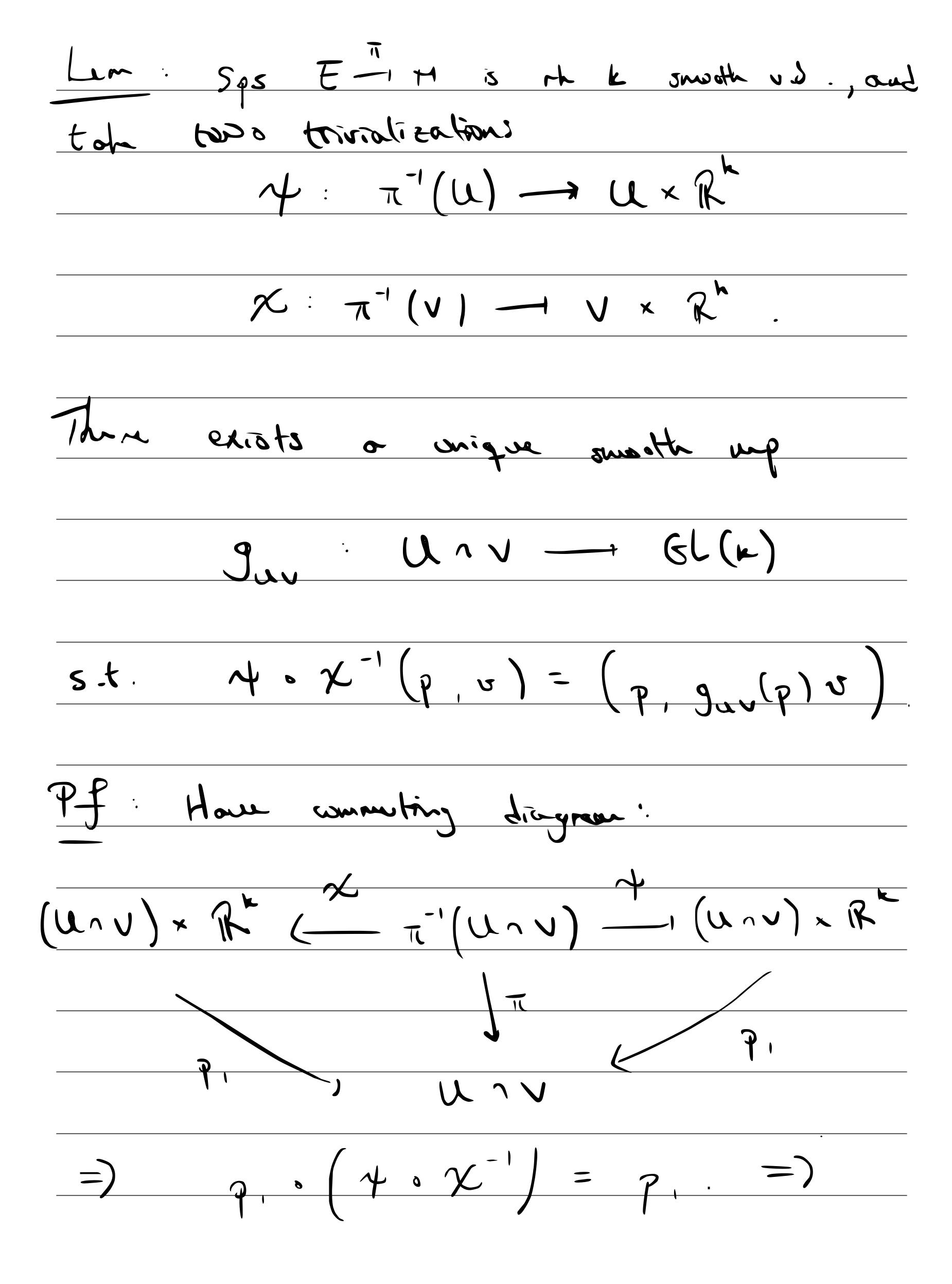
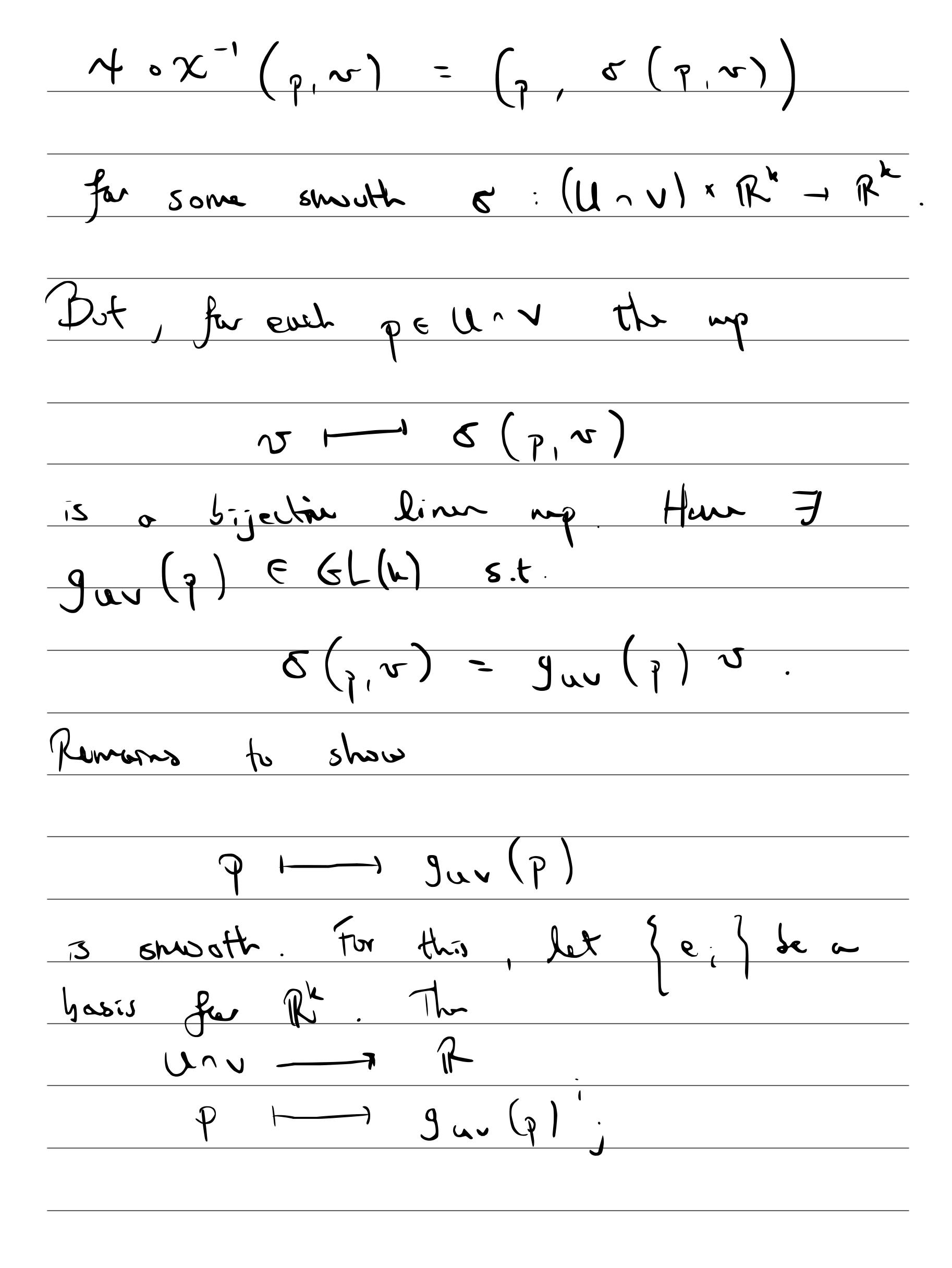
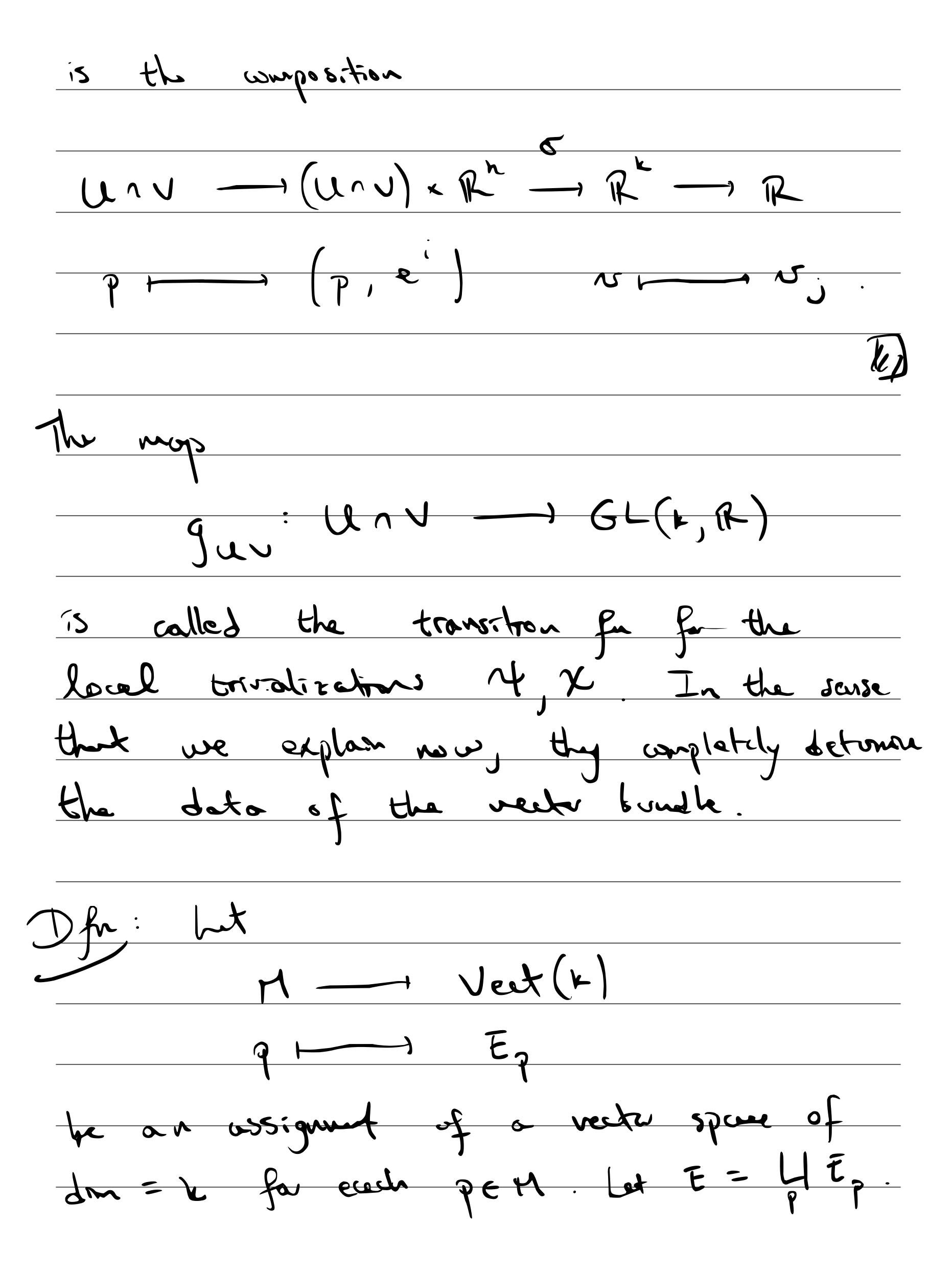
Cox 1: Sps peR(v). Thu by the
rank then we can find woordinates new p
$V = \frac{\partial}{\partial x}$ in local words.
The the corresponding flow is
$\frac{\partial_{+}(x) = (t + x', x', x')}{=}$
$\left(\frac{\partial}{\partial \theta} - \frac{\partial}{\partial r}(x)\right) = \frac{\partial}{\partial r}(x) = \frac{\partial}{\partial r}(x)$
10-t) 0 (x) (x) (x'+t, x',,x') 3 i (8)
