直線方程式

(1) 點斜式：L：過 (x_0, y_0)，斜率 m

$$\boxed{y-y_0=m(x-x_0)}$$

(2) 兩點式：過 $A(2,5)$，$B(3,7)$

$$m_{AB}=\frac{2}{1}=2$$

$$y-5=2(x-2)$$

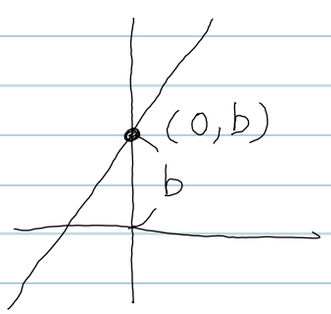
(3) 斜截式　斜率為 m，y 截距 b

$(0,b)$

$$y=mx+b$$

$$y-b=m(x-0)$$

$$y=mx+b$$



(4) 截距式　x 截距 a，y 截距 b

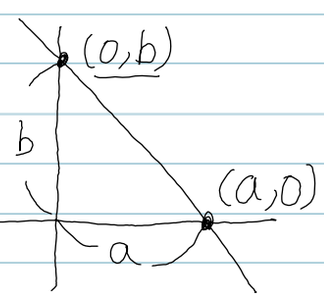
$$\frac{x}{a}+\frac{y}{b}=1$$

$$m=\frac{-b}{a}$$

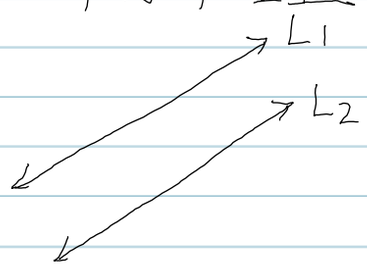
$$y-b=\frac{-b}{a}(x-0)$$

$$ay-ab=-bx$$

$$\frac{y}{b}-1=-\frac{x}{a}$$



(5) 平行與垂直



$L_1 \parallel L_2$

$m_1=m_2$