

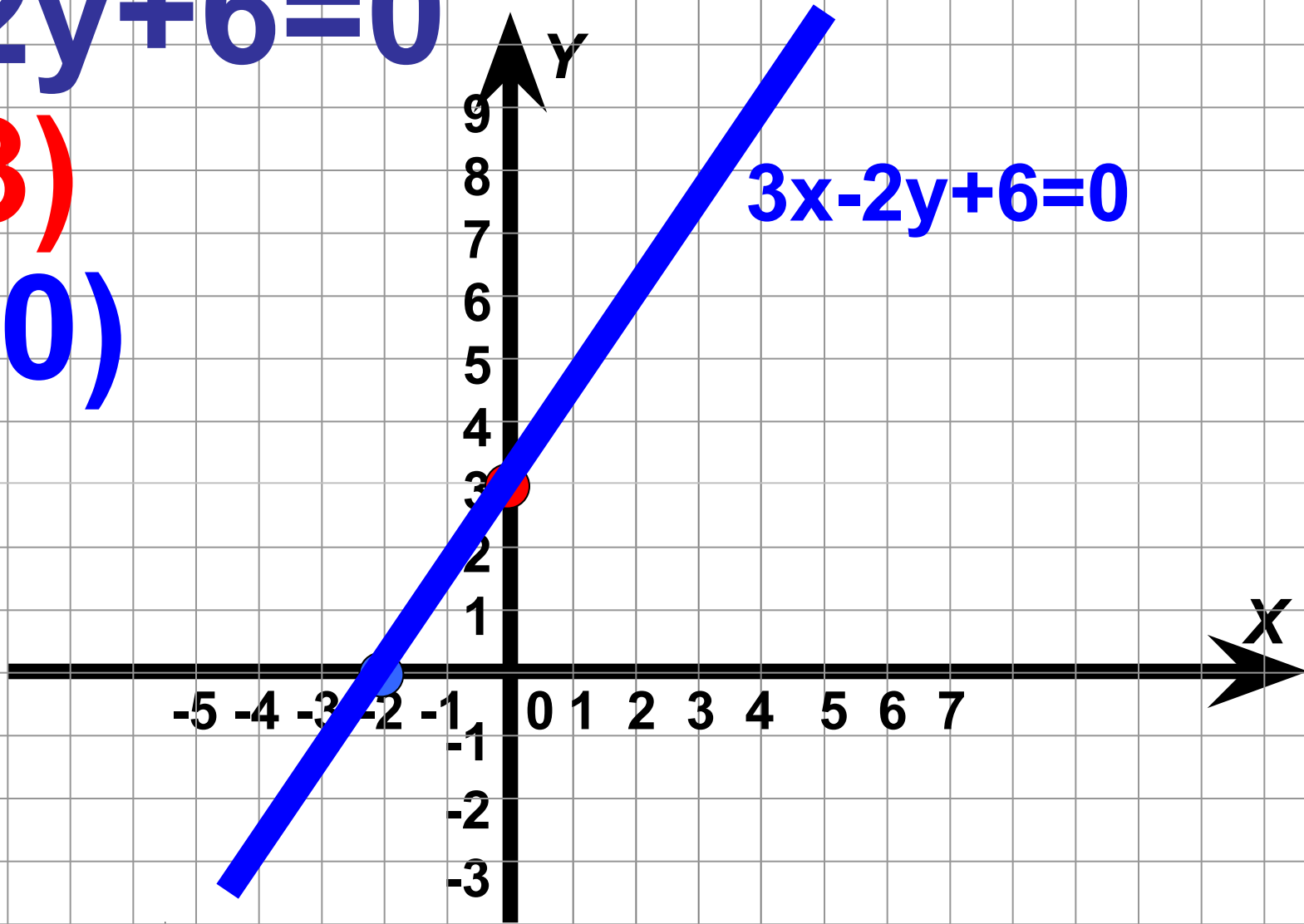
# Линейная функция и её график



$$3x - 2y + 6 = 0$$

$(0; 3)$

$(-2; 0)$



$$3x - 2y + 6 = 0$$

$$3x + 6 = 2y$$

$$2y = 3x + 6$$

$$y = \frac{1}{2}(3x + 6)$$

$$y = \frac{3}{2}x + 3$$

**При  $x = 0$       $y = 3$**

**При  $x = 2$       $y = 6$**

**При  $x = -2$      $y = 0$**

**При  $x = 4$       $y = 9$**

$$ax + by + c = 0$$

