

# Função de 1º grau

## MERGULHE EM TECNOLOGIA



# FUNÇÃO DE 1º GRAU



Uma função de primeiro grau é representada em um gráfico por uma reta.

$$f: \mathbb{R} \rightarrow \mathbb{R}$$

$$f(x) = ax + b$$

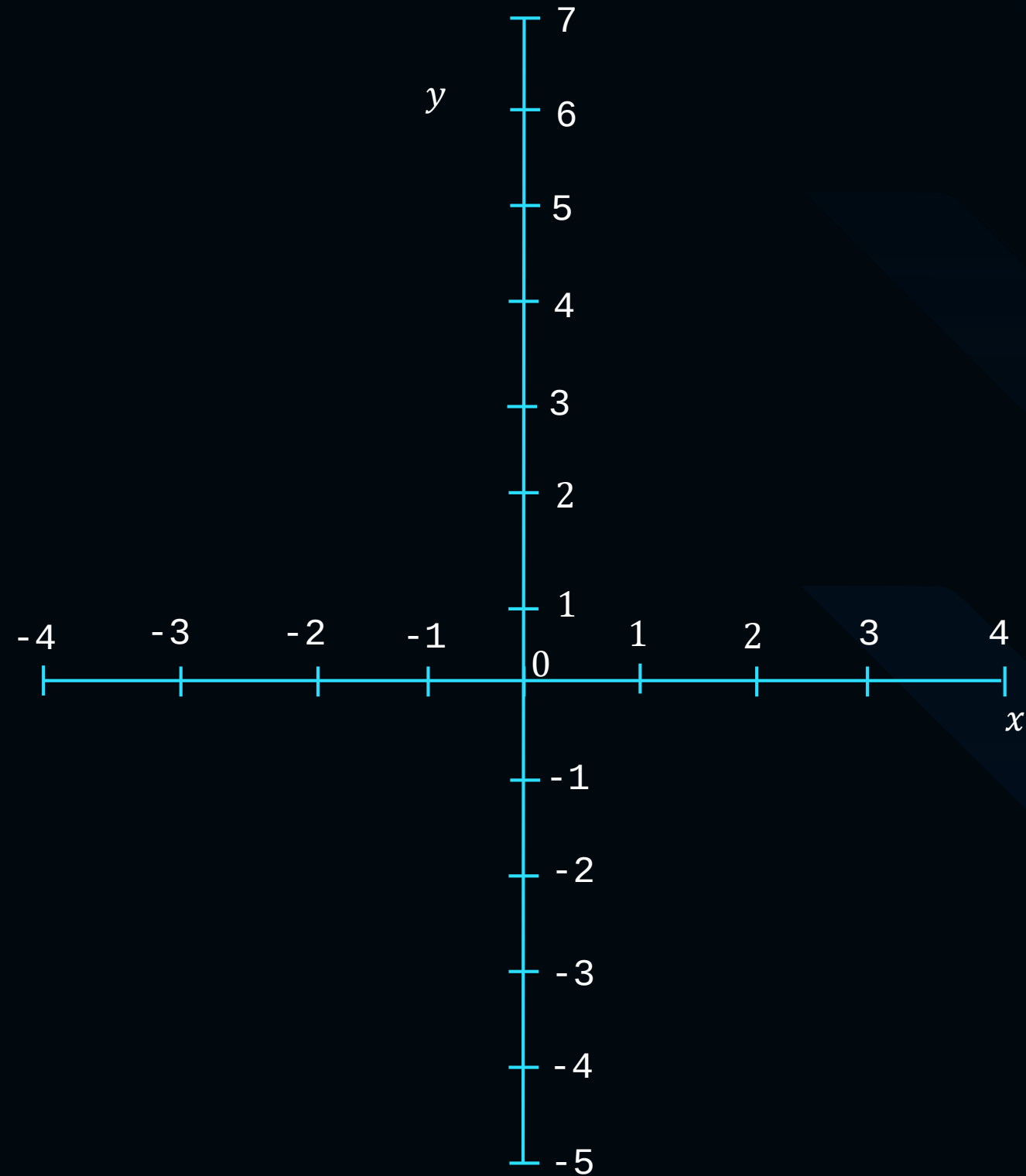
$a$  é o coeficiente angular

$b$  é o coeficiente linear

$x$  é a variável da função

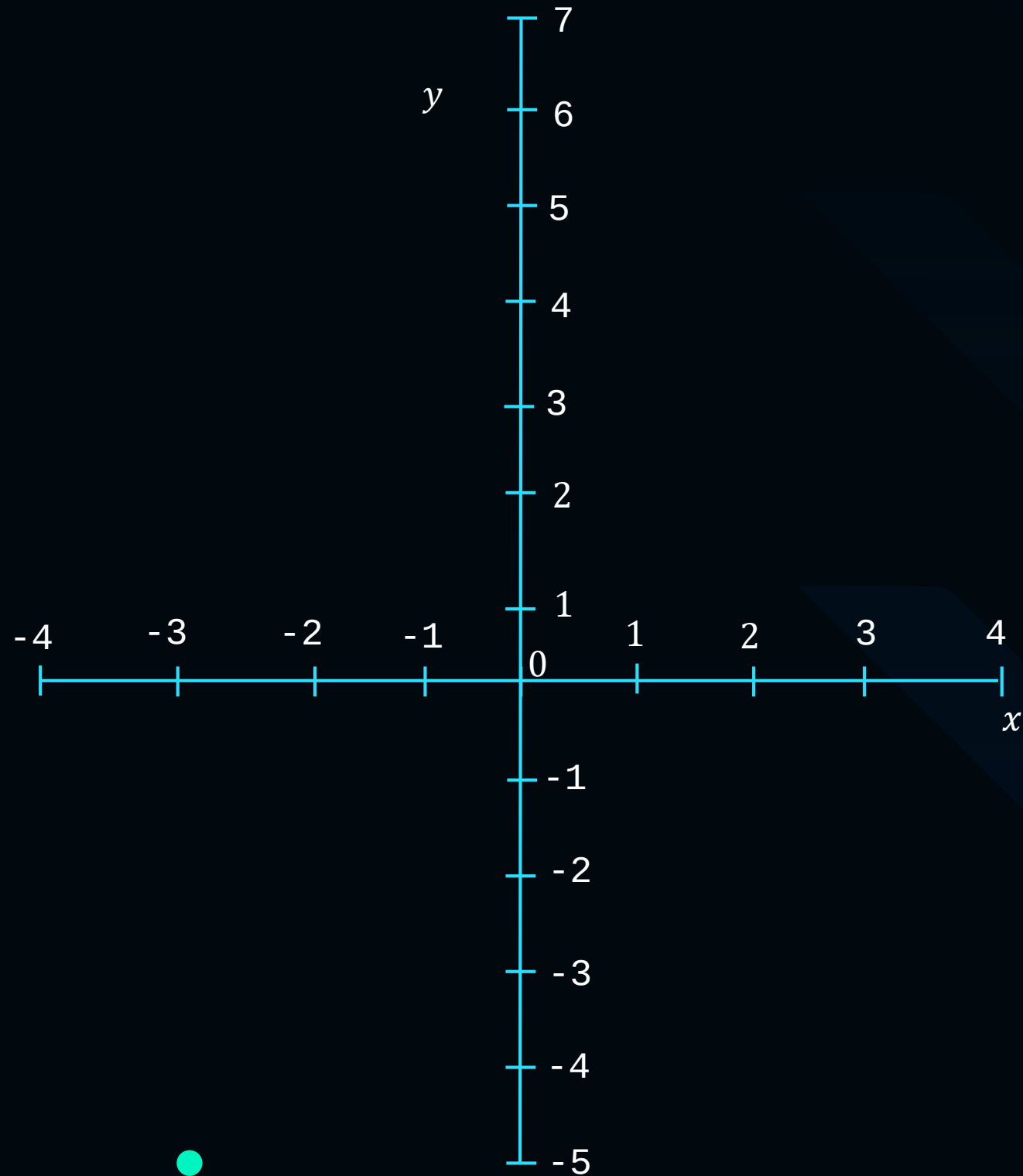
$$f(x) = 2x + 1$$

$x$	$y$
-3	
-2	
-1	
0	
1	
2	
3	



