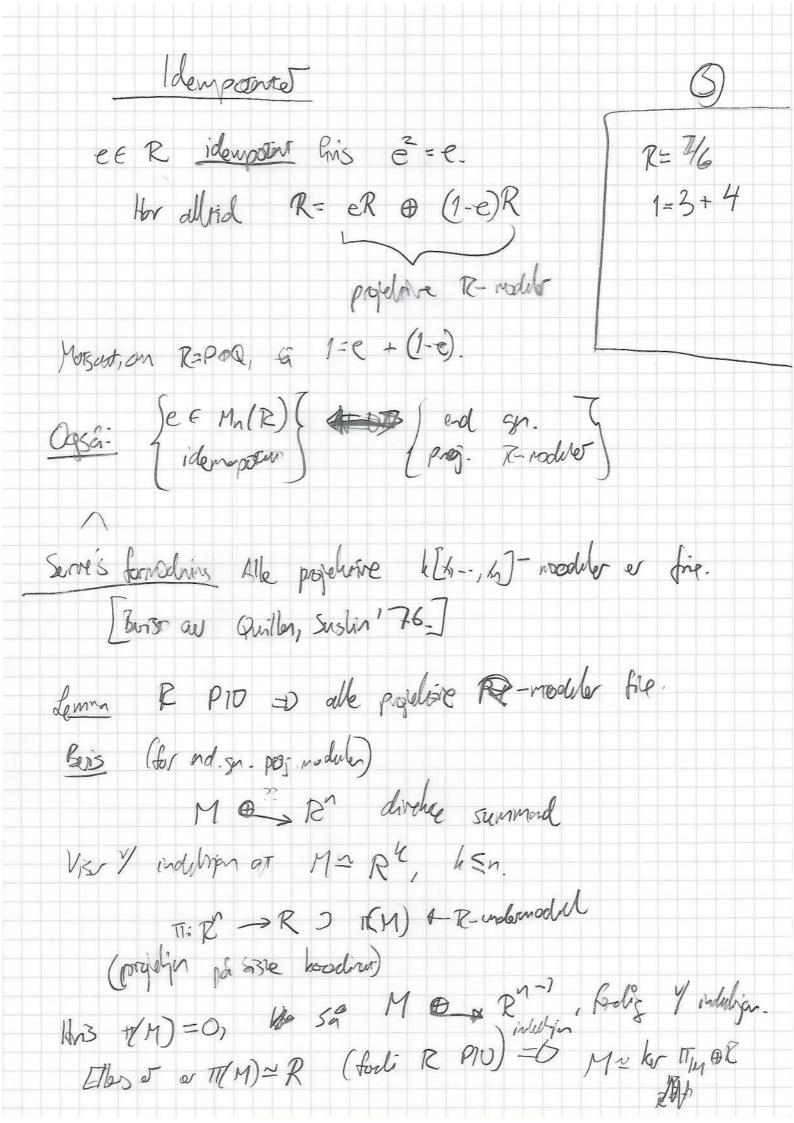
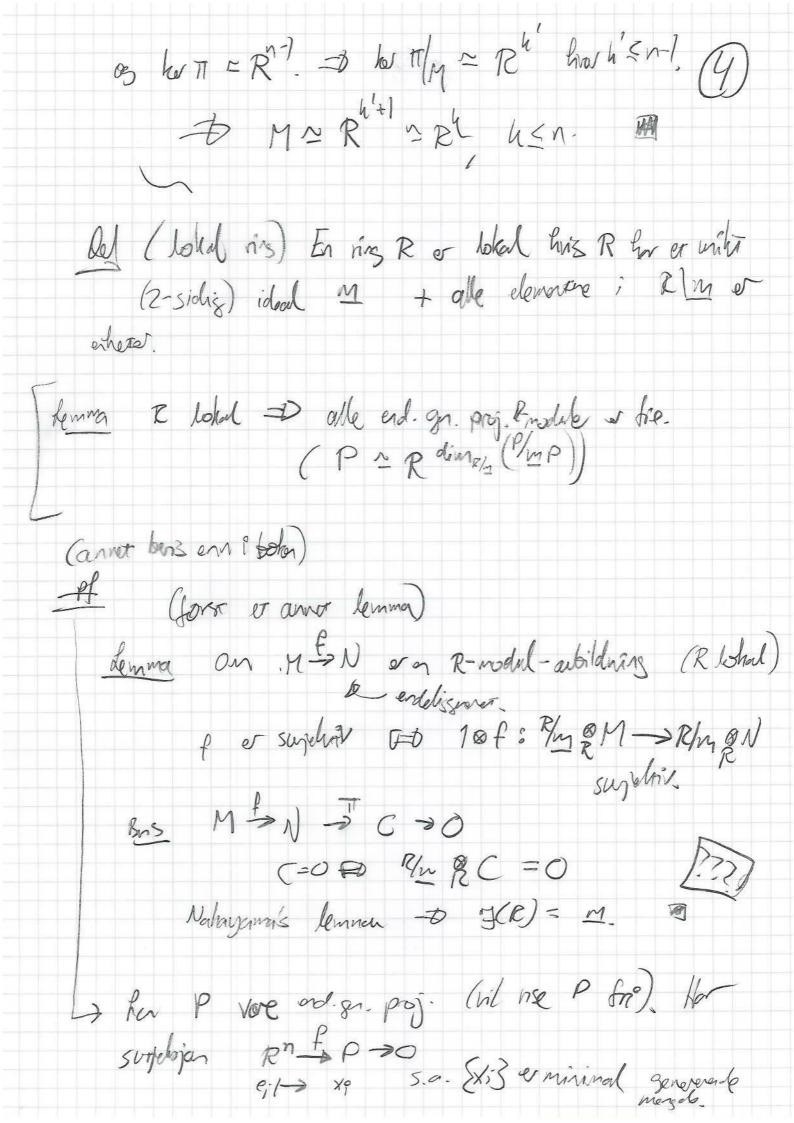
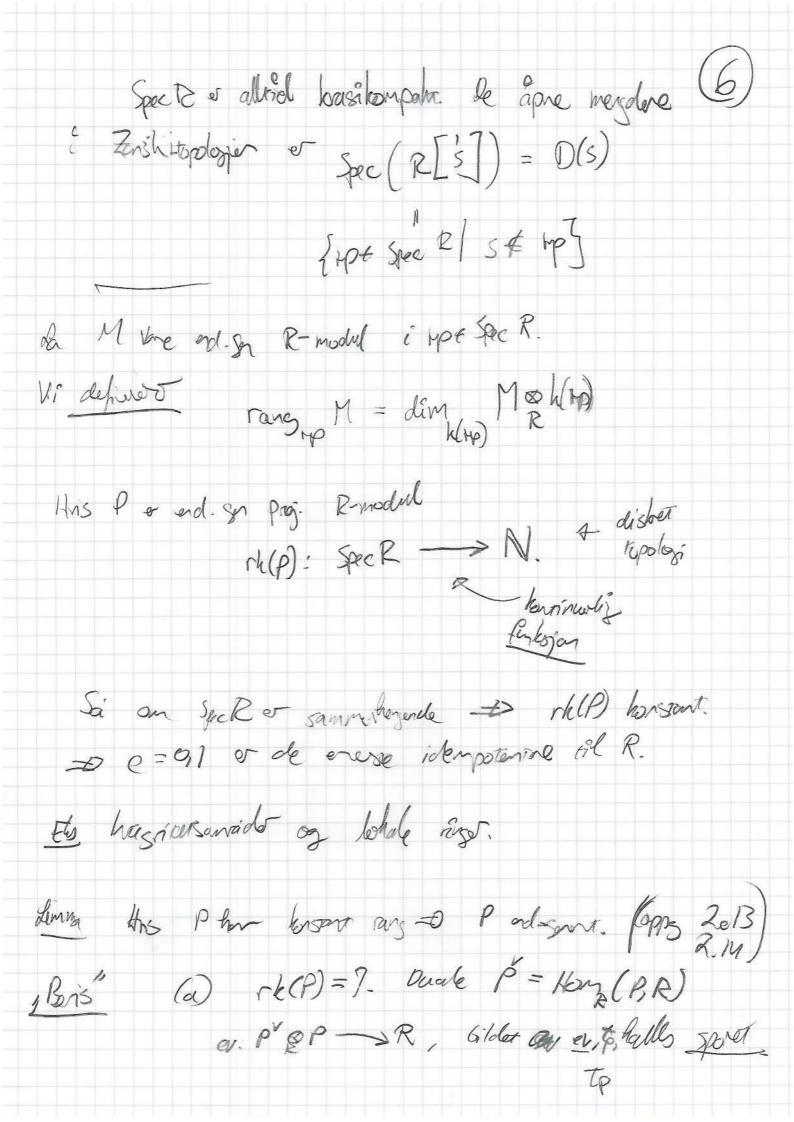
241-205
Lemma Alle projektivo R-moduler et flore.
Pl M proj 50 direture summand aw his
modul. M= BM; flot FD M; flot Y? Stell moduler or flare.
Els. 21-1 (2) R=Mn(F) F, lepp / dh'insjersing Lag R-modul (; CR har office of null borsett
tra cost c
Ci 2 G som R-modulo. Siden R2 ACi es hot Ci
projekår R-modul. Vi har dinn (i = n, an fin R-modul hart-dinnsfers et multippel av n (Så (i ible er få, non projekår).
$ \begin{array}{c c} \hline VE(s) & P = Z[VS] \rightarrow I = (3, 2 + V - S) \\ 6 = (1 + V - S)(1 - V - S) = 2.3 \end{array} $
si e har the angles fatorising.
I o en projekriv R-moduli defineres
$\theta: R \to I$ $(5) \to 3x + (2+(-5)y) \in I$ $(5) \to 3x + (2+(-5)y) \in I$ $(5) \to 3x + (2+(-5)y) \in I$ $(7) \to 7x = id_{1}$ $(8) \to 7x = id_{2}$ $(9) \to 7x = id_{1}$
Spht 13 w. I-JE 31 / 1 /2 3 W I