$$by = -ax - c$$

$$y = -\frac{a}{b}x - \frac{c}{b}$$

$k$

$m$

$$y = kx + m$$

$$y = kx + m$$

где **k**, **m**-числа (коэффициенты)  
причём  $k \neq 0$

**линейная функция**

**X** – независимая переменная (**аргумент**)

**y** – зависимая переменная

$$8x + 3y = 24$$

$$3y = 24 - 8x$$

$$y = 8 - \frac{2}{3}x$$

$$K = -\frac{2}{3} \quad m = 8$$

$$y = -\frac{2}{3}x + 8$$

$$5x - 2y = 10$$

$$-2y = 10 - 5x$$

$$y = -5 + 2,5x$$

**K=**

2,5

$$y = 2,5x - 5$$

**m = -5**

$$3x + 4y = 12$$

$$4y = 12 - 3x$$

$$y = \frac{3}{4}x - \frac{3}{4}$$

**K=**

$$y = \frac{3}{4}x - \frac{3}{4}$$

**m=3**



$$7x - 5y = 35$$

$$-5y = 35 - 7x$$

$$y = -\frac{7}{5} + \frac{1}{5}x$$

**K=**

$$y = 1\frac{2}{7}x - 7$$

$$m = -\frac{7}{5}$$

# Графиком линейной функции

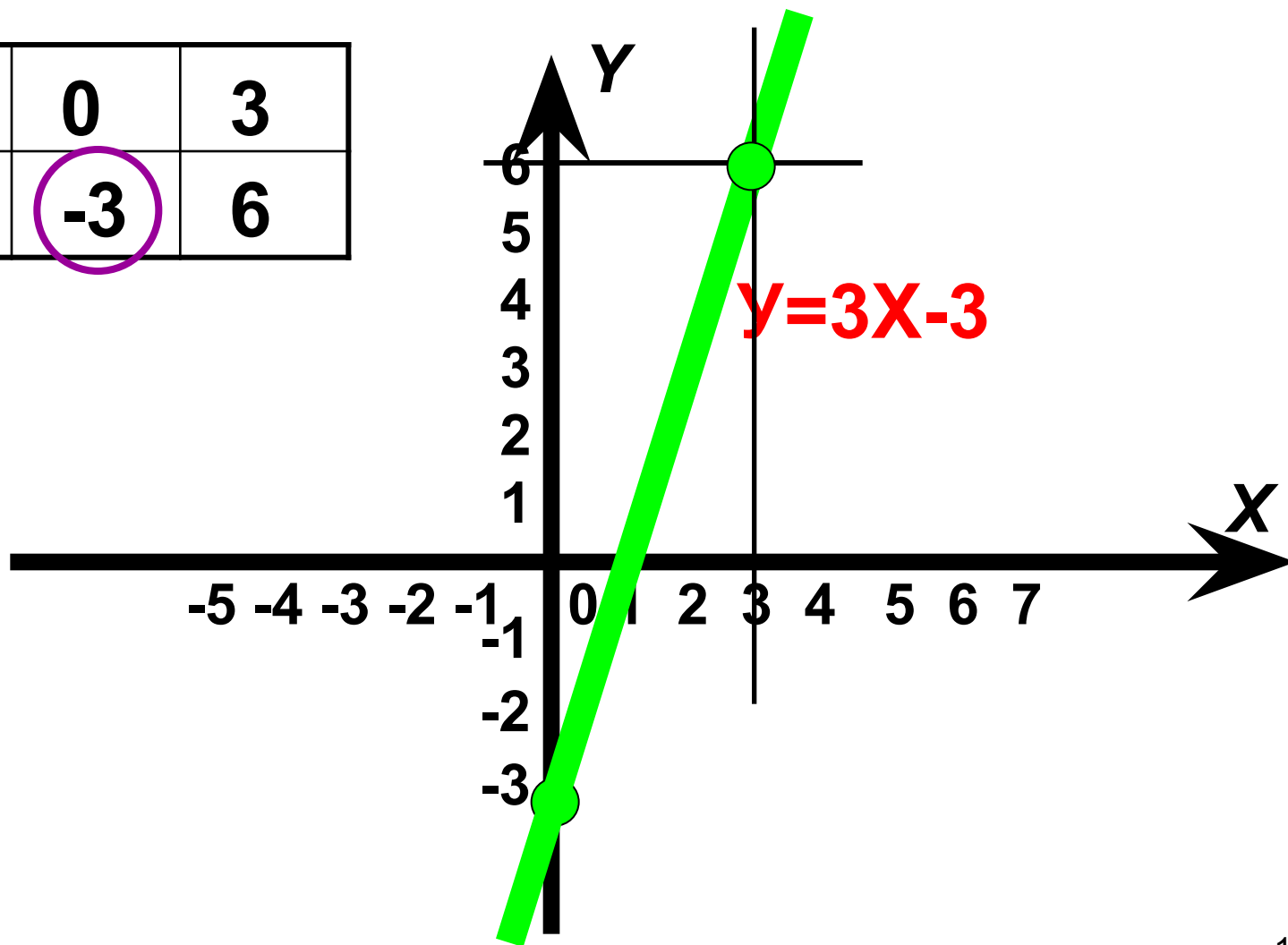