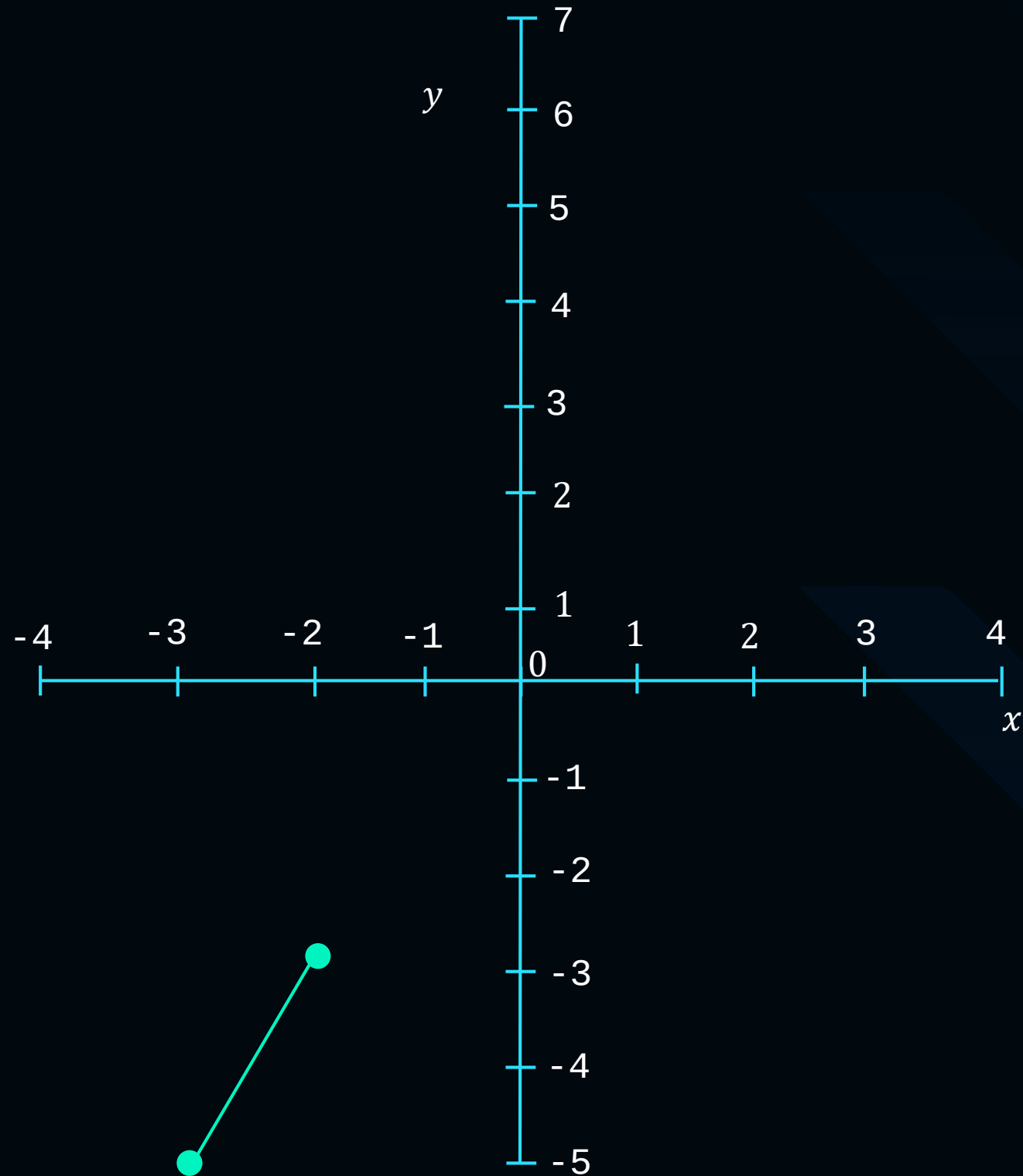
$$f(x) = 2x + 1$$

$x$	$y$
-3	-5
-2	
-1	
0	
1	
2	
3	



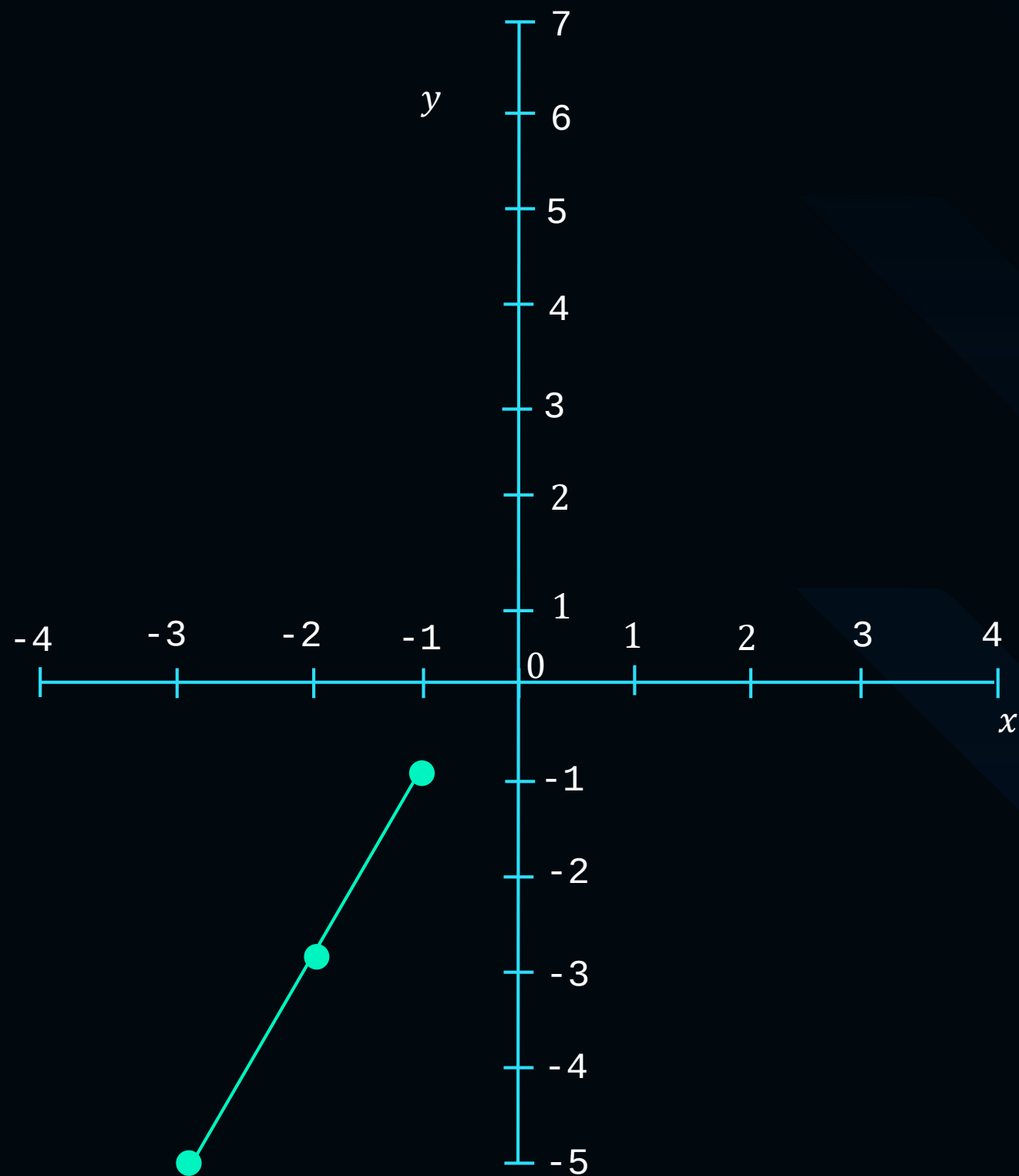
$$f(x) = 2x + 1$$

$x$	$y$
-3	-5
-2	-3
-1	
0	
1	
2	
3	



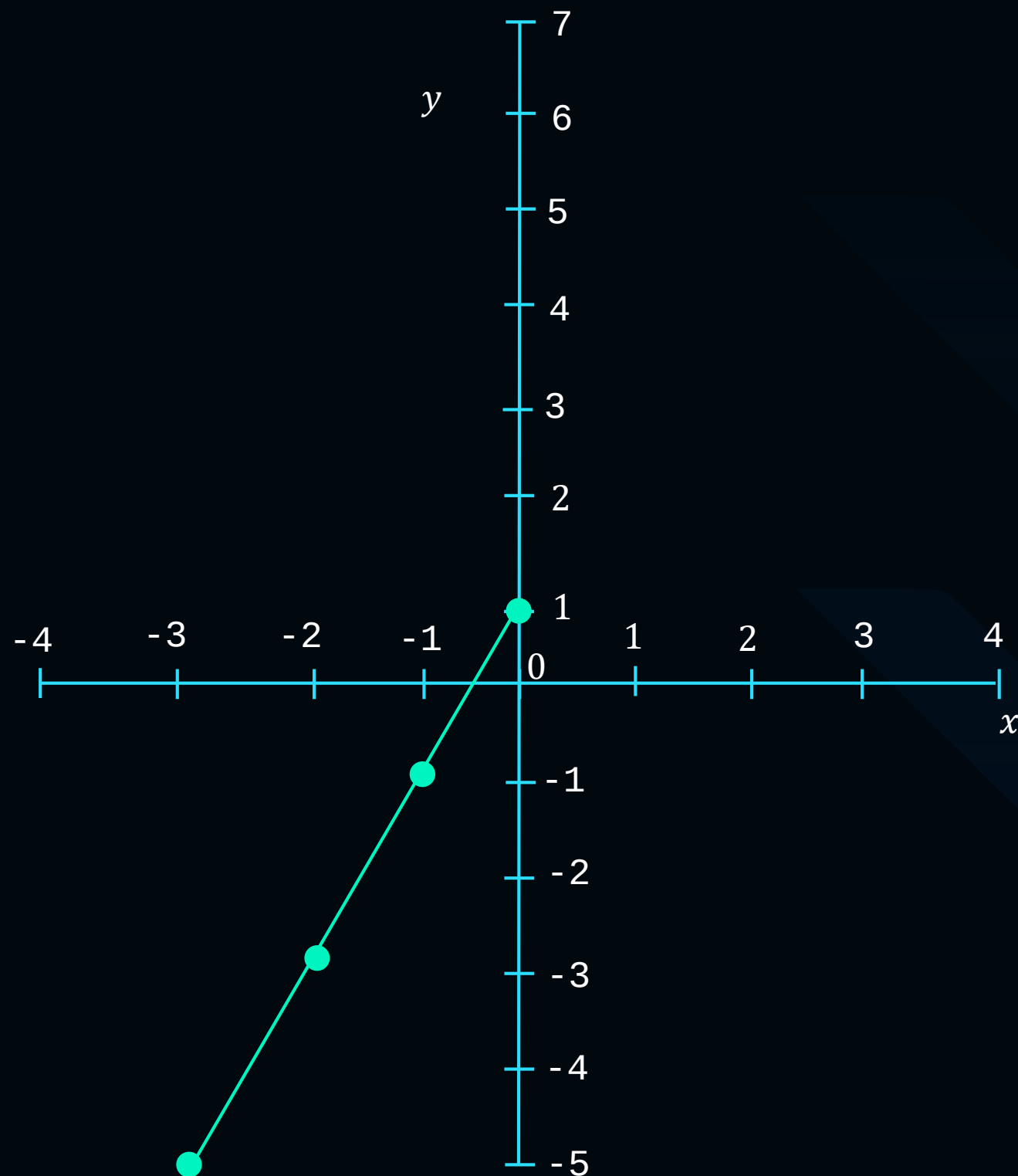
