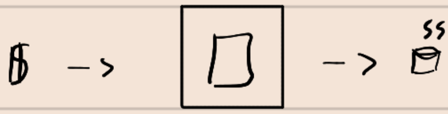
Equação do 2° grau

função



N° → f(x) → (N°)

forma padrão: $ax^2 + bx + c$

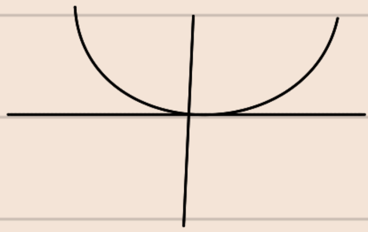
Ex: $f(x) = 3x^2 + 4x + 2$

$a = 3$; $b = 4$; $c = 2$

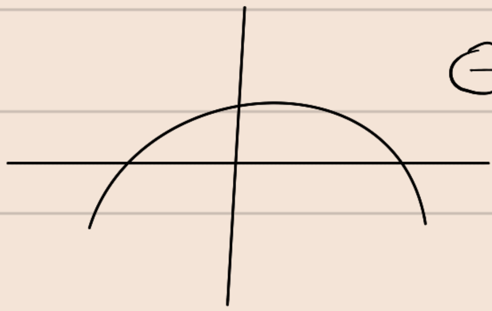
Gráficos:

(+)

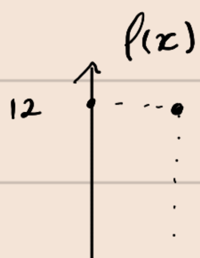
$f(x) = ax^2 + bx + c$



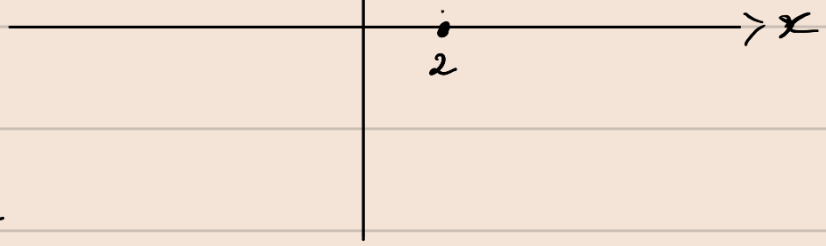
a (+)



(−)



$f(x) = 1x^2 + 2x + 4$



$f(2) = 2^2 + 2 \cdot 2 + 4$

$4 + 4 + 4 = 12$

* $f(x) = \boxed{a}x^2 + bx + c$
* $f_2(x) = \boxed{2}x^2 + 3x + 4$

$f_3(x) = -3x^2 + 2x + 4$

$a = -3 \quad b = 2 \quad c = 4$

$f_4(x) = 0x^2 + 2x - 8$

$a = 1 \quad b = 2 \quad c = -8$

$f(x) = x^2$

$f(0) = 0^2 = 0$

$f(1) = 1^2 = 1$

$f(2) = 2^2 = 4$

$f(x)$	x
0	0
1	1
4	2

$f(x) = 2x^2$

$f(1) = 2 \cdot 1^2 = 2$

$f(2) = 2 \cdot 2^2 = 8$

$f(x)$	x
0	0
2	1
8	2

$f(x) = x^2 - 2x$

$f(x) = x^2 - 2x + 2$

$f(0) = 0^2 - 2 \cdot 0 + 2$

$f(0) = 2$

Ex:

$f(x) = x^2 + 2x - 1$

$f(x) = 3x^2 + 3x - 2$