Тема урока:

Линейная функция и её график

7 класс

Разбейте функции, заданные формулами на группы:

$y = 2x - 3$

$y = 6$

$y = 7$

$y = x/2$

$y = -x$

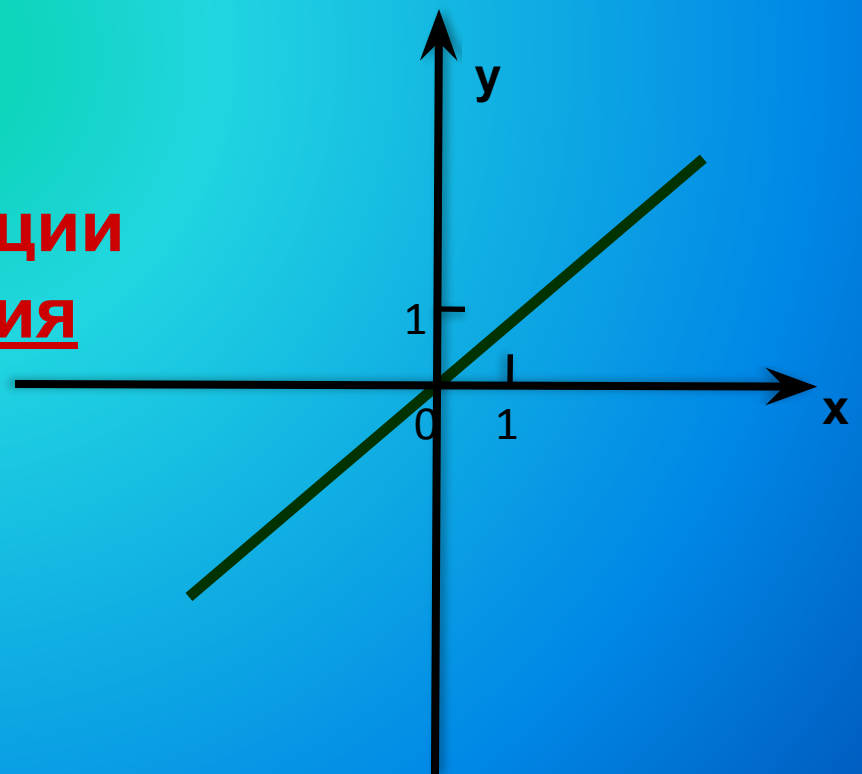
$y = -12$

$y = 0$

Линейной функцией называется функция вида

Y=kx+b, где k и b некоторые числа

Графиком линейной функции является <u>прямая линия</u>



Постройте график функции y = 2x – 3

- Для построения графика линейной функции достаточно найти координаты двух точек и отметить их на координатной плоскости. Отмечаем координаты точек