$$f(x) = 2x + 1$$

$x$	$y$
-3	-5
-2	-3
-1	-1
0	1
1	3
2	5
3	7



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

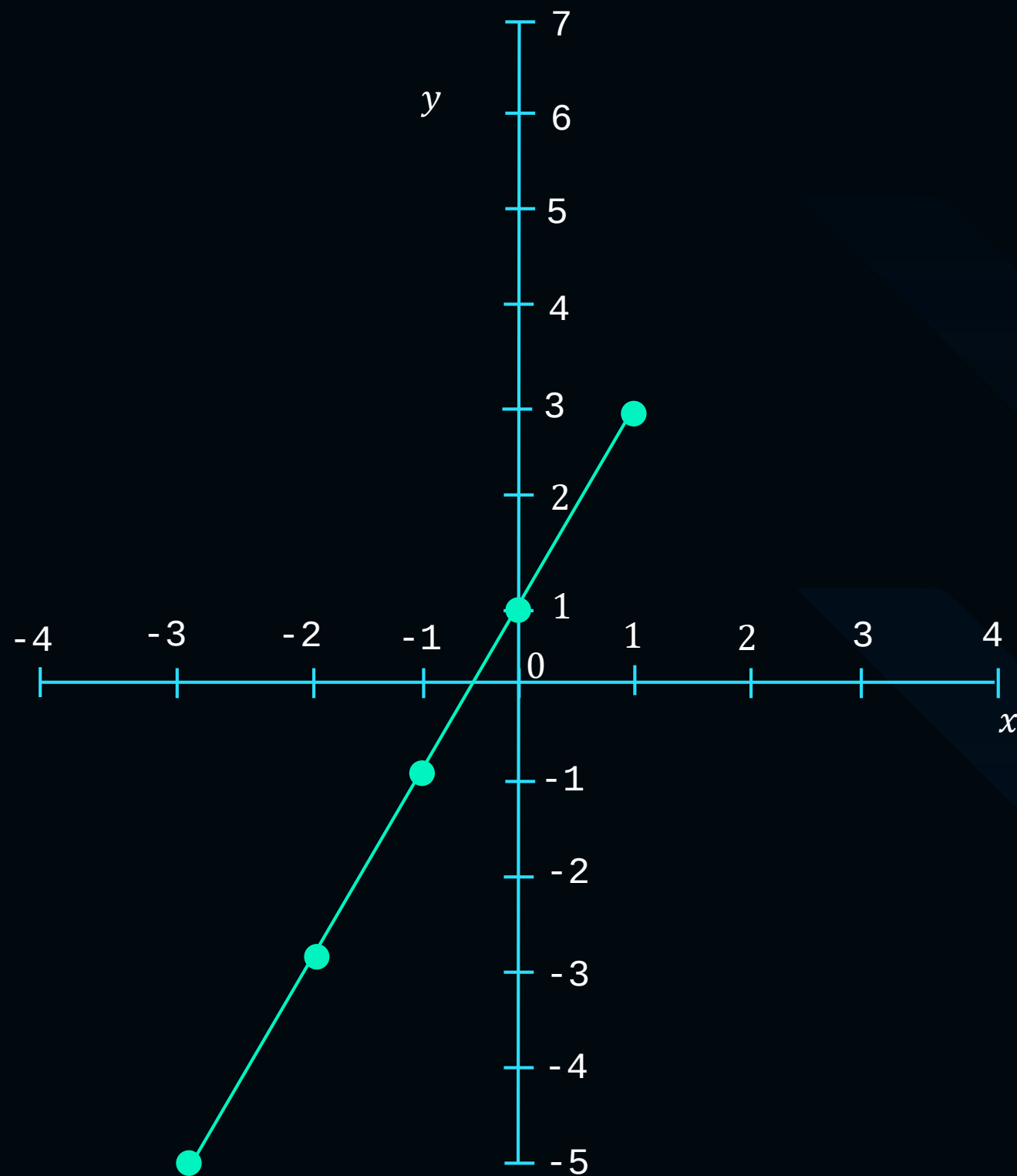
$x$	$y$
-3	-5
-2	-3
-1	-1
0	1
1	3
2	5
3	7