Men I es the et hordided = I Elle fi-Els ET ille projentit ideal! R= F(X,y] >I= (x,y), heller like or wordideal. Her presiden $\mathbb{R}^{2} \xrightarrow{(\times 0)} \mathbb{I} \to 0$ Note à vice ar & ible for on sphing. Are w: I - R et or splitting. $\omega(x) = (a, b)$ $\Rightarrow X = \theta \omega(x) = \theta(\alpha, \delta) = \alpha X + \delta Y$ $q, \delta \in \mathbb{R}$ SbN a= adx) + a, (x) /+ -- + am(x) / som d. i h[x][Y] $V_{i}^{o} = \frac{1}{4} \sum_{i=1}^{m} q_{i}(x) Y \qquad b = -\sum_{i=0}^{m} q_{i+1}(x) x Y_{i}^{o}$ $\omega(y) = (id) \Rightarrow c = \sum_{j=1}^{n} \varsigma(\lambda) y^{j}$ Regrer w $\omega(xy)$ på to máxor. $\Rightarrow (xc, xd) = (\alpha y, 6y)$ $\Rightarrow by = xd \Rightarrow x \in (y, x)$ $\Rightarrow y = yd$





Ra K være kjæren: $0 \rightarrow K \rightarrow \mathbb{R}^N \rightarrow P \rightarrow 0$ $e_i \mapsto x_i$ Har plitting 0 ->K -> R" => P->0 O -> PM & K -> PM & R -> O this or where deliverage as {9 & x1 -- , 10 h} general by of, sá ville a etre deliverse av {1-, 23 assi genere P, fin leminalt. Desfor or {10 x-., 10 x} boxs for P/m & P. → 10TT er iSomofi, sa Plug K = 0. D K=0 1 Newigura. (2.21 taplensty: også wendelizagnere proj. moduler over totale ringer et frio. Kurdler NPE Sec R. (R Communitiv). Port sen projetient R-model. On or Pip ~ Rip for n>0. Videre christerer SER/rip s.c. P[5]~ (R[5])ⁿ



P. Sti, generi au X Y upt Spec R. (4) ev (Xip & Xip) = 1 (pr old) => to \$ up (sjold) Show 1 = \(\frac{1}{2} \) for the MO (\quad \text{suc} R), with a deletaren ti generale Pup. 25 {5;3 vil da general P. (B) that or ship = 1 konsens? On vil 1 P ha konsens rus 1. Fra @ or do endelissevere (\(\frac{\pi}{2}\) \quad \qq \quad \ Lemmer 2.4 R hommwords. En R-model M or behale frithis

Y MESpeck, I SERING S.a. MISI or on fin R-model. Edgade et da elizaber? OM v ad. egg prig R-modul

3 M bokert for av adelig rang. (i alle prinident) 3) M artilis preservolor R-model of & Mp6 Speck, Ber3 (appgane) (Se per berisor) Nesse of Milnor-parthing!