$X_1 = 1,\ y_1 = -1$

$X_2 = 3,\ y_2 = 3$

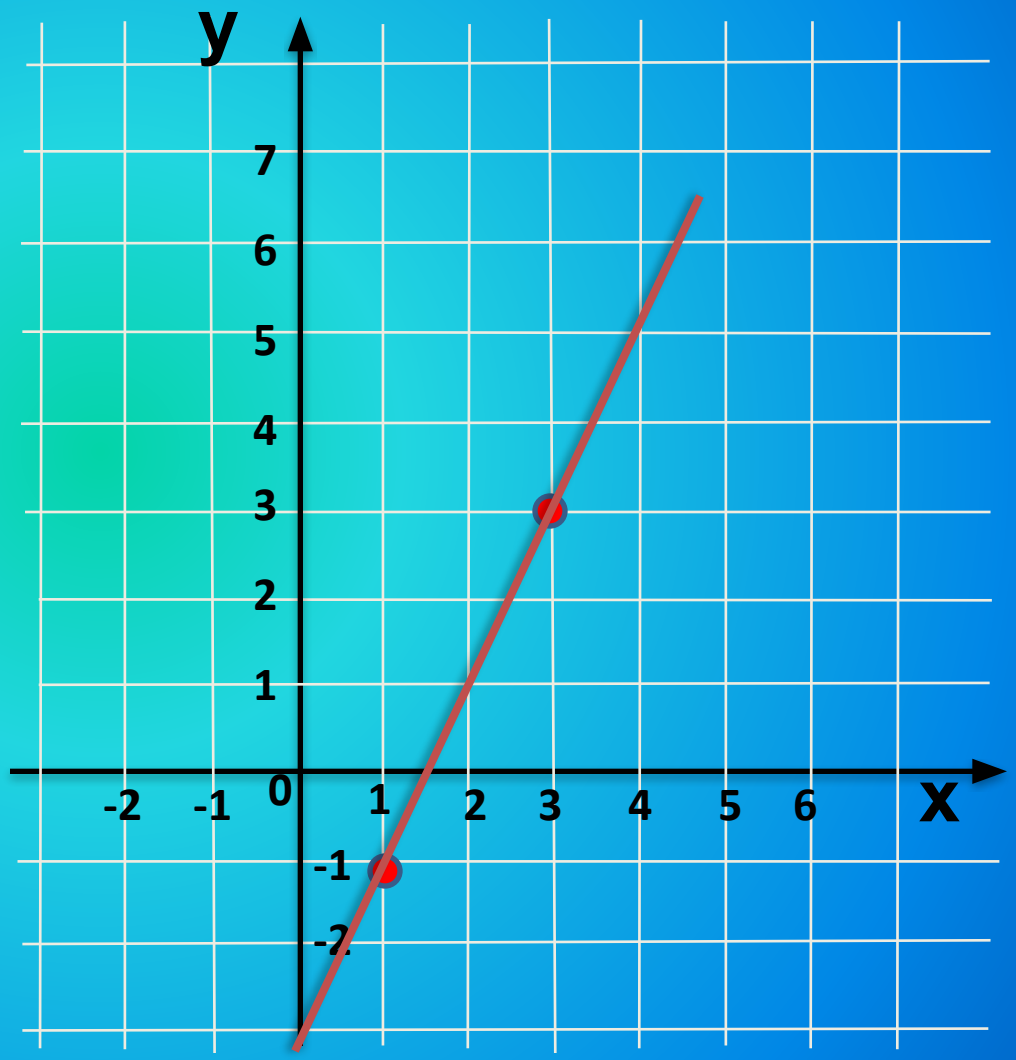
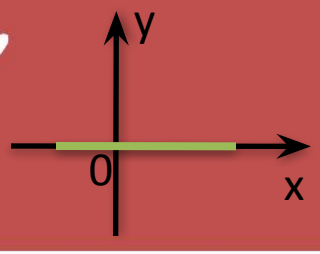
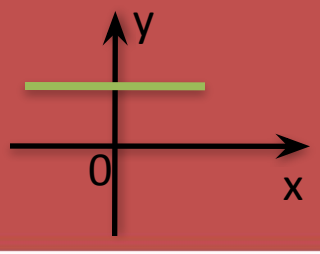
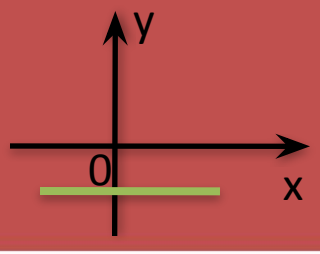
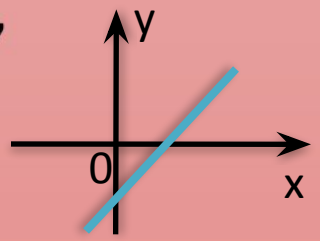
