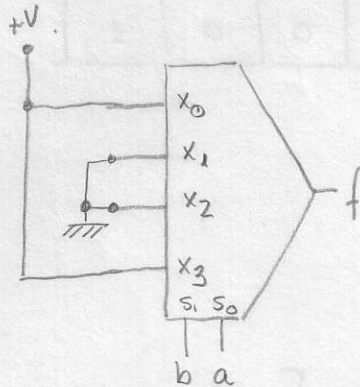


EJERCICIOS de MULTIPLEXORES

1) Implementar la función  $f(b,a) = \sum_2(0,3)$

	a	
b	0	1
0	1	0
1	0	1

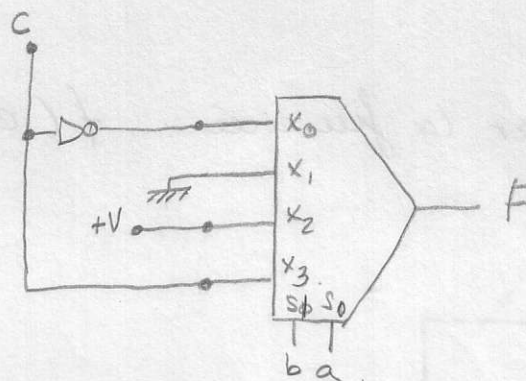


$2^m = n$  }  $n = \text{n}^\circ \text{ entradas}$   
 $m = \text{n}^\circ \text{ señales de selección}$

$m = 2$   
 $2^2 = 4 \Rightarrow n = 4$

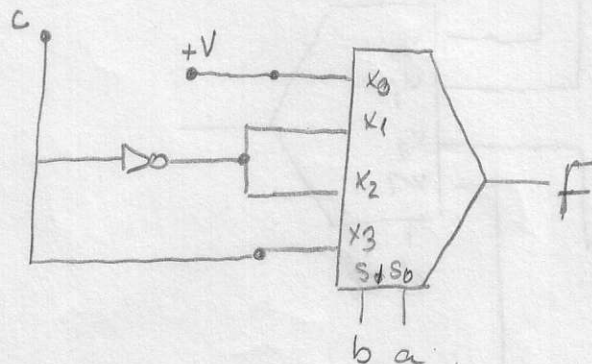
2) Implementar la función  $f(c,b,a) = \sum_3(0,2,6,7)$

	ba			
c	00	01	10	11
0	1	0	1	0
1	0	1	0	1
$F=f(c)$	$\bar{c}$	0	1	c



3) Implementar la función  $f(c,b,a) = \sum_3(0,1,2,4,7)$

	ba			
c	00	01	10	11
0	1	1	1	0
1	1	0	0	1
$F=f(c)$	1	$\bar{c}$	$\bar{c}$	c

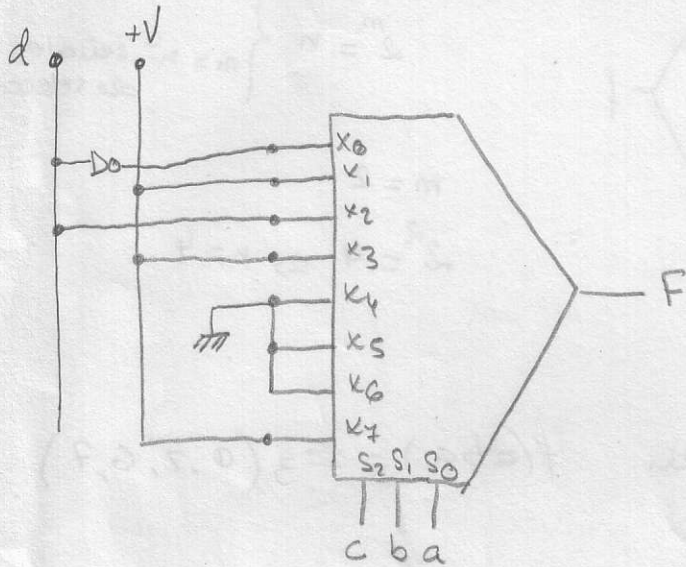


4) Ej: Implementar la función  $f(d,b,c,a) = \sum_4(0,1,3,7,9,10,11,15)$

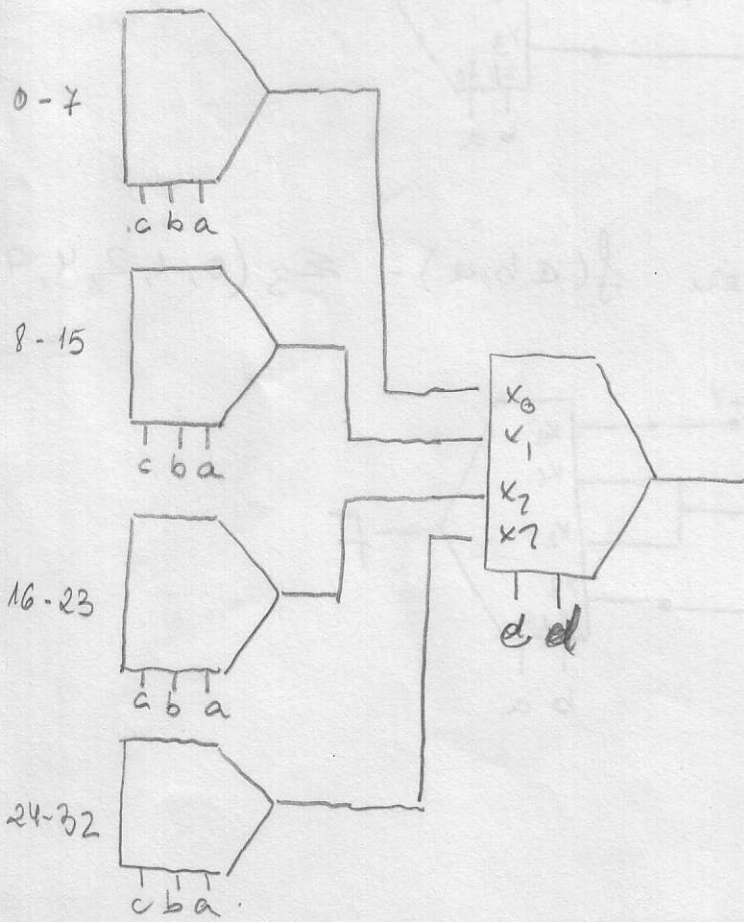
		cba							
d		000	001	010	011	100	101	110	111
0		1	1		1				1
1			1	1	1				1
$F=f(d)$		$\bar{d}$	1	d	1	0	0	0	1

$$2^m = n \quad \left\{ \begin{array}{l} n = \text{n.º ent.} \\ m = \text{selecc.} \end{array} \right.$$

$$m=3 \Rightarrow n=8 \text{ entr.}$$



5) Implementar la función:  $f(e,d,c,b,a) = \sum_5(0,1,3,8,11,13,17,23,28,29)$



$$2^m = n$$

$$m=5$$

$$2^5 = 32$$

	ed	cba
0	00	000
8	01	000
16	10	000
24	11	000

Ex: Implementar  $f = \sum_4 (1, 3, 5, 6, 15) + \sum_\phi (11)$   
 mediante un mux de 8 canales

cba	$x_0$	$x_1$	$x_2$	$x_3$	$x_4$	$x_5$	$x_6$	$x_7$
d	000	001	010	011	100	101	110	111
0		1		1		1	1	
1				X				1
1	0	$\bar{d}$	0	$\bar{d}/1$	0	$\bar{d}$	$\bar{d}$	d

