

5)  $(\lambda x. ((\lambda y. x y) z)) (\lambda x. x y)$

↑ ligada    ↑ ligada    ↑ libre

↓ libre

Orden Normal:

$$\beta = (\lambda x. ((\lambda \cancel{x}. (\lambda x. x y) \cancel{x}) z))$$

Se vuelve ligada  
∴ regla alpha. ANTES.

$$\alpha = (\lambda x. ((\lambda u. x u) z)) (\lambda x. x y)$$

$\overline{F}$      $P_1$

$$\beta = ((\lambda u. (\lambda x. x y) u) z)$$

$$\beta = (\lambda u. (\lambda x. x y) u) z$$

↓ quite  
paréntesis  
extra

$$\beta = (\lambda x. x y) z$$

$$\boxed{\beta = z y}$$

Orden Aplicativo:

$$= (\lambda x. ((\lambda y. x y) z)) (\lambda x. x y)$$

$\overline{F}$      $P_1$

$M = \text{Cntr}PQ(\overline{F})$

$$M = ((\lambda y. x y) z)$$

$$= (\lambda y. x y) z$$

$$= x z$$

$$P_1 = (\lambda x. x y)$$

$$\Rightarrow (\lambda x. (x z)) (\lambda x. x y) = (\lambda x. x y) z = \boxed{z y}$$