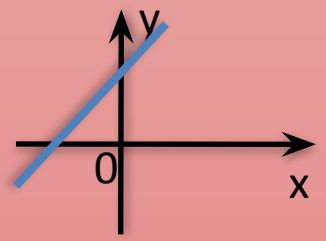
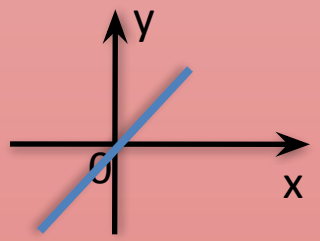
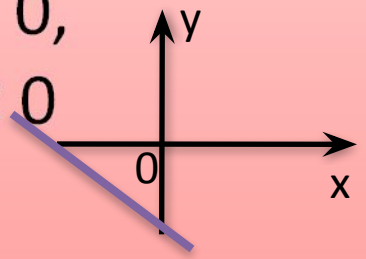
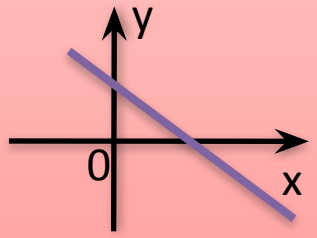
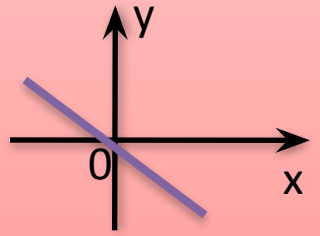
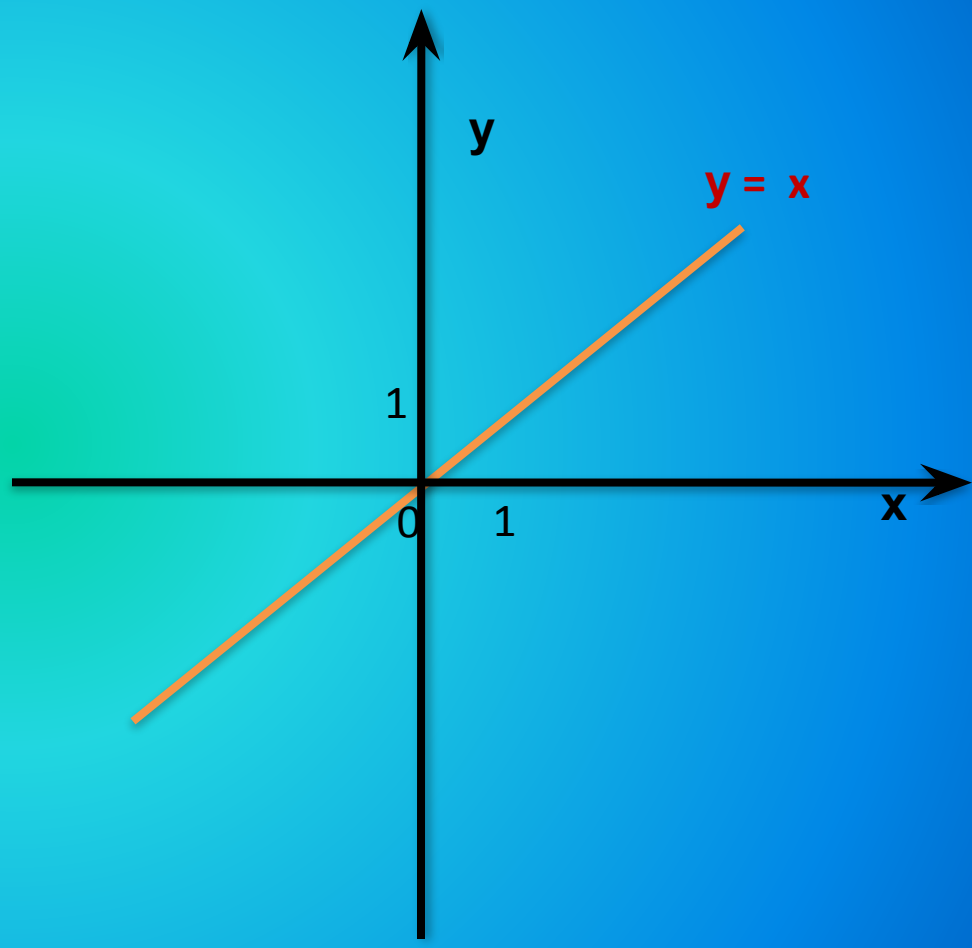


