

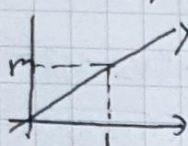
# 제 4장 벡터방정식

① 직선  $X = mX + b$ :  $m$ 은 기울기  $b$ 는  $X$ 절편

$b=0 \Rightarrow X = mX \Rightarrow$  원점을 지나는 직선

$X=1 \Rightarrow X=m \Rightarrow (1, m) \quad X=mX$

$\hookrightarrow S(1) = (1, m)$



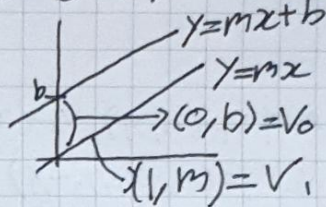
$\hookrightarrow (1, m) = V$

$(X, Y) = tV$

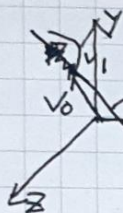
$X = tV$

$\hookrightarrow$  좌표

$b \neq 0 \Rightarrow Y = mX + b$

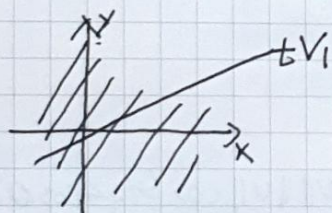


$X = V_0 + tV_1$   
 $(a, b)$



$X = V_0 + tV_1$  ① 좌원  $\leadsto$  벡터 방정식의 장점  
 $\hookrightarrow (a, b, c)$

② 평면의 벡터방정식

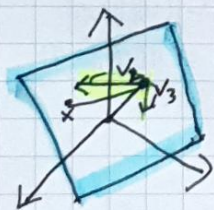


$\because$  if  $V_1 \parallel V_2$  이 아니라면 2벡터로 평면 표현 가능.  
 $\hookrightarrow V_1 = kV_2$

$(3, 2)$

$\hookrightarrow 3e_1 + 2e_2 \quad (e_1 = (1, 0), e_2 = (0, 1))$

$(a, b) = a \cdot e_1 + b \cdot e_2$



$X = V_1 + t_0V_2 + t_1V_3$

$\hookrightarrow$  좌원  $t_0, t_1$