

# Hoja de trabajo 3

Jorge Luis Ortiz

16 de agosto de 2018

## 1. Ejercicio # 1

$$s(s(s(0))) \oplus s(s(s(0)))$$

$$s(s(s(0))) \oplus s(s(0))$$

$$s(s(s(s(0)))) \oplus s(s(0))$$

$$s(s(s(s(s(0))))) \oplus s(0)$$

$$s(s(s(s(s(s(0))))))$$

## 2. Ejercicio #4

$$\blacksquare a \oplus s(s(0)) = s(s(a))$$

$$a \oplus s(s(0))$$

$$s(a) \oplus s(0)$$

$$s(s(a))$$

$$\blacksquare a \otimes b = b \otimes a$$

$$s(a) \otimes b = b \otimes s(a)$$

$$s(a) \otimes b = b \otimes s(a)$$

$$s(a \oplus b) = b \otimes a$$

$$s(a \otimes b) = s(b \otimes a)$$

tambien aÑadimos  $s(b)$

$$s(a \otimes s(b)) = s(s(b) \otimes a)$$

$$s(a) \otimes s(b) = s(b) \otimes s(a)$$

Se demuestra con que la propiedad aplica para los sucesores.

- $a \otimes (b \otimes c) = (a \otimes b) \otimes c$