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

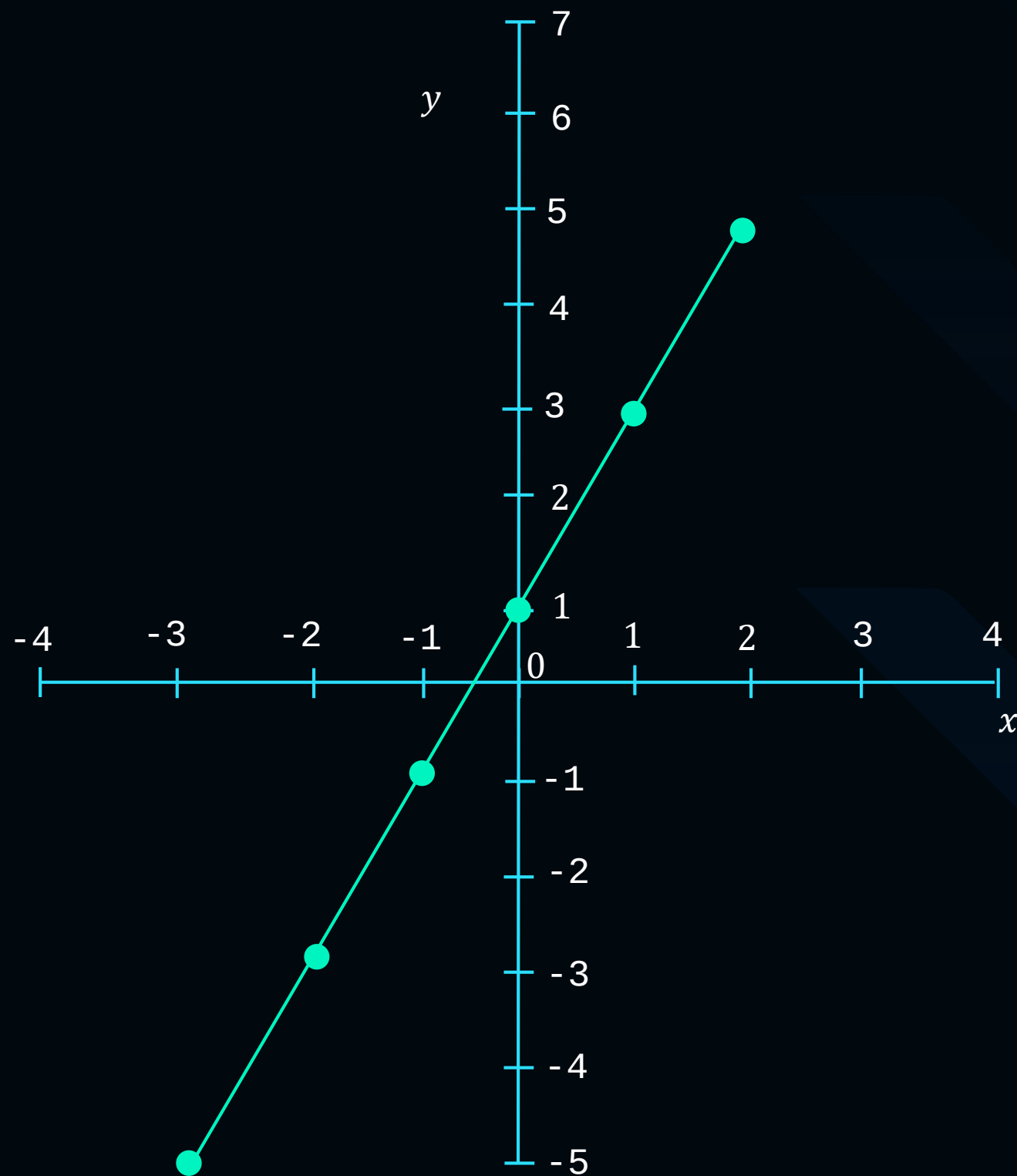
$x$	$y$
-3	-5
-2	-3
-1	-1
0	1
1	3
2	
3	





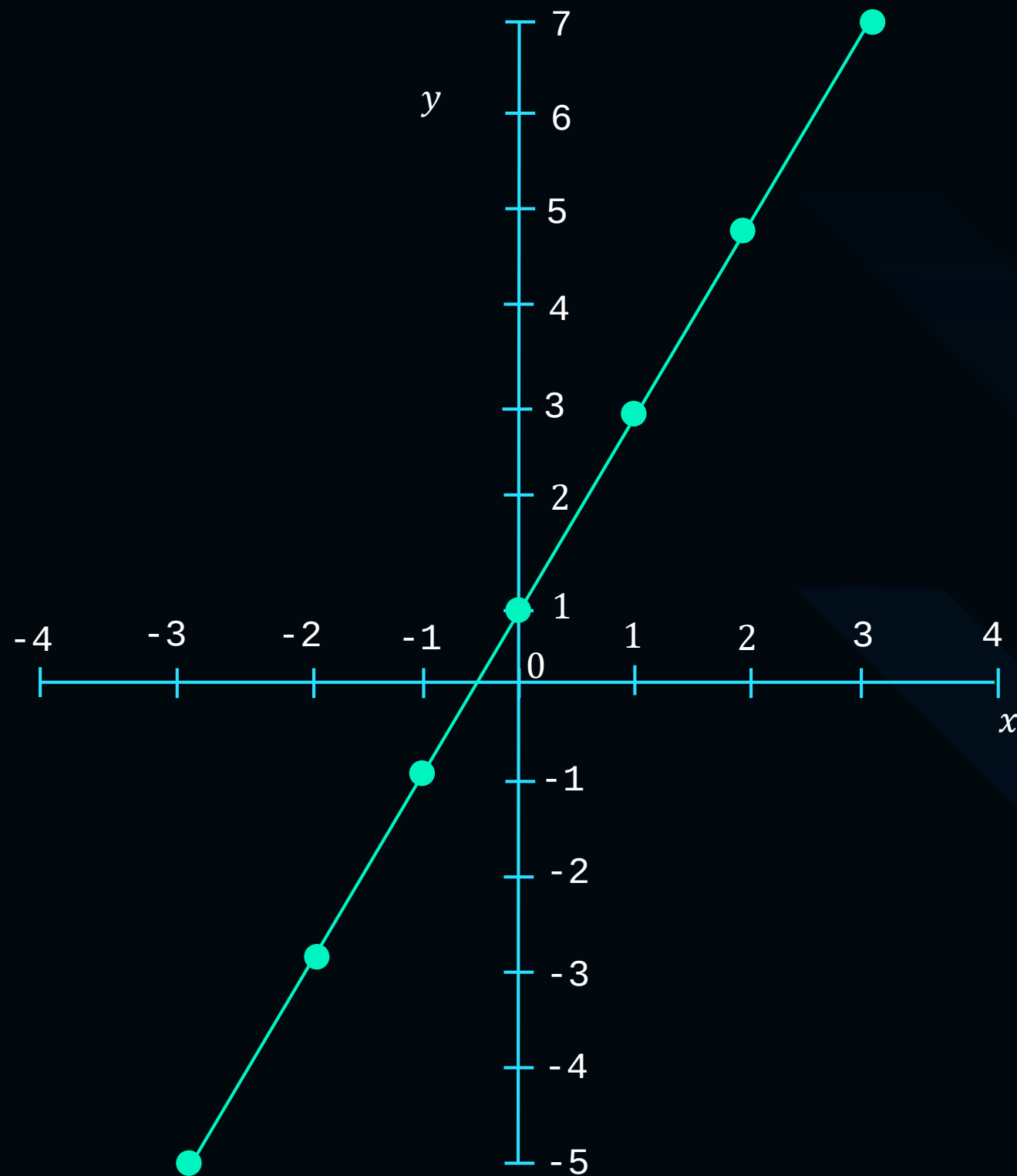
$$f(x) = 2x + 1$$