$$y = kx + m$$

является

прямая

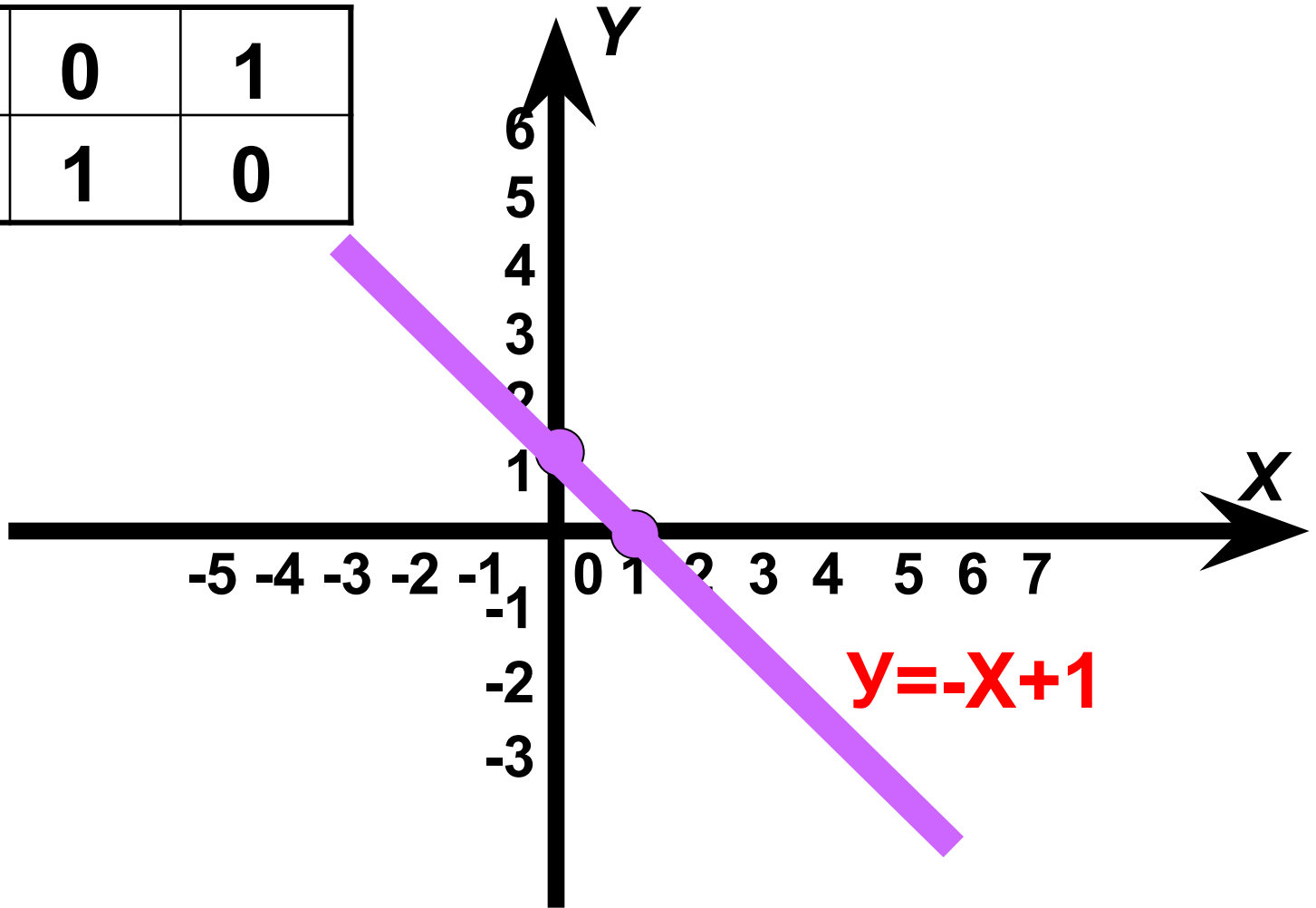
$$y = 3x - 3$$

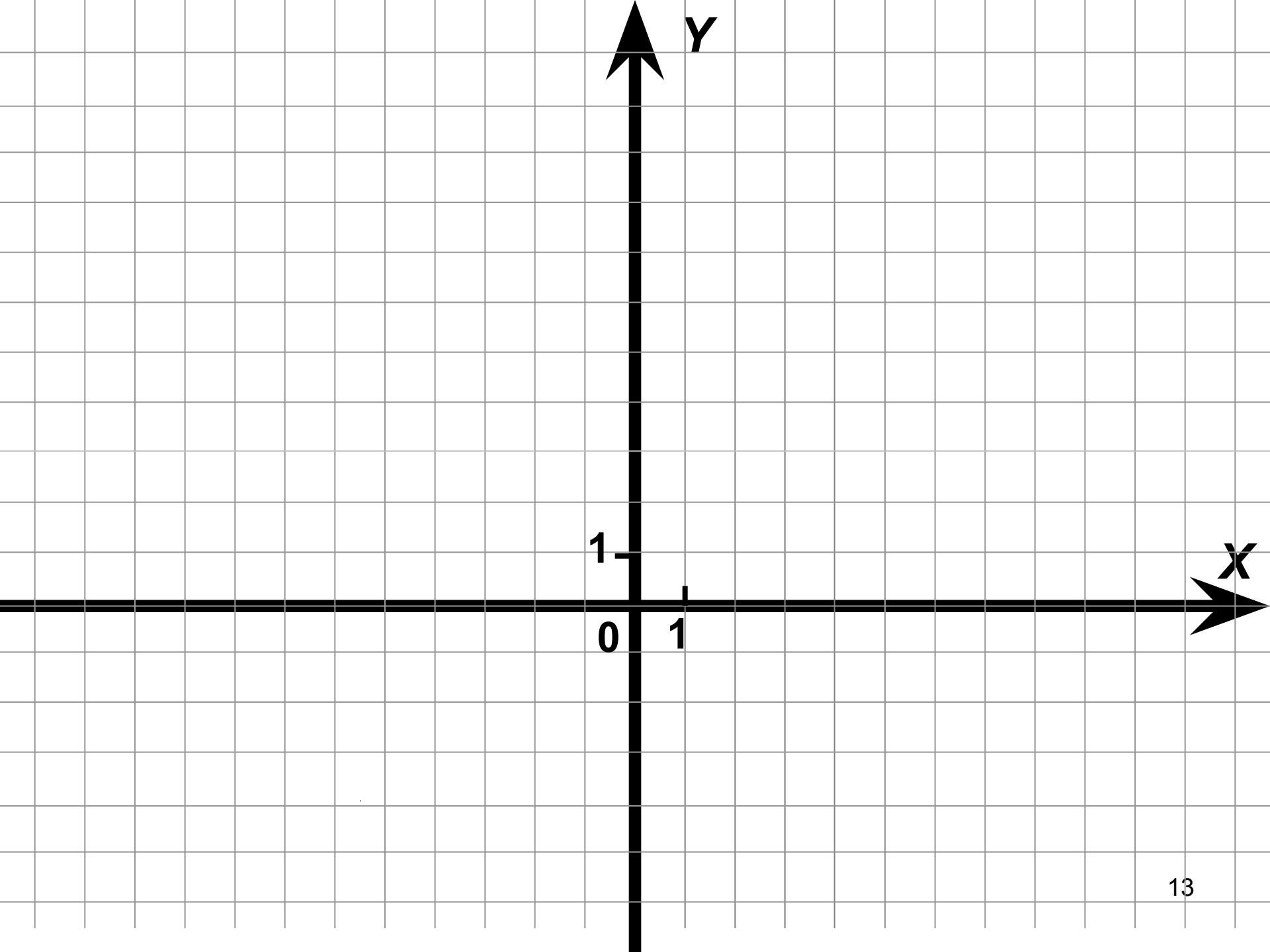
|   |    |   |
|---|----|---|
| x | 0  | 3 |
| y | -3 | 6 |



$$y = -x + 1$$

|          |          |          |
|----------|----------|----------|
| <b>x</b> | <b>0</b> | <b>1</b> |
| <b>y</b> | <b>1</b> | <b>0</b> |





