

Discente:

Curso:

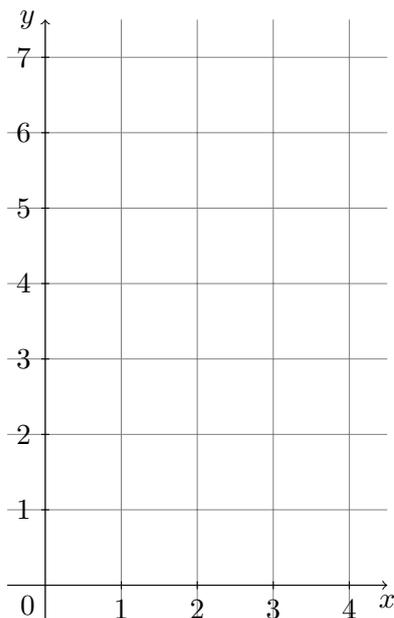
1 Definição

Seja $f : \mathbb{R} \rightarrow \mathbb{R}$ uma função. Dizemos que f é uma *função afim* se existem $a, b \in \mathbb{R}$ tal que $f(x) = ax + b$.

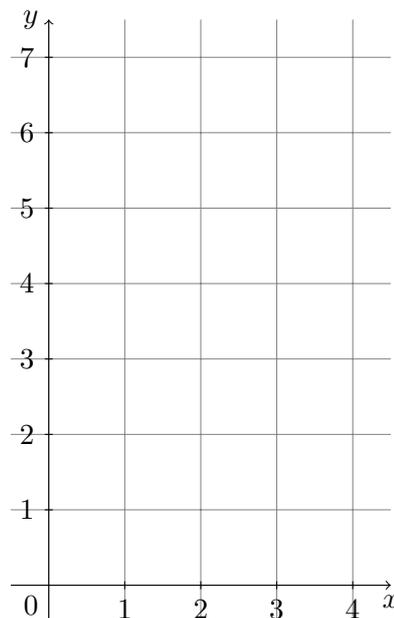
Função	a	b
$f(x) = 2x + 5$		
$g(x) = x - 2$		
$y = 4 + 3x$		
$y = 5x$		
$h(x) = 6$		

2 Gráficos

Faça o gráfico da função $f(x) = 2x + 1$.



Faça o gráfico da função $g(x) = -x + 4$.



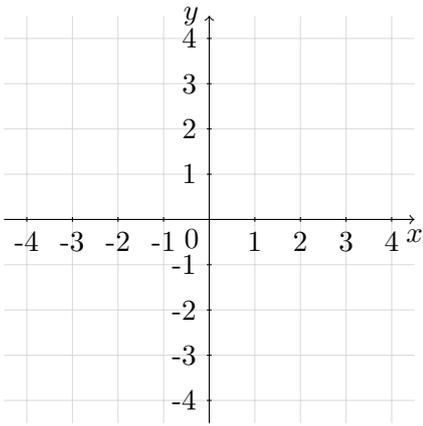
O gráfico que representa uma função afim é sempre uma reta.

O coeficiente a é a taxa de variação da função, isto é, $a = \frac{\Delta y}{\Delta x}$.

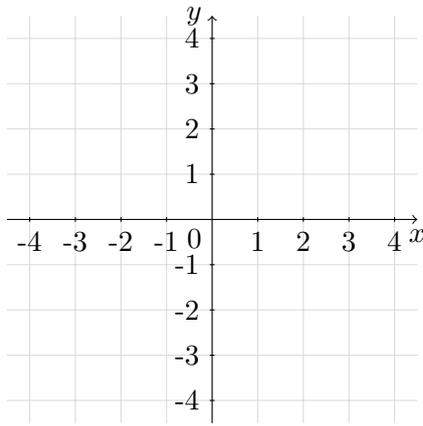
$$\left\{ \begin{array}{l} a > 0 : \text{ a função é crescente} \\ a < 0 : \text{ a função é decrescente} \\ a = 0 : \text{ a função é constante} \end{array} \right.$$

Já o coeficiente b indica o ponto de intersecção da reta com o eixo dos y .

