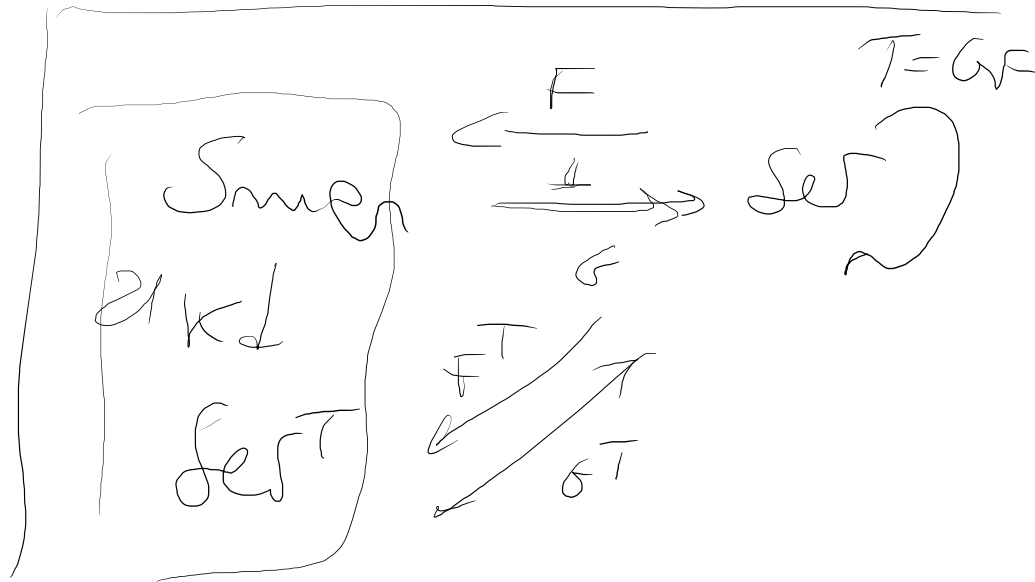
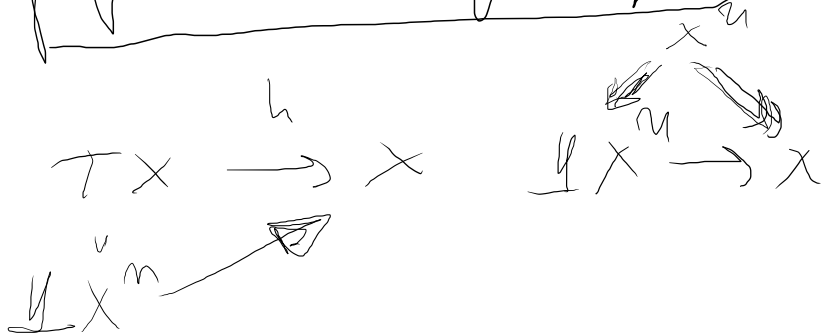


Saunders Misc. Lane

Categories for the Working

Mathematical

free semigroups



F. Borceux Handbook of categorical
Algebra

I - linguaggi categoriali - limiti - effetti

II - categorie algebriche - categorie abeliane

III - Teoria topos

Vol 1

^u stump effizienzieren

4

ef rep

ef fut



Vol 2

\mathcal{L} regulare

$$ef\text{-}rep = ef\text{-}fute$$

Vol 1

generator

P generate

generate fun

generate rep

DO NOT

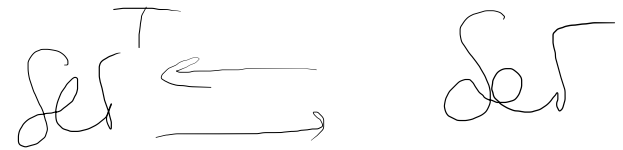
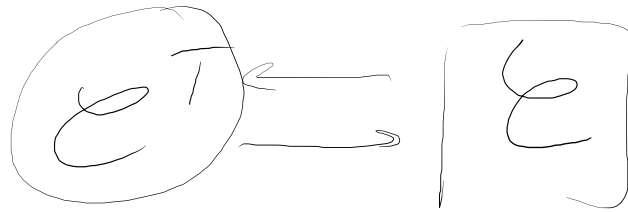
Help

exec
P gen rep
print rep

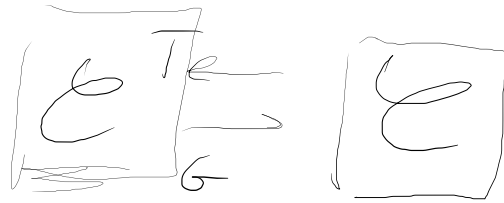
A $\xrightarrow{A(P, -)}$ Set

Vol 2

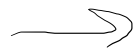
Leunt e coluunt u-coluunt //
al. algebre