Таблица зависимости функции y = k x + b от значений k и

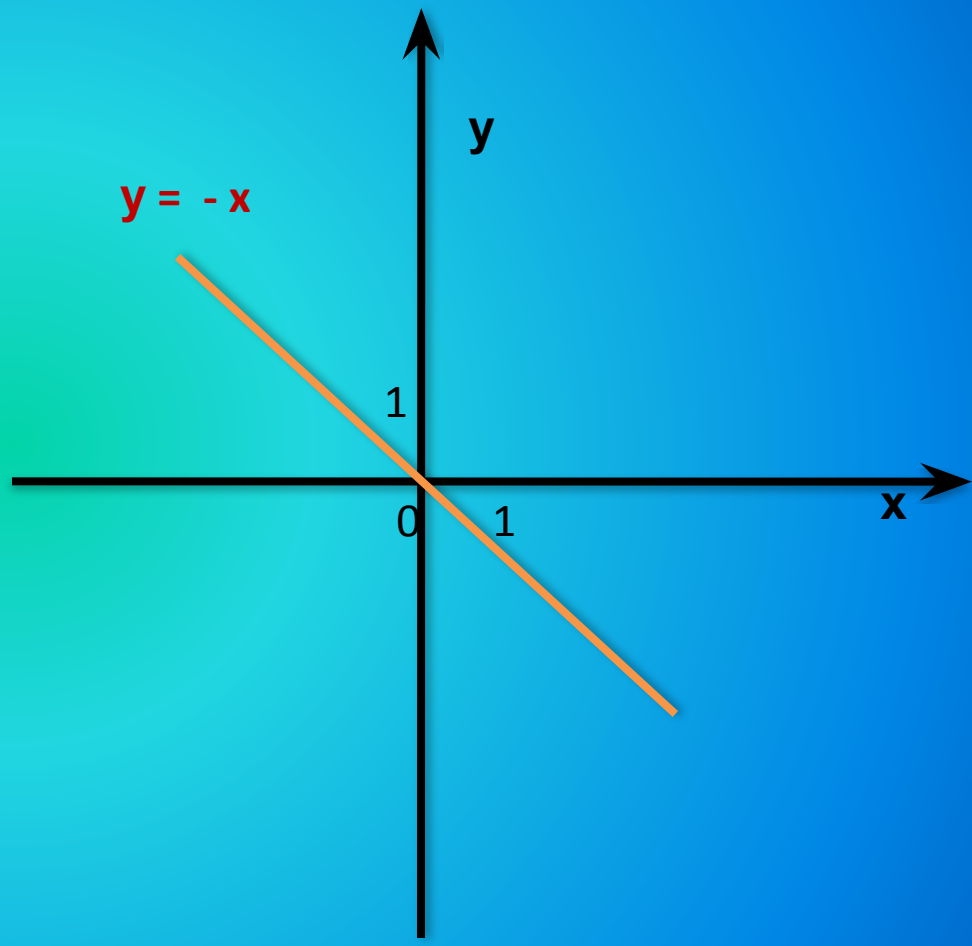
k = 0, b = 0 	**k = 0, b > 0** 	**k = 0, b < 0** 
k > 0, b < 0 	k > 0, b > 0 	k > 0, b = 0 
k < 0, b < 0 	k < 0, b > 0 	k < 0, b = 0 

