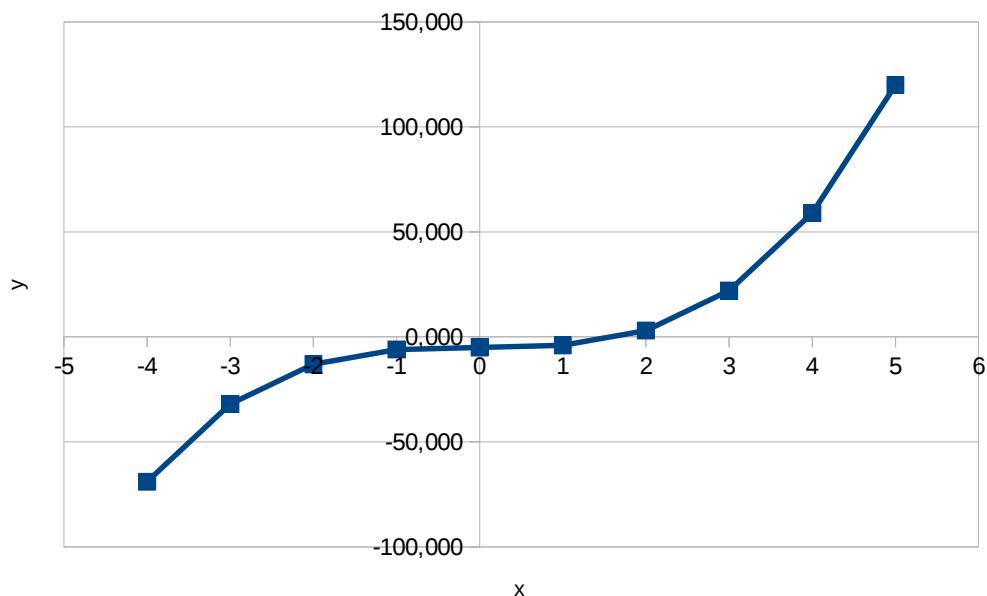


Exemplo 2 – Newton-Raphson

$$f(x) = x^3 - 5$$

x	f(x)
-5	-130,000
-4	-69,000
-3	-32,000
-2	-13,000
-1	-6,000
0	-5,000
1	-4,000
2	3,000
3	22,000
4	59,000
5	120,000



$$e = 0,001$$

$$f'(x) = 3x^2$$

$$f''(x) = 6x$$

b) Melhor extremo (valor inicial), onde $f(x) \cdot f''(x) > 0$

x	f(x)	f''(x)	f(x)*f''(x)
1	-4,000	6,0000	-24
2	3,000	12,0000	36

<--- Aqui

N	x _(i)	f(x)	f'(x)	x _(i+1)	E_ideal	E
1	2	3,00000	12	1,7500	0,001	0,2500
2	1,7500	0,35938	9,1875	1,7109	0,001	0,0391
3	1,7109	0,00797	8,781376	1,7100	0,001	0,0009

FIM!

Solução: 1,7100