Prop. 1



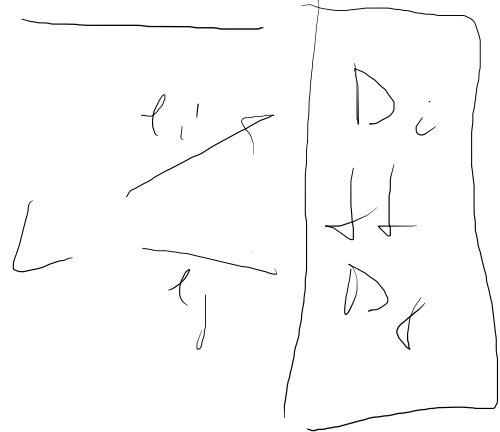
E ho leunt



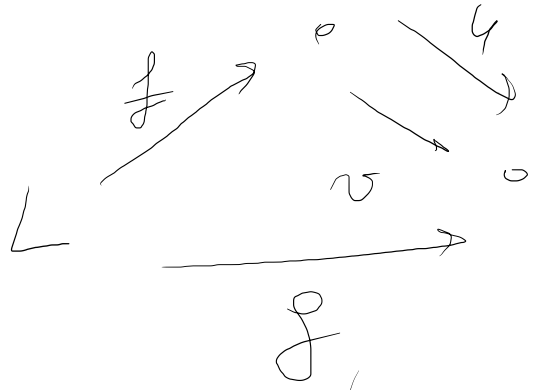
E^T ho leunt

G li-presen

Omnibus

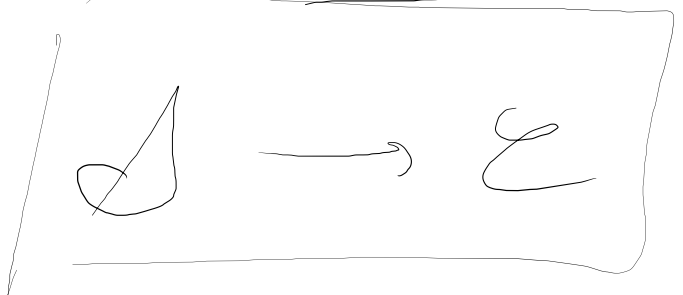


beet in \mathcal{E} for an omnibus



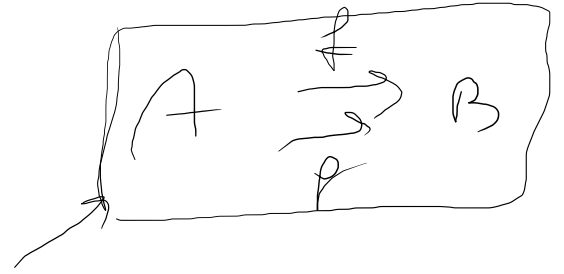
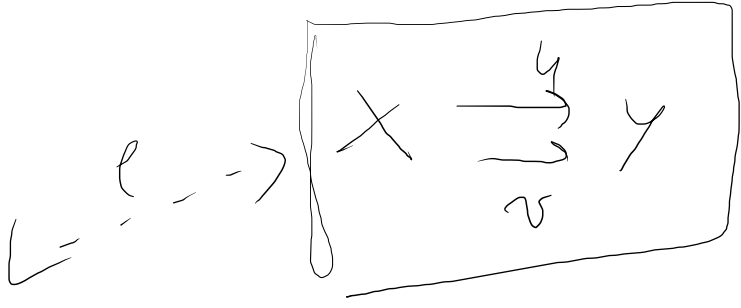
$u f = v f = f$

