$$(x, y) = x(1, 0) + y(0, 1)$$

$$= xe_1 + ye_2$$

$$x(1,0) + y(0, 1)$$

$$= (0, 0)$$

$$(x, y) = (0, 0)$$

$$e = (e_1, e_2) B = (e_2, e_1)$$

$$f(2,3) = 2(1,0),3(4) = 2e_1 + 3e_2 = (3/2)e = (2,3)e$$

$$f(2,3) = 3(0,1),2(1,0) = 3e_{24} 2e_{1} = (3/2)e$$

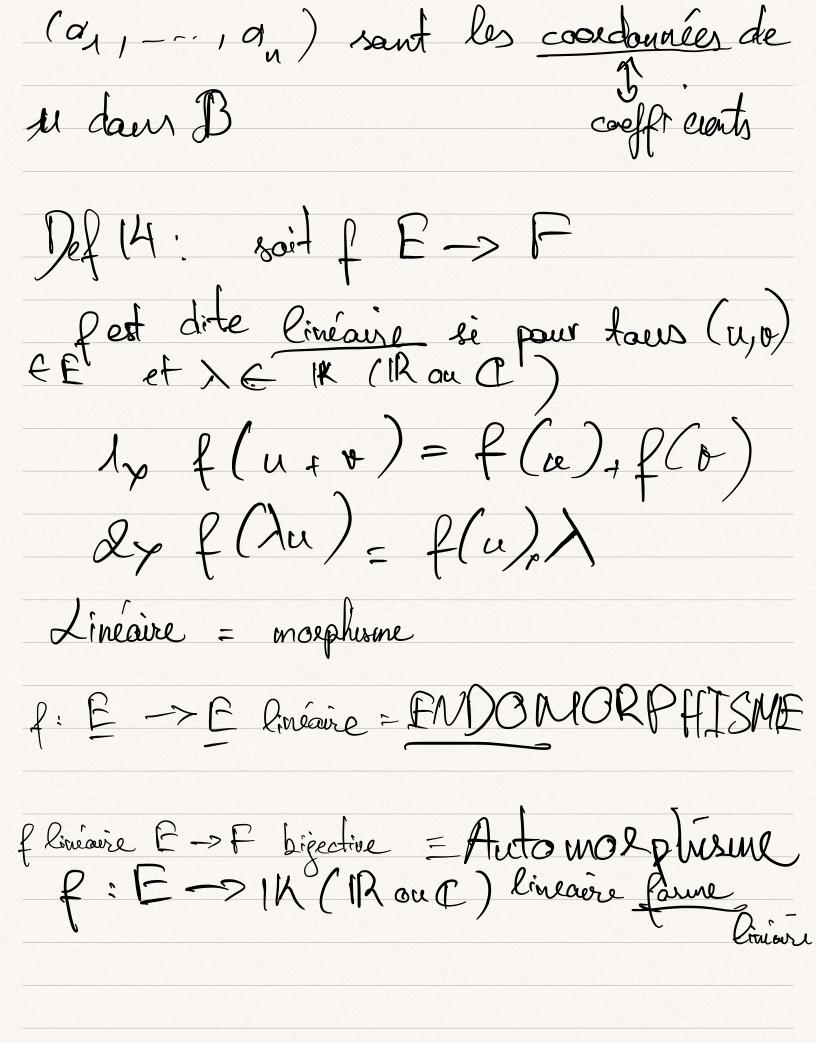
$$f(2,3) = 3(0,1),2(1,0) = 3e_{24} 2e_{1} = (3/2)e$$