k = 1 ; y = x



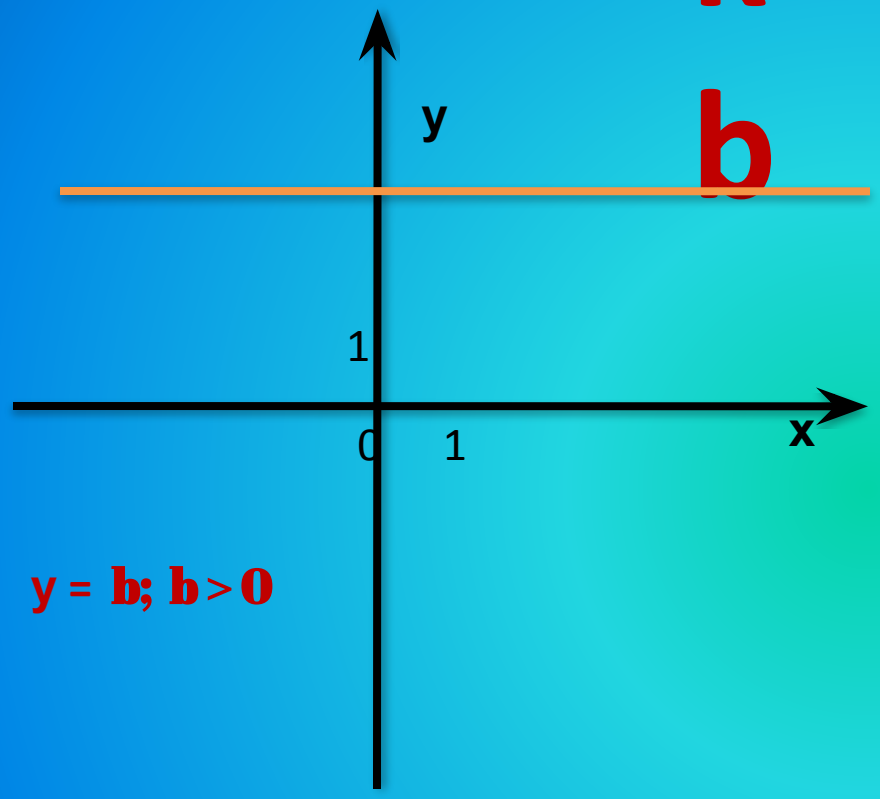
Прямая, являющаяся биссектрисой I и III координатных углов

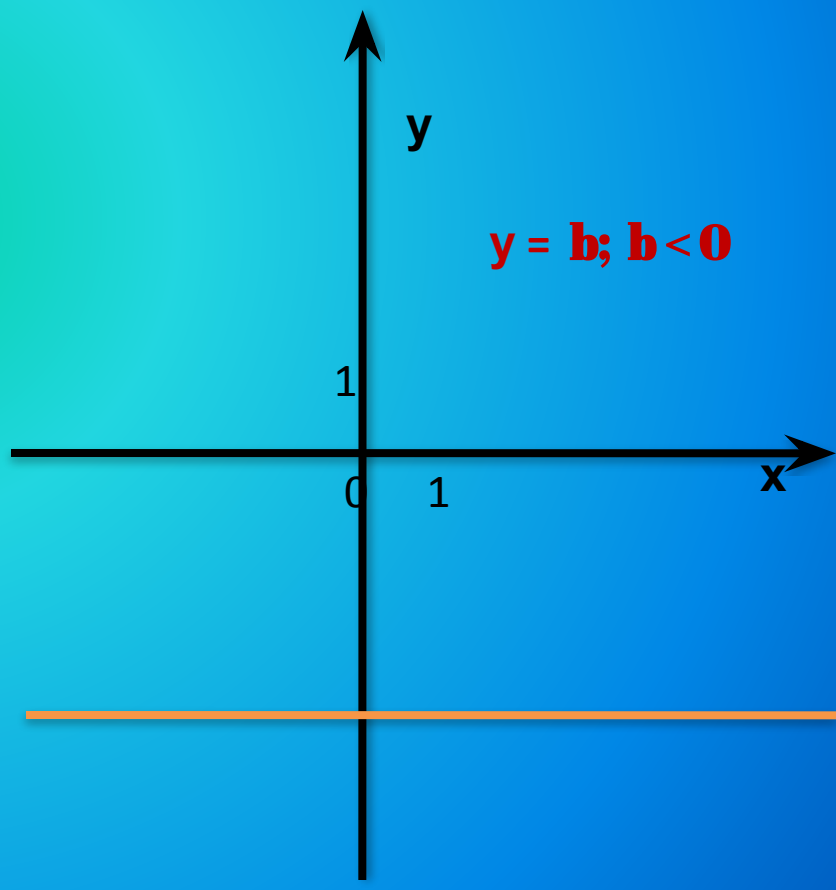
k = - 1 ; y = - x



Прямая, являющаяся биссектрисой II и IV координатных углов

k = 0 ; y = b





Прямая, параллельная оси Ох и пересекающая ось Оу в точке с ординатой b.

