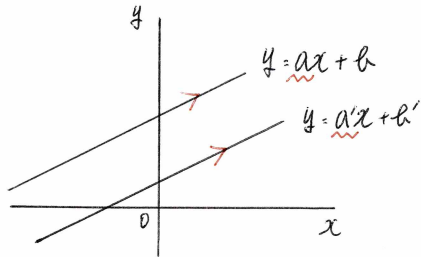


(4) 平行な直線



④ 平行 \iff 傾きが等しい

$$a = a'$$

例. $y = 3x + 5$ に平行で、 $(-1, -2)$ を通る直線

$$y = 3x + 5 \text{ に平行だから } a = 3$$

$$y = 3x + b \text{ に } (-1, -2) \text{ を代入}$$

$$-2 = 3 \times (-1) + b$$

$$-2 = -3 + b$$

$$-3 + b = -2$$

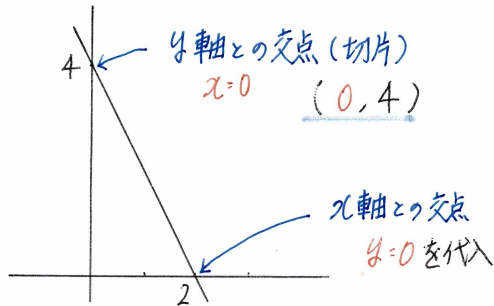
$$b = -2 + 3$$

$$b = 1$$

$$\underline{y = 3x + 1}$$

◇ x軸、y軸との交点の座標

例、 $y = -2x + 4$



$$\begin{aligned} 0 &= -2x + 4 \\ 2x &= 4 \\ x &= 2 \quad (2, 0) \end{aligned}$$

例(1) $y = -\frac{1}{2}x - 3$ に平行で、 $y = -2x + 2$ と y軸上で交わる直線

$$\downarrow \\ a = -\frac{1}{2}$$

$$\downarrow \textcircled{\text{ホ}} \text{切片が等しい} \\ b = 2$$

$$\underline{y = -\frac{1}{2}x + 2}$$

例(2) $y = 2x + 4$ に平行で、 $y = -x + 5$ と x軸上で交わる直線

$$\downarrow \\ a = 2$$

$$\downarrow \textcircled{\text{ホ}} y=0 \text{を代入} \\ 0 = -x + 5$$

$$x = 5 \quad (5, 0)$$

$y = 2x + b$ に $(5, 0)$ を代入

$$0 = 2 \times 5 + b$$

$$0 = 10 + b$$

$$10 + b = 0$$

$$b = -10$$

$$\underline{y = 2x - 10}$$