	LE01_12
and the second	Fernanda Oliveira Carneiro de Albuquerque
	an issues ouver a carriero de Ansoquerque
	Questão 1
	a ( \( \frac{1}{\sqrt{9}} \cdot \frac{1}{\sqrt{9}} \cdot \frac{1}{\sqrt{9}} \cdot \frac{1}{\sqrt{9}} \cdot \( \frac{1}{\sqrt{9}} \cdot \frac{1}{\sqrt{9}} \cdot \frac{1}{\sqrt{9}} \cdot \frac{1}{\sqrt{9}} \cdot \( \frac{1}{\sqrt{9}} \cdot \frac{1}{\sqrt{9}}
	a) ( <u>\la \la_b.a</u> ) ( <u>\la_a.aba</u> ) <u>b</u> (( <u>\la_a.aaa</u> ) ( <u>\la_a.aaa</u> ))
	Livre
	× ()
	$-b(\lambda w. \underline{\lambda k. w})(\underline{\lambda x. x b x}) b((\lambda y. yyy)(\lambda z. \overline{z} z))$
	M a
	$\frac{\beta}{\beta}$ ( )
	$\frac{\beta}{\beta} (yk \cdot (yx \cdot xp \times y)) p ((yx \cdot \lambda\lambda\lambda)) (yz \cdot 55))$
	$\frac{\beta}{\beta} > (\lambda \times . \times b \times) ((\lambda y. yyy)(\lambda z. zz))$
	M a
	S S S S S S S S S S S S S S S S S S S
	-b (xy, yyy) (x2.72) b (xy, yyy) (x2.22)
	E M
	В
	B (\\2.\frac{22}{\lambda}(\\\2.\frac{22}{\lambda}(\\\2.\frac{22}{\lambda})\lambda(\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
	M d
	$\frac{\beta}{\beta}$ (12.22)(12.22)(12.22)
	β ( λ2. 22) ( λ2. 22) ( λ2. 22) p ( λλ·λλλ) ( γ5. 55)
	Entra em looping, portanto não possui forma normal.
1	
)	

b) (\la. \lab.b) ((\lab.\la.ab)b) ((\laa.aba)(\laa.aba))  Livre  Livre	
~ (yw. yx.x) ((yx. y5.5 x)p) ((yk. kpk)(y1.11))	
B (NX·X)((XK·KPK)(XL·LL))	
M 9	
Bo (( )K. KPK) ()T. LT))	
Bo ((XLLL) b (XLLL))	
m a	
Bo (PP (Yr. rr))	
Forma normal: (bb(AL.LL))	
*	

c) (xa.	(Aa.b)((Ab.Aa.ab))((Aa.aba))
	livre Livre Livre
<u>~</u> ⊳() c	- <u>Aw.b)((Ax.Ay.yx)b)((Az.zbz)(AL.LL))</u>
	9
B ( Nw.	((\lambda 2. 2 \lambda 2) (\lambda (\lambda 1. \lambda 1))
	M a
<u>₿</u>	
Forma n	Ormal: b

d)(\(\lambda\)(\(\lambda\)\(\lambda\)(\(\lambda\)\(\lam	
olivre	
~ ( /x · y / x / ( / x / x / x / x / x / x / x / x	
B ( yx. x) ((xr. KPK) (xr. sr))	\
B D (()K.KDK)()T LL)	
8	
B (XL.LL) b (XL.LL)  M a	
β	
β bb (λL.LL)	
Forma normal: bb(\l.\L)	