k = 0 ; y = 0

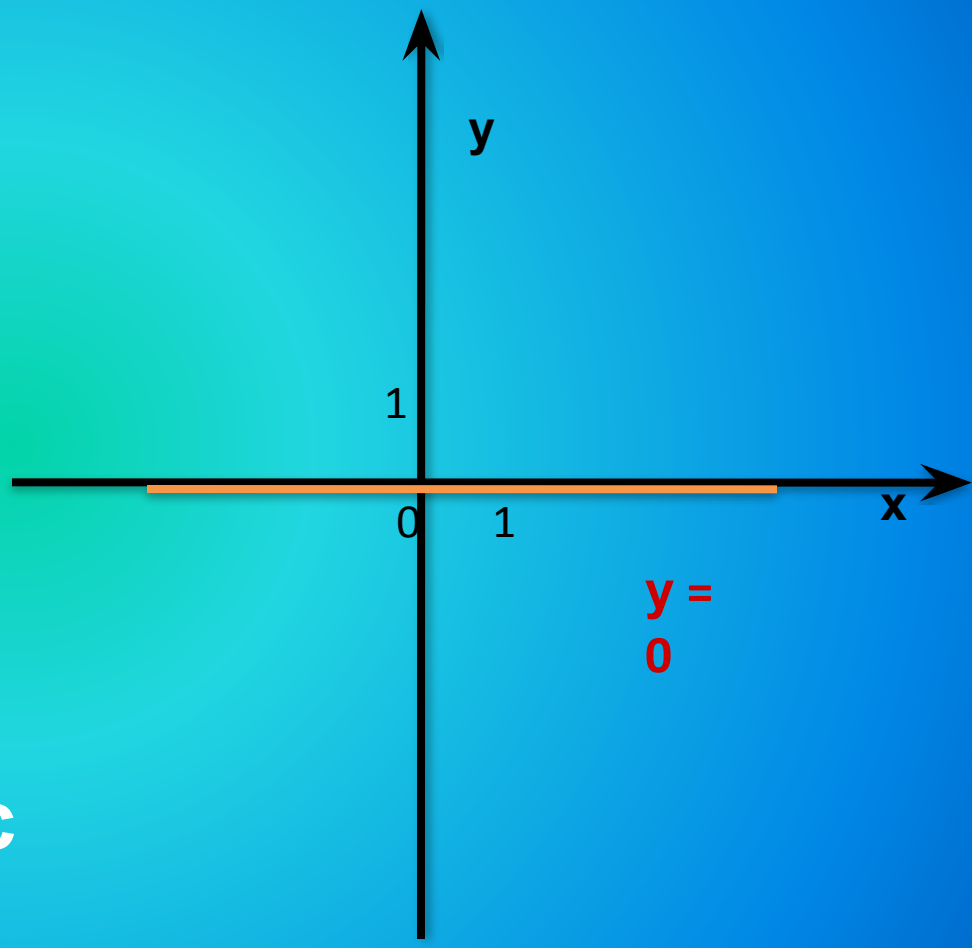
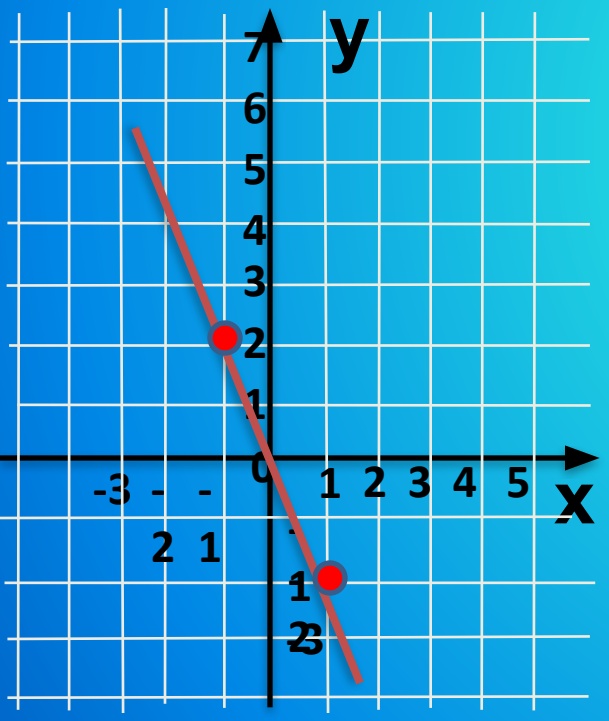