Найдите точку пересечения

прямых  $y = -2x + 3$  и

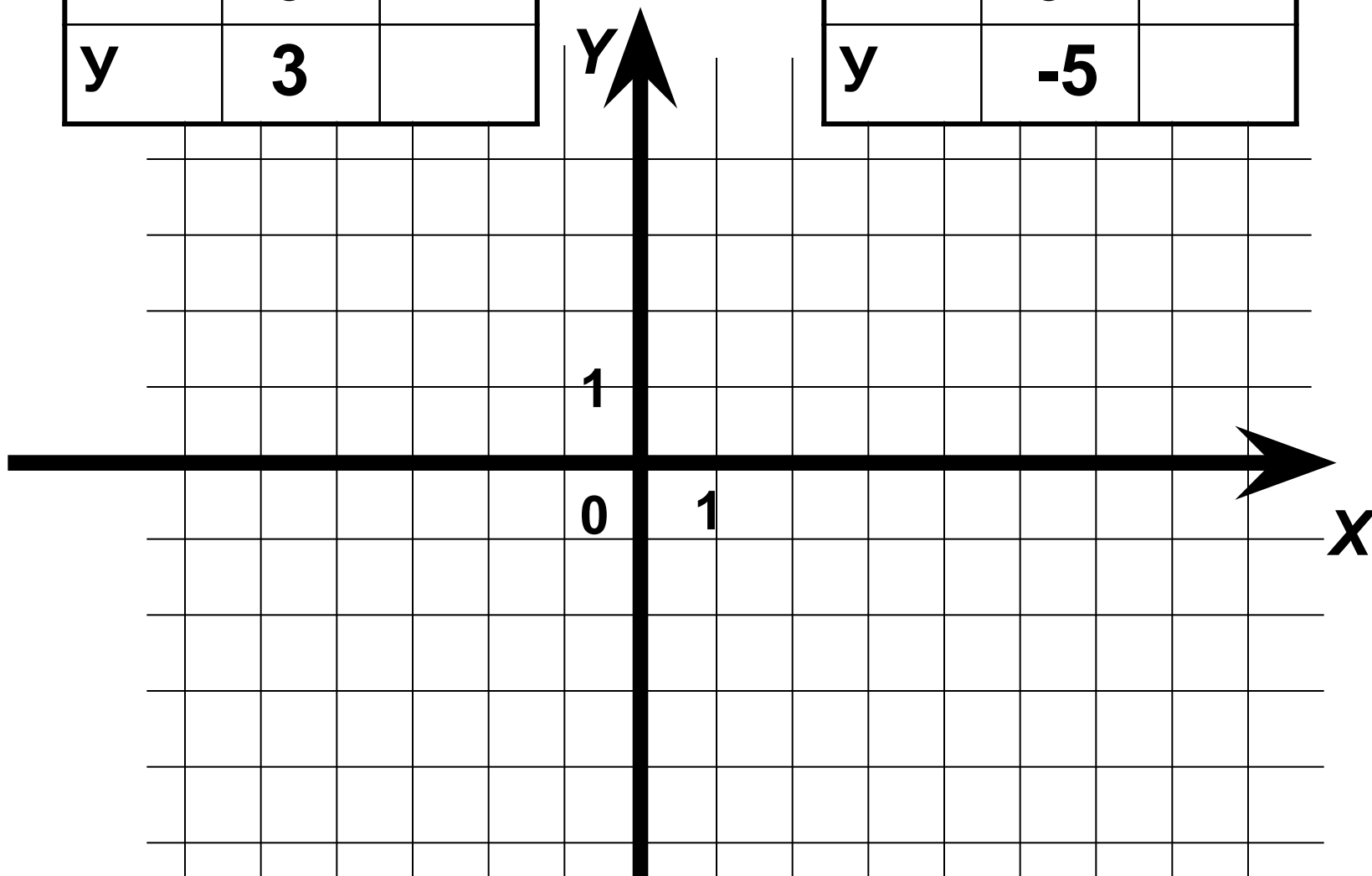
$y = 2x - 5$ .

$$y = -2x + 3$$

$$y = 2x - 5$$

|   |   |  |
|---|---|--|
| x | 0 |  |
| y | 3 |  |

|   |    |  |
|---|----|--|
| x | 0  |  |
| y | -5 |  |



$$y = -2x + 3$$

$$y = 2x - 5$$

|   |   |    |
|---|---|----|
| x | 0 | 3  |
| y | 3 | -3 |

|   |    |    |
|---|----|----|
| x | 0  | 1  |
| y | -5 | -3 |