beet: for an FACTORS



Equation

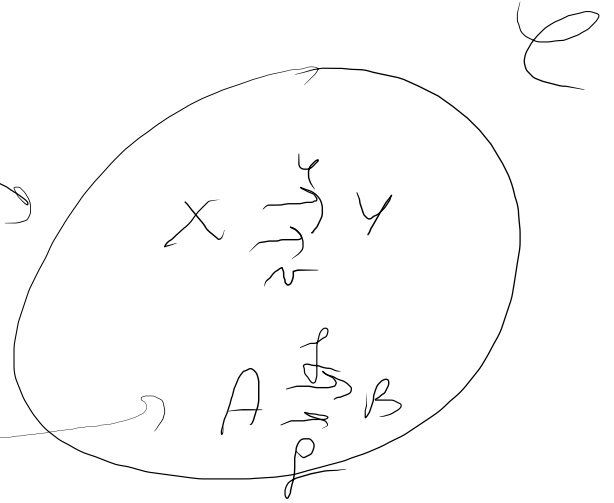
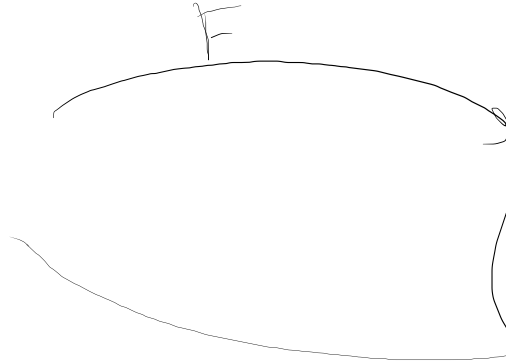
u ℓ



κ

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Proprietati

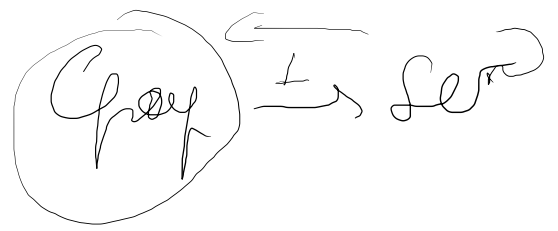
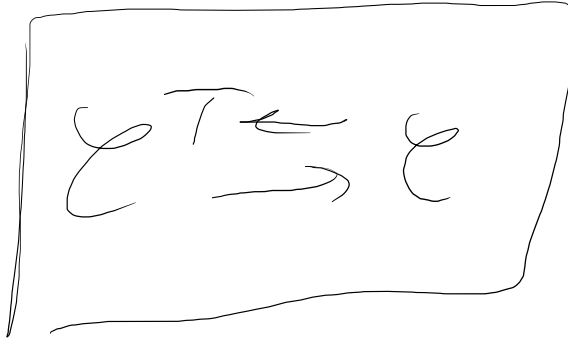
Se un \mathcal{E} e' un colunt eol e'

preservati de $T, T.T$



unde $\mathcal{E}T$ he colunt

preservati de v

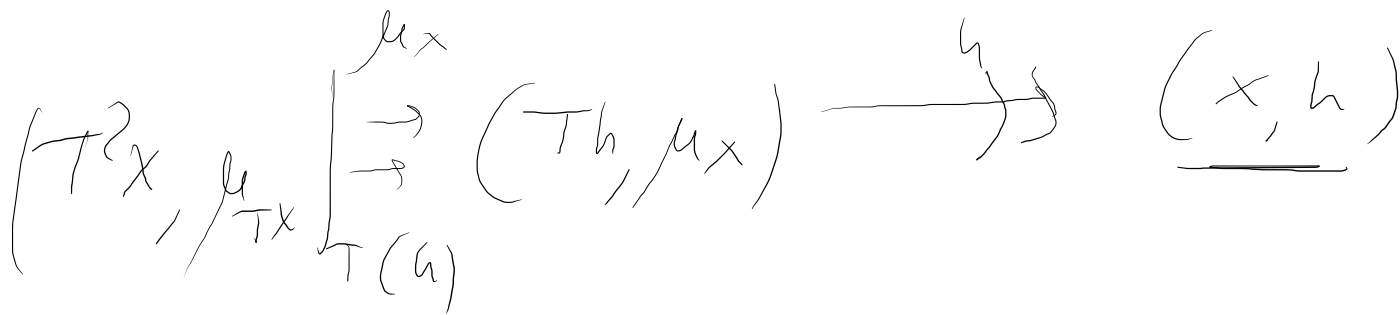


Lemma.