$x$	$y$
-3	-5
-2	-3
-1	-1
0	1
1	3
2	5
3	



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

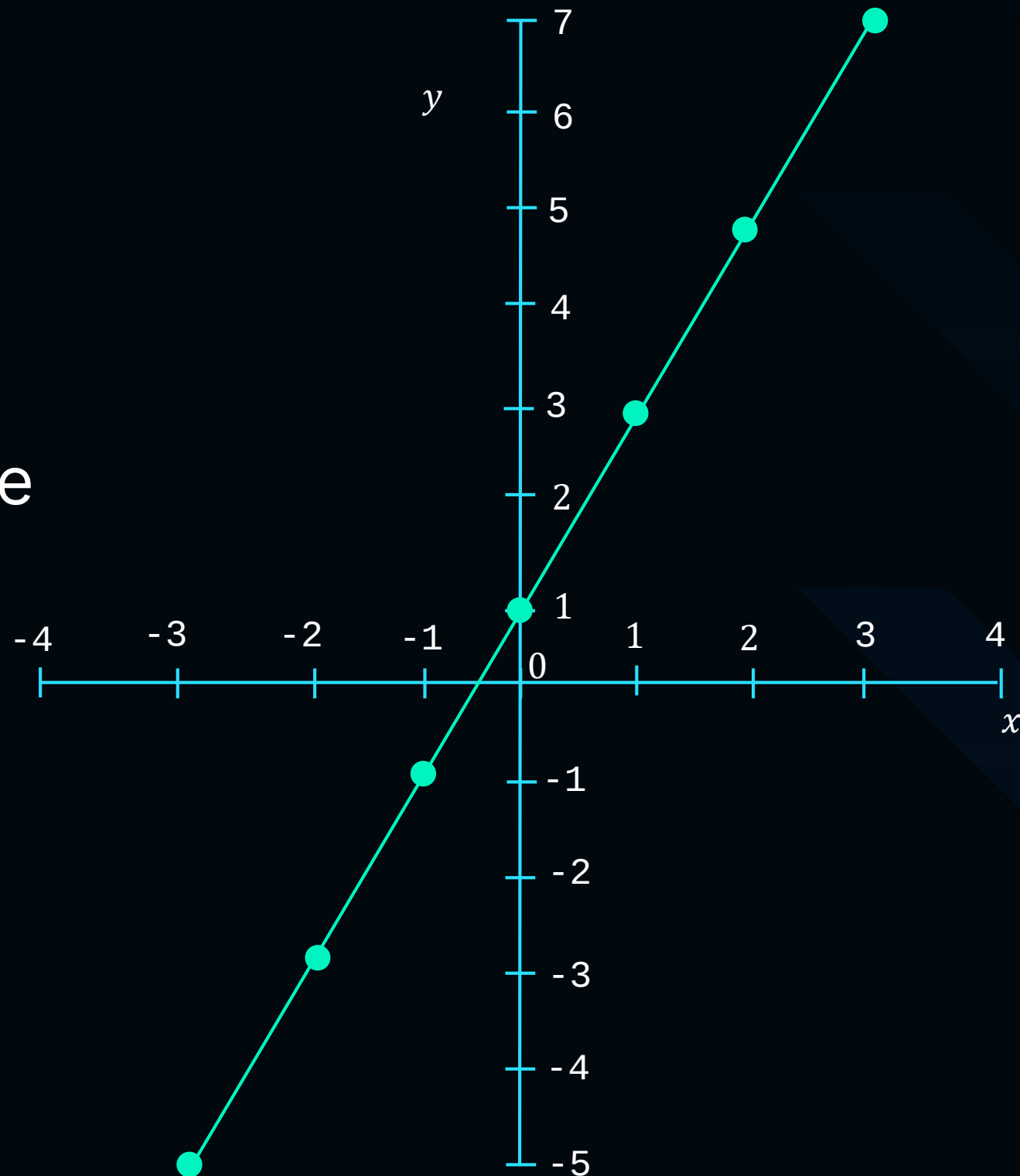
$x$	$y$
-3	-5
-2	-3
-1	-1
0	1
1	3
2	5
3	7