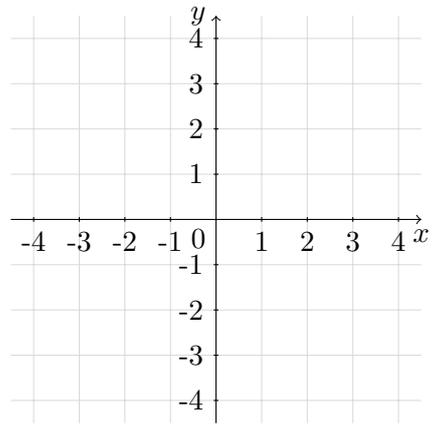
$$f(x) = x + 2$$



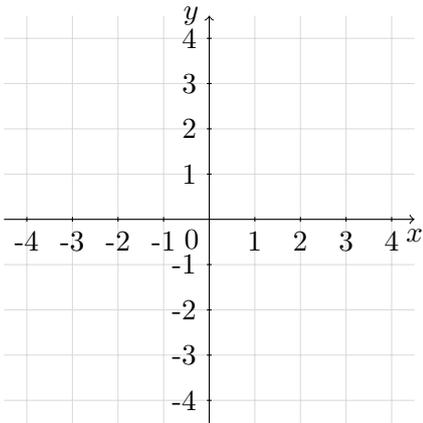
$$g(x) = 2x - 1$$



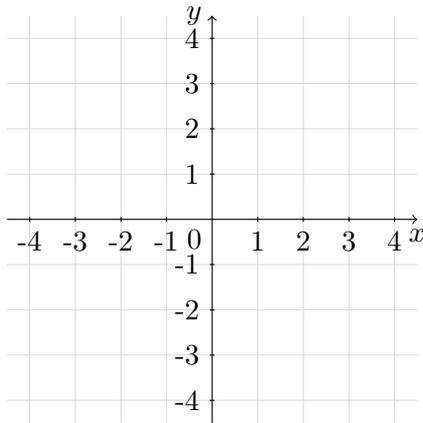
$$y = -x - 1$$



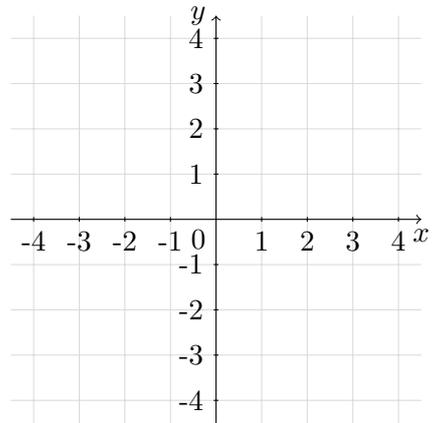
$$h(x) = -3x + 3$$



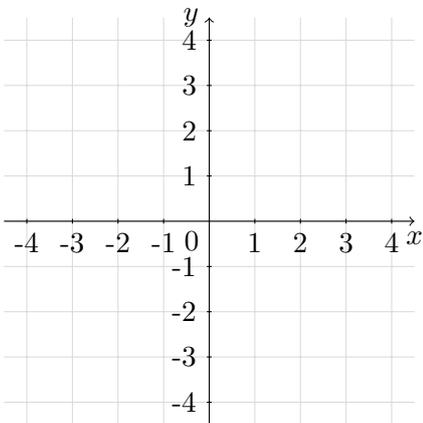
$$y = x - 3$$



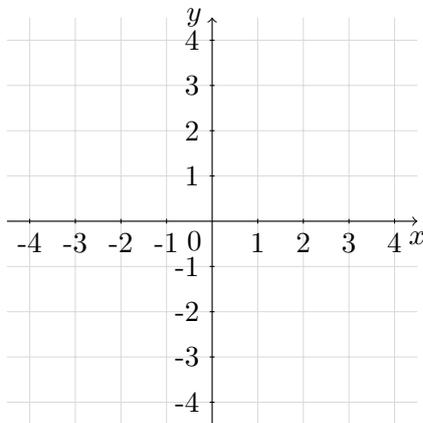
$$y = x$$



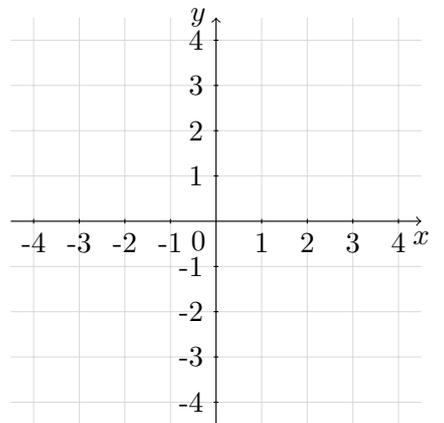
$$y = -x$$



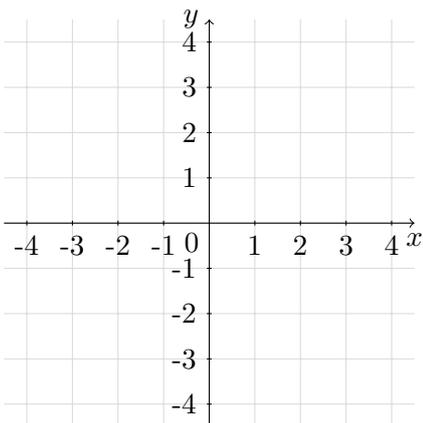
$$y = 2x$$



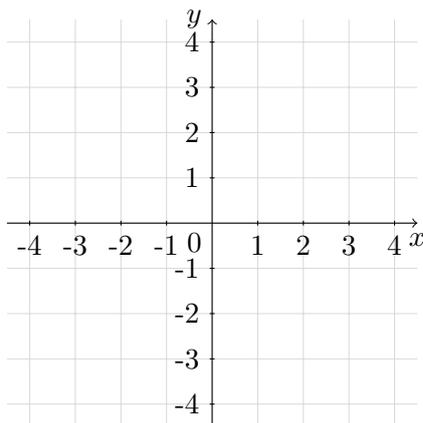
$$i(x) = -3x$$



$$y = 2$$



$$u(x) = 1$$



$$v(x) = 3$$

