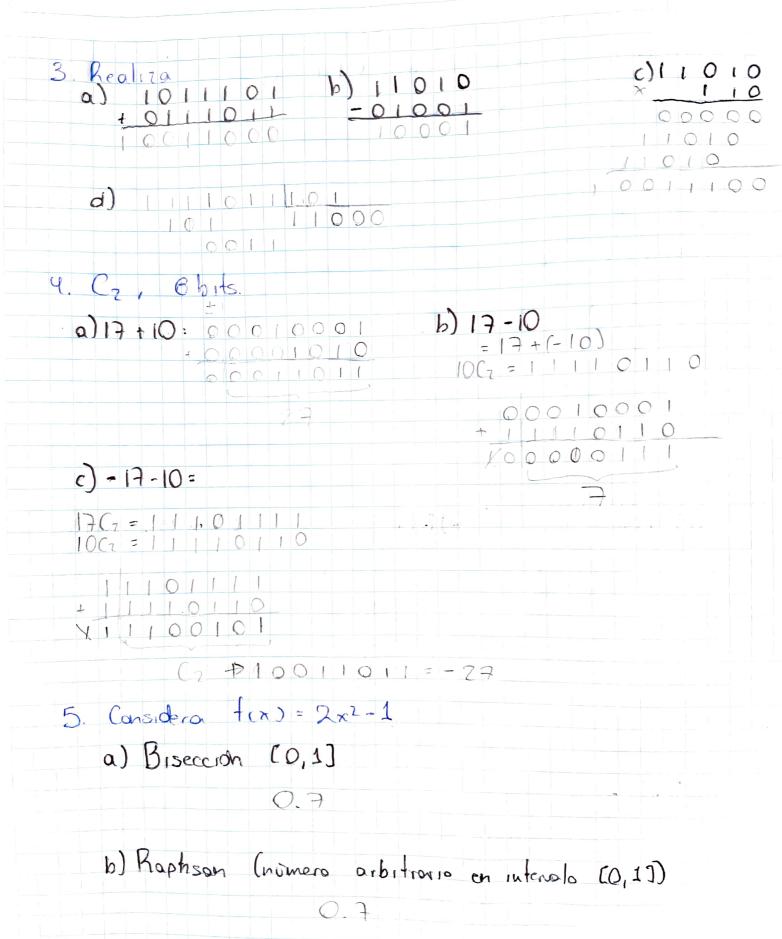
J. Taylor orden 4  f(x) = e = 12	alrededor de O
f(x)=ex-c-x	$\{(0) = 0$
f'(x)= ex 1 e-x	FCOTENI
$f''(x) = e^{x} - e^{x}$	F''(0) = Q
f"(x)=ex+ex	F(1)(0) = 1
('V(m) = ex-e-x	f''(0) = 0
$O)(x) = x + x^3$	
2. A binario a) 7310 = 1/	c) 0,25,0=0.01000000000000000000000000000000000
36 1	32 1
9 9	8 0 0 0 0
2 0	2 0 0 0 0
0 1	1 0 00
= 10010012 -	100000112
e) 1.312p = 1.010011	11112
0.624	
0.490	
1.960	1
1.986	
1.67 1.79	1
1.980	3



## **Aproximaciones**

Luis Eduardo Robles Jimenez

## **Function**

```
In [132]: expression = "2*x**2-1"
```

## **Method**

```
In [131]: NewtonRaphson(0.5, 0.00001, 500)
                f(x) = 2*x**2 - 1
                f'(x) = 4*x
         1. P = 0.750000000000000
                                      Er = 0.0588235294117646
         3. P = 0.707107843137255
                                     Er = 0.00173310225303292
         4. P = 0.707106781187345
                                      Er = 1.50182396529309e-6
Out[131]: 0.707106781187345
In [130]: BinarySearch(0, 1, 0.00001, 500)
                f(x) = 2*x**2 - 1
                [0, 1]
         1. P = 0.5
                       Er = 1.0
         2. P = 0.75
                       3. P = 0.625
                       Er = 0.2
         4. P = 0.6875
                       Er = 0.09090909090909091
         5. P = 0.71875 Er = 0.043478260869565216
         6. P = 0.703125 Er = 0.0222222222222222
         7. P = 0.7109375
                              Er = 0.01098901098901099
         8. P = 0.70703125
                              Er = 0.0055248618784530384
         9. P = 0.708984375
                              Er = 0.0027548209366391185
         11. P = 0.70751953125
                              Er = 0.0006901311249137336
         12. P = 0.707275390625 Er = 0.00034518467380048324
         13. P = 0.7071533203125 Er = 0.00017262213015708613
         14. P = 0.70709228515625
                                      Er = 8.631851532153647e-05
         15. P = 0.707122802734375
                                     Er = 4.3157395019636617e-05
         16. P = 0.7071075439453125
                                     Er = 2.1579163160052653e-05
         17. P = 0.7070999145507812
                                     Er = 1.0789697996353082e-05
         18. P = 0.7071037292480469
                                     Er = 5.394819893937841e-06
```