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

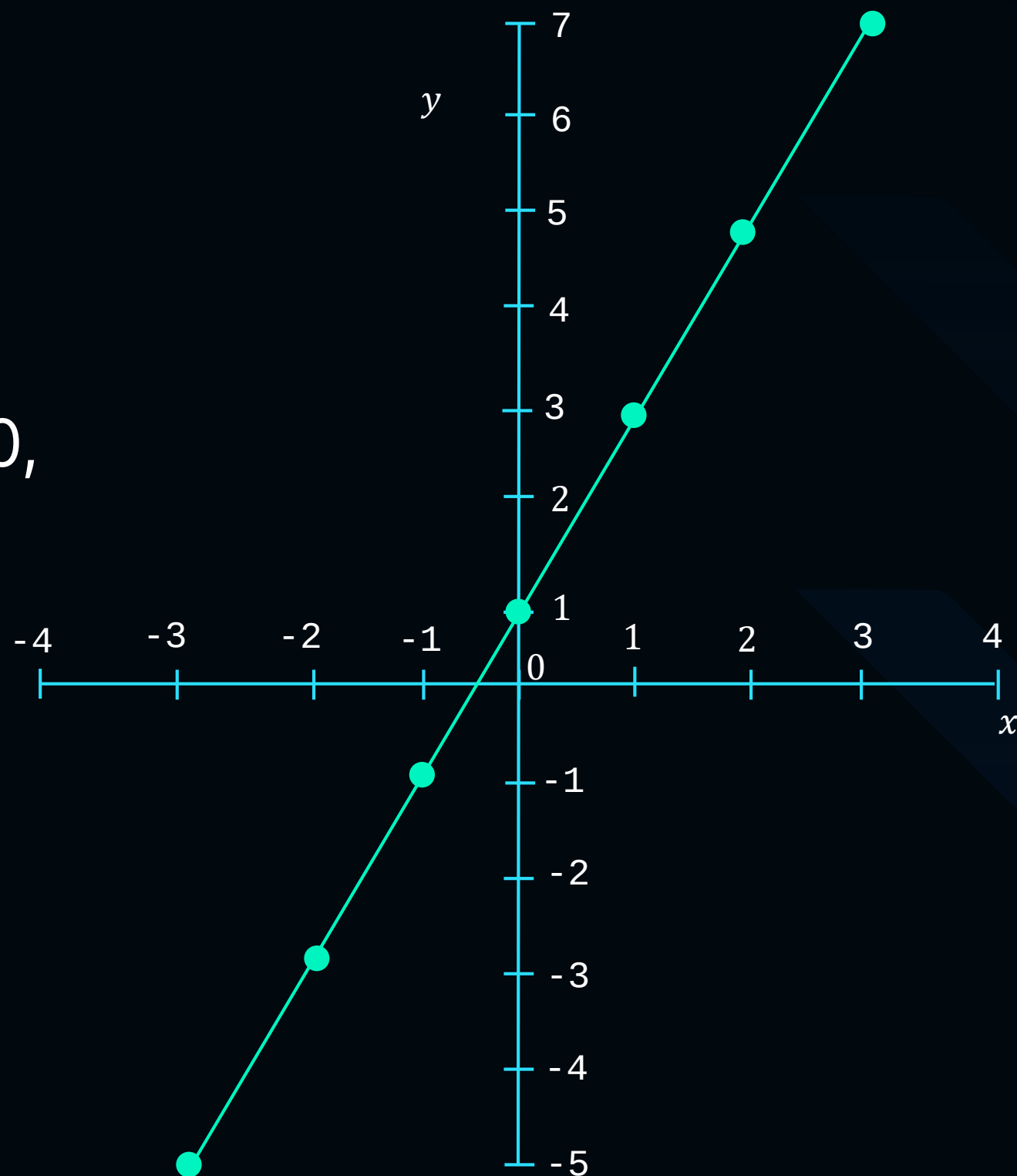
Coeficiente angular  $a = 2$   
indica que a cada 1 valor de  $x$ , cresce 2 o valor de  $y$ .

Coeficiente linear  $b = 1$   
indica que quando  $x = 0$ ,  
reta cruza o eixo  $y = 1$ .



