

【中2数学 | 一次関数の利用】

下のようにグラフ上の2点が与えられている。それぞれの1次関数の式を求めよ。

(1) (1,1) (2,2)

$$\text{傾き} \quad \frac{2-1}{2-1} = 1 \quad \therefore y = x$$

$$\therefore y = x + b$$

$$1 = 1 + b \quad \therefore b = 0$$

(2) (3,-1) (5,9)

$$\text{傾き} \quad \frac{9-(-1)}{5-3} = 5 \quad \therefore b = -16$$

$$\therefore y = 5x - 16$$

$$\therefore y = 5x + b$$

$$-1 = 15 + b$$

(3) (2,1) (1,-2)

$$\text{傾き} \quad \frac{1-(-2)}{2-1} = 3 \quad \therefore b = -5$$

$$\therefore y = 3x - 5$$

$$\therefore y = 3x + b$$

$$1 = 6 + b$$

(4) (1,3) (5,-5)

$$\text{傾き} \quad \frac{-5-3}{5-1} = -2 \quad \therefore b = 5$$

$$\therefore y = -2x + 5$$

$$\therefore y = -2x + b$$

$$3 = -2 + b$$

(5) (1,1) (3,2)

$$\text{傾き} \quad \frac{2-1}{3-1} = \frac{1}{2} \quad 1 = \frac{1}{2} + b$$

$$\therefore b = \frac{1}{2}$$

$$\therefore y = \frac{1}{2}x + b$$

$$\therefore y = \frac{1}{2}x + \frac{1}{2}$$

(6) (2,3) (5,2)

$$\text{傾き} \quad \frac{2-3}{5-2} = -\frac{1}{3} \quad \therefore y = -\frac{1}{3}x + b \quad \therefore b = \frac{11}{3}$$

$$3 = -\frac{2}{3} + b$$

$$\therefore y = -\frac{1}{3}x + \frac{11}{3}$$