5.8.1.4 parenthesize the tollowing EECS 762 HWS Tuke Vercher

 $(b) \times \times \times = (\times(\times(\times)))$ (a) $\lambda_x : \lambda_y : \chi = (\alpha_x : (\lambda_y : \chi))$

 $(C) \times \Im \times \times \times \cup (\times (\Im \times \times \times (\times)))$

500 I compute free vars for the following AxxxAxx (B)

- fu(x) u fu(y) u fu(1+(x)/8x3) u fu(y) (Kx xx h x)

= +v(x)0+v(y)0 23023

EX3VEY3- Ex. 43

(b) (xxy xx

= fuc (x, y) (x, x) (x) (x) (x)

E 43 - 530 530 543 =

C) S.x. (Og.y) x XXX JrCAx. (Ayy) y Ax.x]

= +1 (Dy. y) (+1(y)

n fr

```
(Aw.w)(AxxX(Azz) (Aw.w)XAxxX(Azz)
                                                                                                                                                                                                                           (3ww)(Axx)(Chyy)(Chyy)(AxxXChyyyXAzz)) (hww)(Axx)(Chyy)(Azz))
                                                                                                                                                                                                                                                                                                                                                                              (Aw. w) (Az. z)
                                                                                                                                                                                                                                                                                              (Dw.w)(Ax.x)(Az.z)
                                                                                                                                                               (\alpha)(\Omega_{\omega,\omega})(\Omega_{x,x})(\Omega_{y,y},y)(\Omega_{z,z})
                                                                                                                                                                                                                                                                                                                                                                           (Axx XA22)
                                                                                                                                                                                                                                                                                                                                                                                                                                                              (b) [(x \times )/x](\Omega_2, x \neq z) = (\Omega_2(x \times ) \neq z)
                                                                                                                                                                                                                                                                                      ((2,2K)(pyy)(2,2))
                                                                                                                                  5.8.3.5 Listall possible Breductions
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (Dw.w)(Gz.z)
                                                                                               (C) [(z\times)/x](Az.xz) = Aw.(z\times)w
                          (a) [x/y](9z, 2y) = 9z, zx
5.8.2.2 perform subst.
                                                                                                                                                                                                                                                                                                                                ((228) ((228) ((228) ((34.4) ((34.4))
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (228)(685)
                                                                                                                                                                                                                                                                                                                                                                                   (9xx)(9z,z)
                                                                                                                                                                                                                                                                                                                                                                                                                                72.2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        92.2
                                                                                                                                                                                                                                                                       ((Sxx)((04.4)(Azz))
                                                                                                                                                                                                                                                                                                                                                                                     (220)(826)
```

(if hy)(xxx)) hy y. (Ax.x)((AxxXAyy)) Ay.(Ax.xX(Ax.xXAyy)) Dy. (7x.x)(0x.x)(24.41) Children the 5.5.3.5(6) 24 (4x.x)(24.4) (3x.2y.x)((3x.x)(3y.y)) (3x.3y.x)((3x.x)04.y)) Jy ((Jx.x)(Jyy)) (8.AC). Ry (A.Ry). Py (9x.9y.x)(9xx)(3yy)) (3x.2x.)(2x.x)(2x.x)(2y.y)) (Arbe)(x here) (RAB) AC (9x. hy.x)(9xx)(9yy) (Chry xy) (dx.x)(dh.x) (dr.x)(dr.x)(dy.y) 14.(3x.x)(34.4) (3x.24.x)(34.4) (A. Les As (A. Ros As

5.8.4.2 foreach reduction sup write down the corresponding context

a) 1x. (2yyy) ((1222)x) - 1x. (2yyy)(xx) (= \x. (03.44)* 6.) (9x.x)((8y.yy) 22. (9w.w) = (9x.x)((9y.yy) 92.2)

(* 26 (RR. Ry) x x (y 2 , 2)

C. (2x.x)(2x.4) Az. 22 m (2y.4) Az. 22

C=* 922

 $(\lambda_x, \kappa_x)(\lambda_x, \kappa_{xx})$