

Metodo de Biseccion											
$f(x) = 90t + 60t - 300$											
t	f(x)										
-10,0	-1800										
-9,5	-1725										
-9,0	-1650										
-8,5	-1575										
-8,0	-1500										
-7,5	-1425										
-7,0	-1350										
-6,5	-1275										
-6,0	-1200										
-5,5	-1125										
-5,0	-1050										
-4,5	-975										
-4,0	-900										
-3,5	-825										
-3,0	-750										
-2,5	-675										
-2,0	-600										
-1,5	-525										
-1,0	-450										
-0,5	-375										
0,0	-300										
0,5	-225										
1,0	-150										
1,5	-75										
2,0	0										
2,5	75										

iteracione	xi	xu	xr ( xi + xu ) /2	f(xi)	f(xr)	f(xi)f(xr)	e
1	1	3	2	-150	0	0,000000	encontrado
2	1	2	1,5	-150	-75	11250,000000	error
3	1,5	2	1,75	-75	-37,5	2812,500000	error
4	1,75	2	1,875	-37,5	-18,75	703,125000	error
5	1,75	1,875	1,8125	-37,5	-28,125	1054,687500	error
6	1,8125	1,8125	1,8125	-28,125	-28,125	791,015625	error
7	1,8125	1,8125	1,8125	-28,125	-28,125	791,015625	error

f(x) frente a t



# Metodo de Secante

$$f(x) = 90t + 60t - 300$$

t f(x)

-10,0 -1800

-9,5 -1725

-9,0 -1650

-8,5 -1575

-8,0 -1500

-7,5 -1425

-7,0 -1350

-6,5 -1275

-6,0 -1200

-5,5 -1125

-5,0 -1050

-4,5 -975

-4,0 -900

-3,5 -825

-3,0 -750

-2,5 -675

-2,0 -600

-1,5 -525

-1,0 -450

-0,5 -375

0,0 -300

0,5 -225

x0 1,0 -150

1,5 -75

2,0 0

2,5 75

iter

Xi

x0

f(Xi)

f(x0)

X (i+1)

Error f(Xa)

< 0 xu=xr  
> 0 xi=xr

1

3

1

150

-150

2,0000

-0,00500000

error

2

2,0000

3

0

150

2,0000

0,00000000

Encontrado

3

2,0000

2,0000

0

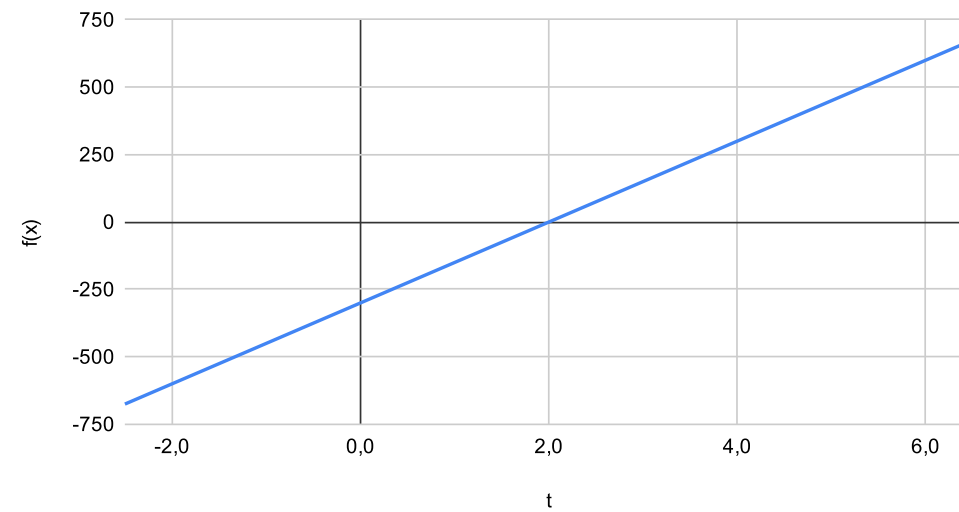
0

#DIV/0!

#DIV/0!

#ERROR!

f(x) frente a t





# Metodo de Newton-Raphson

$$f(x) = 90t + 60t - 300$$

t f(x)

-10,0 -1800

-9,5 -1725

-9,0 -1650

-8,5 -1575

-8,0 -1500

-7,5 -1425

-7,0 -1350

-6,5 -1275

-6,0 -1200

-5,5 -1125

-5,0 -1050

-4,5 -975

-4,0 -900

-3,5 -825

-3,0 -750

-2,5 -675

-2,0 -600

-1,5 -525

-1,0 -450

-0,5 -375

0,0 -300

0,5 -225

1,0 -150

1,5 -75

raiz

2,0 0

2,5 75

3,0 150

3,5 225

4,0 300

n

Pn-1

f(Pn-1)

f' (Pn-1)

Pn

f(Pn)

E

Validacion 1

Validacion 2

1

1,50

-75,00

150,00

2,00000000

19,00000000

0,00010000

EXITO

EXITO

2

2,00

0,00

150,00

2,00000000

19,00000000

0,00010000

EXITO

EXITO

3

2,00

0,00

150,00

2,00000000

19,00000000

0,00010000

EXITO

EXITO

4

2,00

0,00

150,00

2,00000000

19,00000000

0,00010000

EXITO

EXITO

5

2,00

0,00

150,00

2,00000000

19,00000000

0,00010000

EXITO

EXITO

6

2,00

0,00

150,00

2,00000000

19,00000000

0,00010000

EXITO

EXITO

f(x) frente a t