$= \left(\begin{array}{c} x' + t, x', \dots, x' \\ \end{array} \right) \left(\begin{array}{c} 3x \\ \end{array} \right)$

Novenibur 1 17 vector brudle. The most important axion of a vector bundle is local triviality. This says every point pett has a nod For eng q e u 4 determins Rom vanpliem

Prop. T: TH -1 H is a rent = dim H
suat vector bondle.
Pf. Given chart (U, \$1 of M one
have trivializations
+: \(\pi^{-1}(u) \) \(\pi\) \(\pi\) \(\R^k\)
3, (vi)
37 P
This is linear on fibres and satisfies port = T. The composition
20 4 = T. The composition
$\frac{1}{\sqrt{2}} + \frac{1}{\sqrt{2}}$
$\frac{1}{\pi^{-1}(u)} + \frac{1}{u} \times \mathbb{R} \xrightarrow{\phi \times 1} \phi(u) \times \mathbb{R}$
15 the chart for 71(4). 55 4 is
a diffeourphon.







Prop. II E = UE, as above, then
gling duto for E determes the
gloing data for E determes the unique structure of a rester budle on
$\pi: \ \ E \ \ -\!$
Af : Next time.
Ex: Sps E, E' are v. 8'5 of rowh
k, k respectably. The Whitney som
is the v.b.
$E''=E\oplus E'$
where - (EAE), = E, OE,
$-\pi'': E'' \rightarrow H, (\nabla, \nabla_p') \longmapsto p.$
If pett doore U < H udd of p
smull enough 60 that we
have local trivictivations for