(8\times16^0) = 3768_{10}$

3)

$f(1{,}451)$ si $f(x) = 0{,}65x^4 - 1{,}85x^3 + 2{,}55x - 1$ $\quad x = 1{,}45$

$f(x) = 0{,}65x^4 - 1{,}85x^3 + 2{,}55x - 1$

$f'(x) = 2{,}6x^3 - 5{,}55x^2 + 2{,}55$

$f''(x) = 7{,}8x^2 - 11.1x$

$f'''(x) = 15{,}6x - 11.1$

$x = 1{,}45$

$f(x) = 0{,}65 * 1{,}45^4 - 1{,}85 * 1{,}45^3 + 2{,}55 * 1{,}45 - 1 = -0.069127\,1875$

$f'(x) = 2{,}6 * 1{,}45^3 - 5{,}55 * 1{,}45^2 + 2{,}55 = -20.326075$

$f''(x) = 7{,}8 * 1{,}45^2 - 11.1 * 1{,}45 = -4.785$

$f'''(x) = 15{,}6 * 1{,}45 - 11.1 = 11.52$

Error Serie 4

$$f(x) = -0.069127\,1875 - 20.326075(x-1) + \frac{-4.785}{2}(x-1)^2 + \frac{11.52}{3!}(x-1)^3$$

$$f(x) = -0.069127\,1875 - 20.326075(x-1) + (-2392.5)(x-1)^2 + 1.92(x-1)^3$$

$$f(2) = -0.069127\,1875 + (-20.326075) + (-2392.5) + 1.92$$

$$f(2) = \underline{-2410.972\,520\,279}$$

$f(x) = -0.070\,319\,483\,3293$ valor verdadero