$\mathcal{E} \cap \mathcal{T}$

$\forall (x, h)$ it separates $\mathcal{E} \cap \mathcal{T}$

in comp. in \mathcal{E}^T



\mathcal{E}^T

Proposition 3

\mathcal{E} has columns

Some equivalent

- \mathcal{E}^T has rows
- \mathcal{E}^T has full column rank

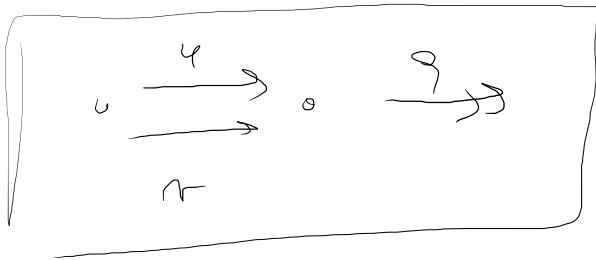
TEOREMA

\mathcal{L} compl. cocompl. righte

ep. ep. rep. ho. fexen $\left(\begin{matrix} \text{Set} \\ U \\ \text{Ox cells} \end{matrix} \right)$

(1) \mathcal{L}^T compl. - cocompl. righte

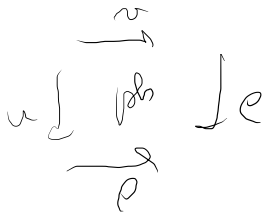
(2) $U: \mathcal{L}^T \rightarrow \mathcal{L}$ e' OSALNO



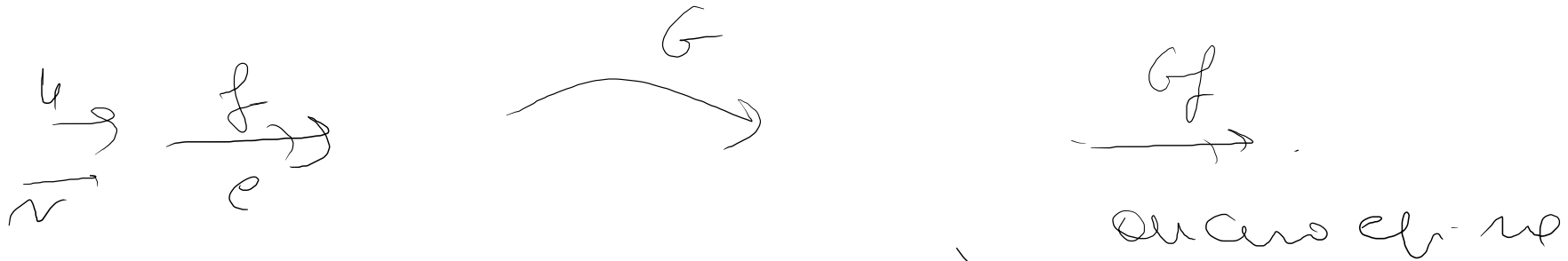
top exalm

$$p = \text{Coep}(u, v)$$

$$(u, v) = \text{Kern } p$$



③ G herena e riflette eq. ripetute



$$f = \text{Coep}(u, v)$$

~~$$Gf = \text{Coep}(Gu, Gv)$$~~

④ $\begin{array}{c} \xrightarrow{u} \\ \xrightarrow{v} \end{array}$ in e^T è cofibra nucleata

$\text{co}(Gu, Gv)$ è cofibra nucleata

5

se \mathcal{L} e-OSADA $\rightarrow \mathcal{L}^T$ e-OSADA

algebraic subset

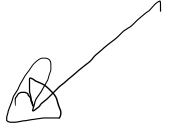
esolto

P falso
be

\Leftrightarrow

se^T

m-pedlicchi @ imops. w



pedlicchi @ unts. w