График совпадает с осью Ох

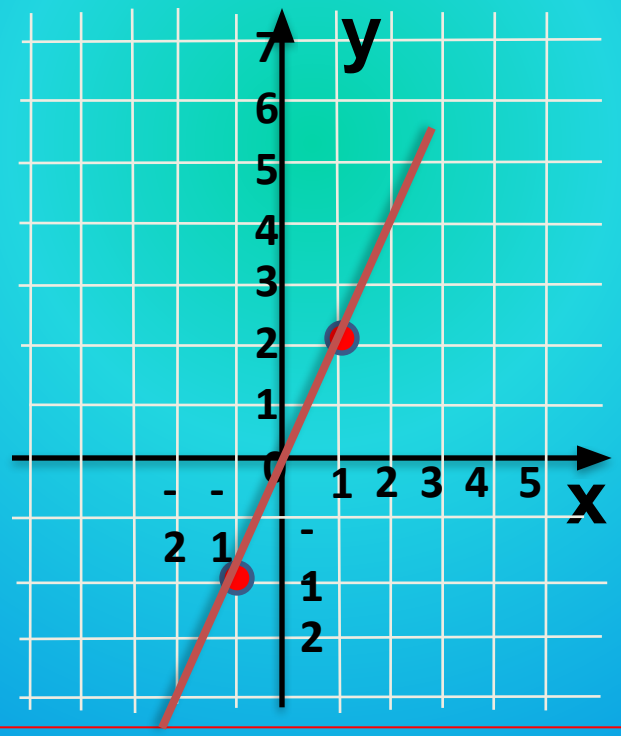
Постройте график функции вида y=kx+b, определить, в каких координатных четвертях расположен график