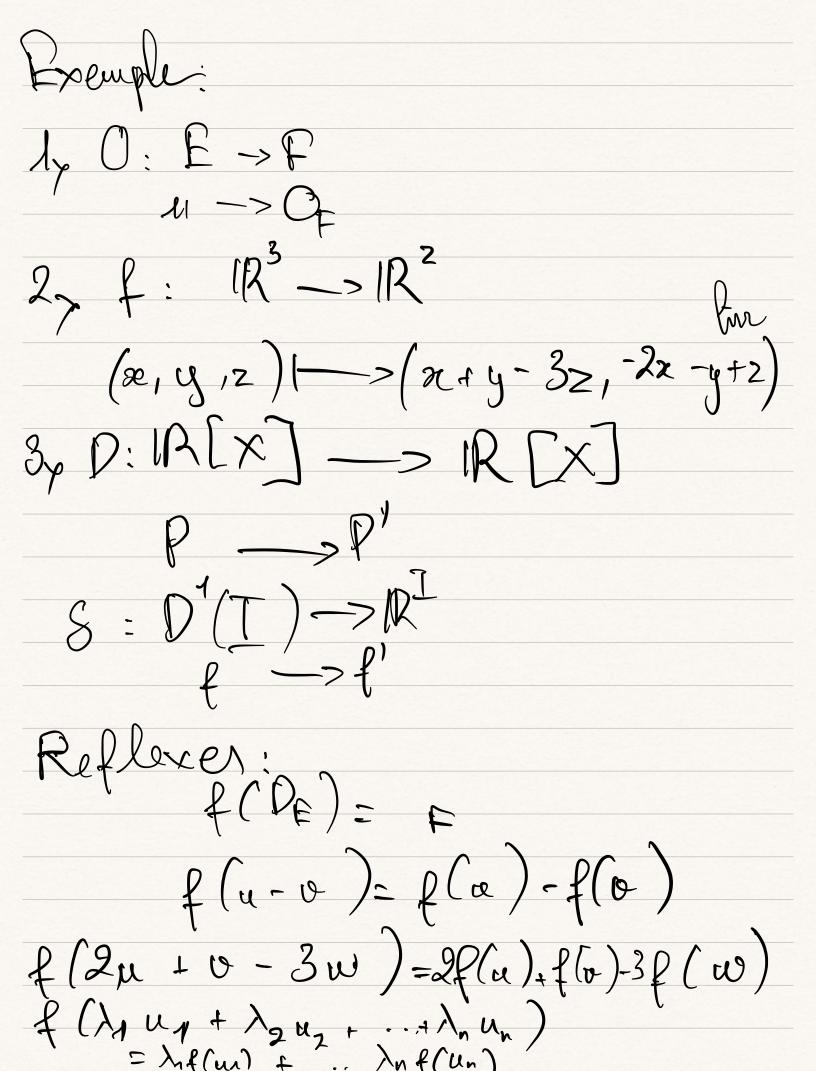
$$f(2,3) = 3(0,1),2(1,0) = 3e_{24} 2e_{1} = (3/2)e$$

$$f(3,2) = (3,2)e$$

$$f$$

+ dn Un alore





Nef 15: E, Fesposse vectoriel B=(en...en) base de E et $E = (E_1, E_2, ... E_n)$ base de F Soit FE ->F lin f (e1) = a1,1E, + a2,1 E2+ ... am, 1Em f(e₁)= a₁, E₁ + a_{2,2} E₂ + ... a_{m,2} E f (en) = a1, E1 + a2, n E2 + ... am, n Em Flore MB, $e(\ell)$ = $\begin{cases} a_{1,1} & a_{1,2} \\ a_{2,1} & a_{2,2} \end{cases}$ $\begin{cases} e_{1} & e_{2} \\ a_{2,1} & a_{2,2} \end{cases}$ $\begin{cases} e_{2} & e_{2} \\ e_{2} & e_{2} \end{cases}$

En:

$$f: \mathbb{R}^3 \longrightarrow \mathbb{R}^3 \text{ fm } \mathcal{B}(e_1, e_2, e_3)$$

we base de \mathbb{R}^3
 $f(e_1) = e_1 + 2e_2$
 $f(e_2) = 3e_1 + 6e_2 + 2e_3$
 $f(e_3) = 2e_1 - e_3$
 $f(e_1) = \begin{cases} f(e_1) & f(e_2) & f(e_3) \\ 2 & 6 & 6 \\ 2 & 2 & -1 \end{cases}$
 $f(e_1) = \begin{cases} f(e_1) & f(e_2) & f(e_3) \\ 2 & 6 & 6 \\ 2 & 2 & -1 \end{cases}$

F: $\mathbb{R}^3 - \mathbb{R}^2$ $(x,y,z) \rightarrow (x+y-2,-x+2) \text{ fin}$ $\mathbb{B} = (e_1,e_2,e_3)$ pare comonique du \mathbb{R}^3 $e_1 = (1,0,0)$ $e_2 = (0,1,0)$ $e_3 = (0,1)$ $e_4 = (1,0)$ $e_5 = (0,1)$ $e_5 = (1,0)$ $e_7 = (0,1)$

$$M(f) = \begin{pmatrix} 4 & 1 & -1 & \xi_1 \\ -1 & 0 & 1 & \xi_2 \end{pmatrix}$$

$$f(e_1) = f(1,0,0) = (1,-1)$$

$$= (1,0) - (0,1) = 1\xi_1 + (-1)\xi_2$$

$$f(e_2) = f(0,1,0) = (1,0) = \xi_1$$

$$Q_{-2} = (1,0) = \xi_1$$

Peoplie lé 10
Soit MB, e (f) et
$$\mu = (x_1 - x_n)_g \in \mathbb{R}$$