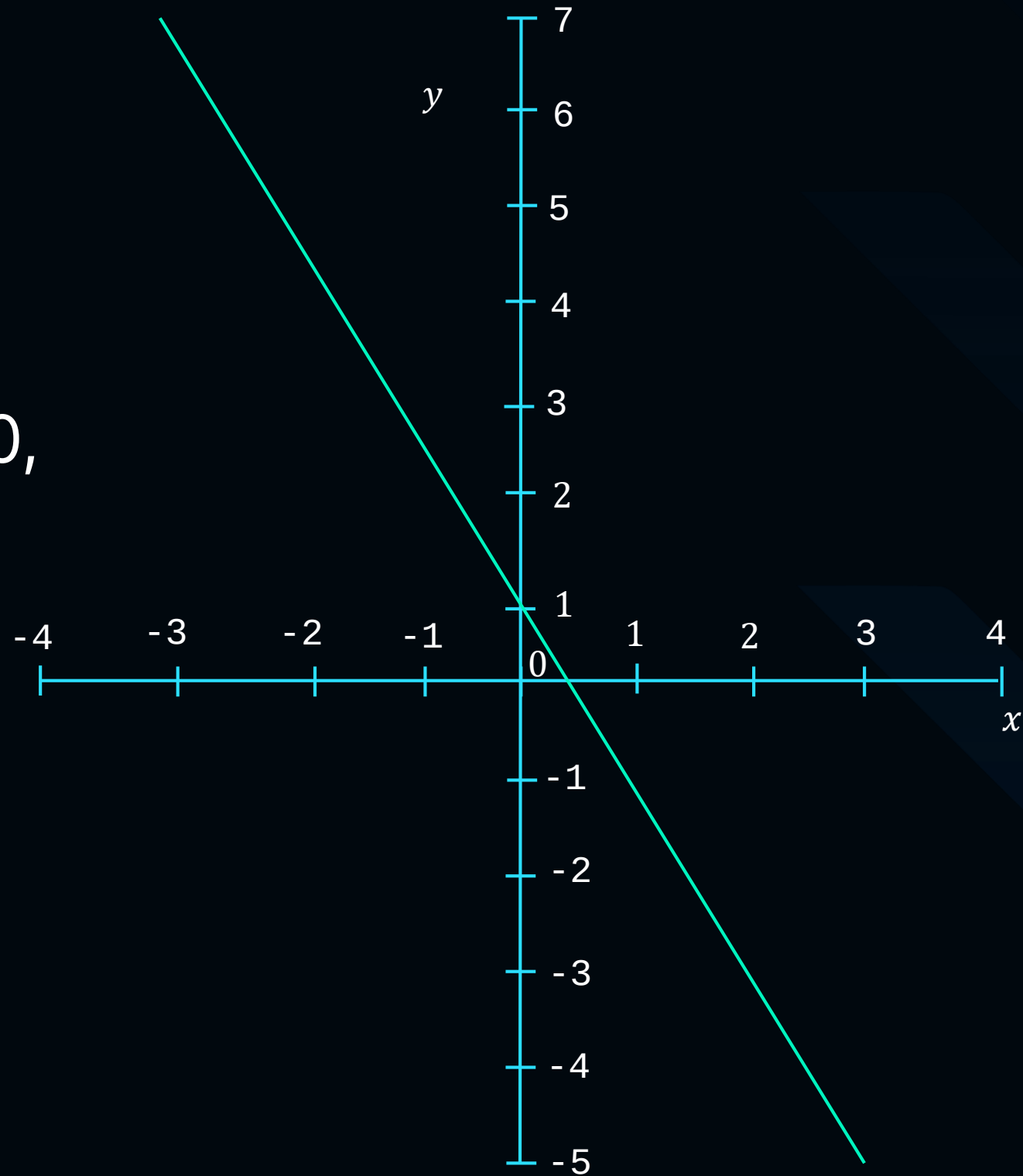
# $f(x) = 2x + 1$

Quando o coeficiente  $a > 0$ ,  
a reta é crescente.



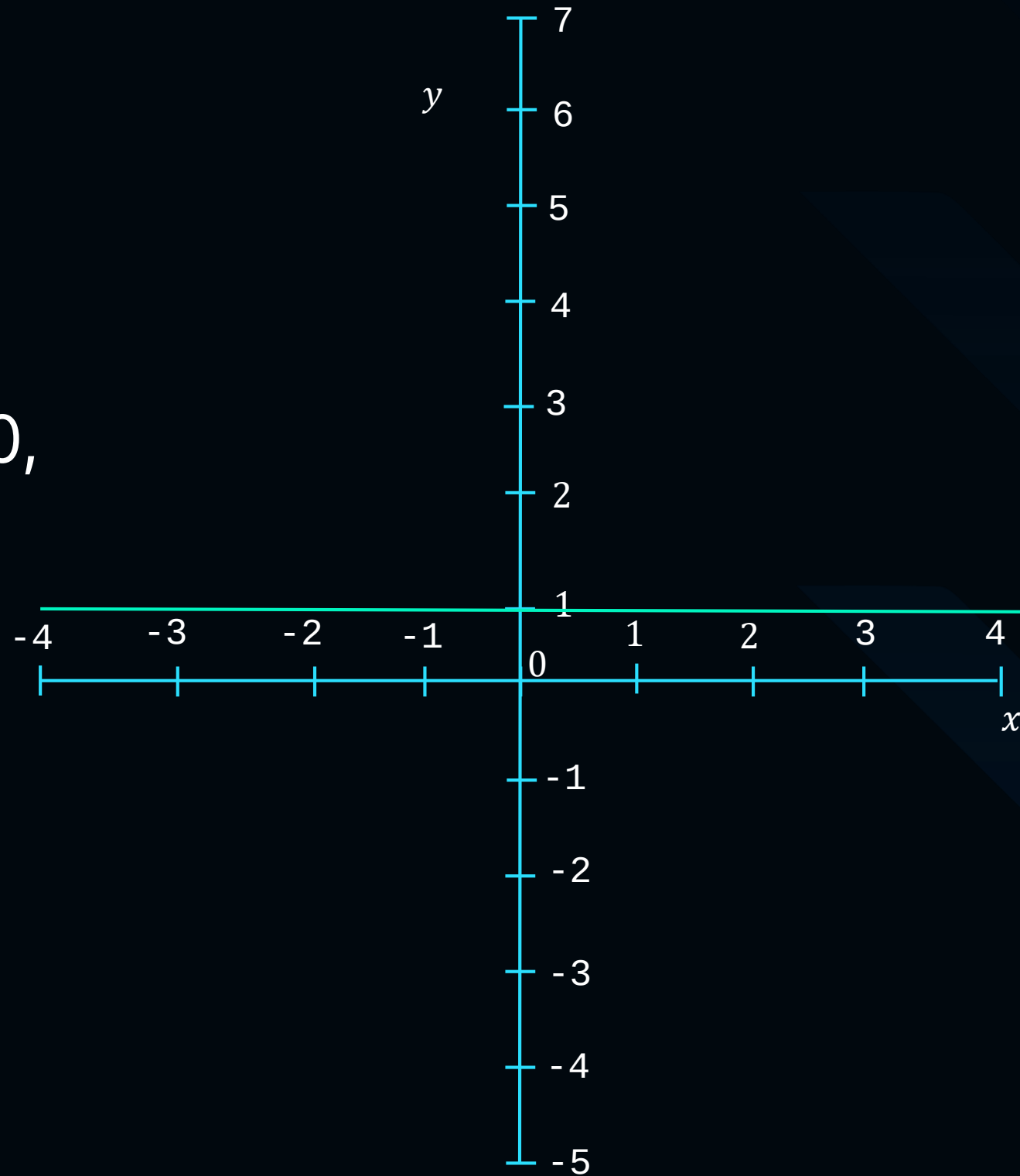
$$f(x) = -2x + 1$$

Quando o coeficiente  $a < 0$ ,  
a reta é decrescente.

 $\mathbb{R}^2$

$$f(x) = 1$$

Quando o coeficiente  $a = 0$ ,  
a reta é constante.



# $f(x) = 2x$

Quando o coeficiente  $b = 0$ ,  
a reta passa pela origem.