y = -2x



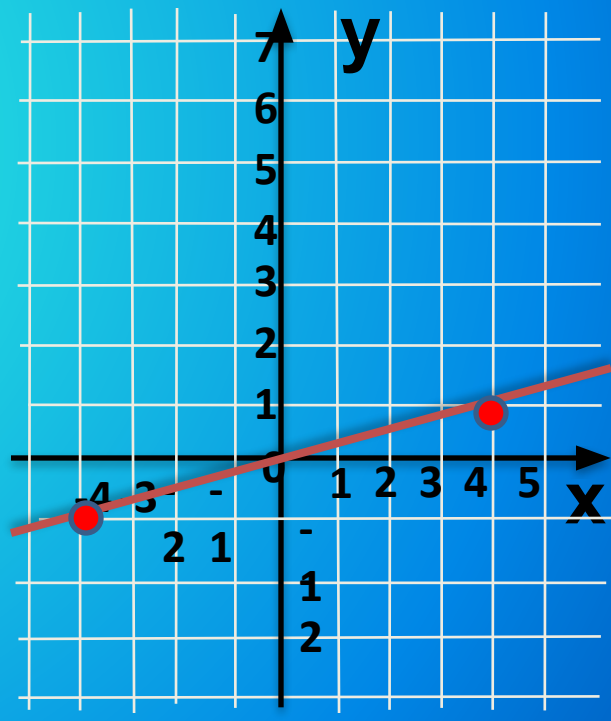
Прямая находится в II и IV

y = 2x



Прямая находится в I и III

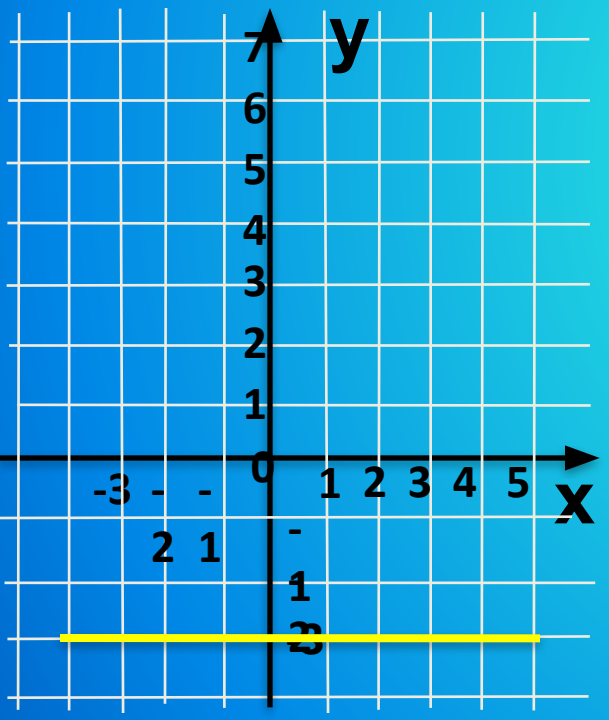
y = x/4



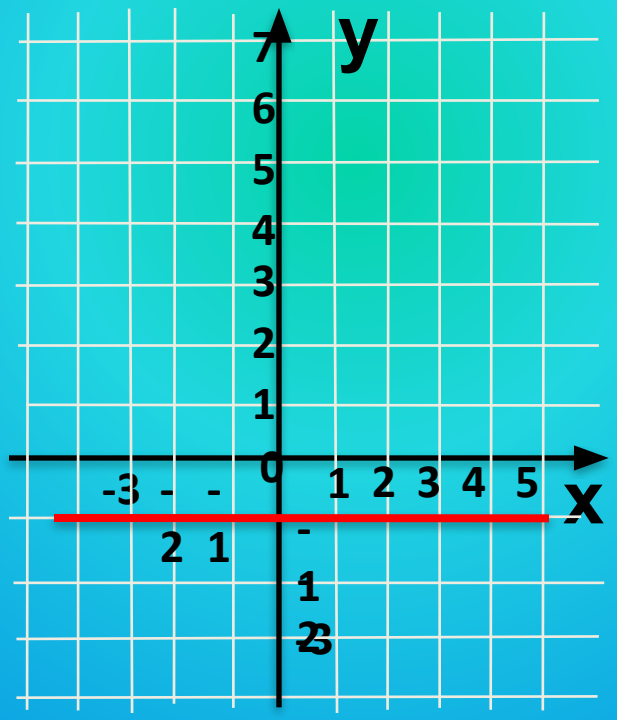
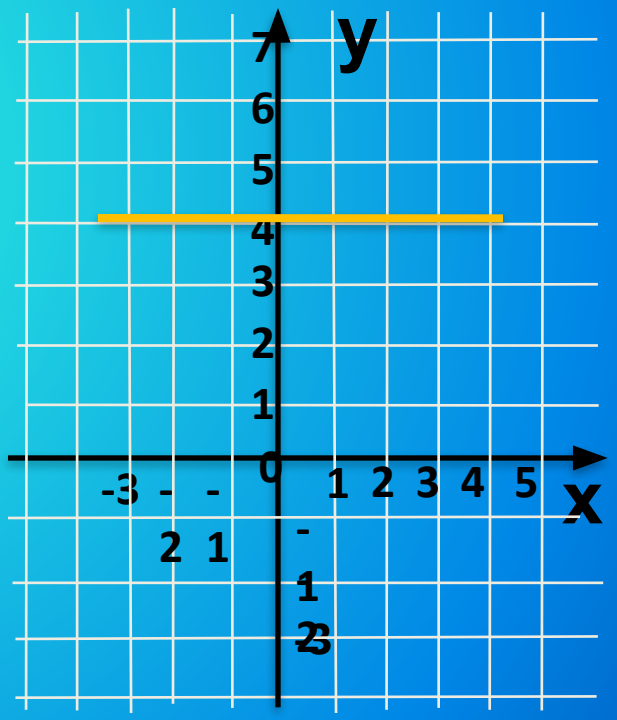
Прямая находится в I и III

Постройте график функции вида y=b

y = -3



y = -1



y = 4