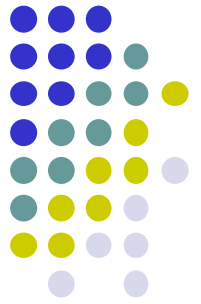


# CORREZIONE PROVA PARZIALE

## TRACCIA (A)



1.a)  $42_8$        $173_8$       conversione in  
    $B=2$

$$\begin{array}{c} 42 \\ \swarrow \downarrow \\ 100 \quad 010 \end{array}$$

$$42_8 = 100010_2$$

$$\begin{array}{c} 173 \\ \swarrow \downarrow \searrow \\ 001 \quad 111 \quad 011 \end{array}$$

$$173_8 = 1111011_2$$

1.b)  $^s \boxed{110101}$

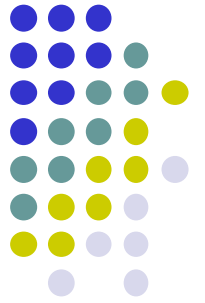
- modulo e segno :  $1 + 4 + 16 + 32 = 53$

$\boxed{-53}$

- complemento 2:

$01001011 = 1 + 2 + 8 + 64 = 75$

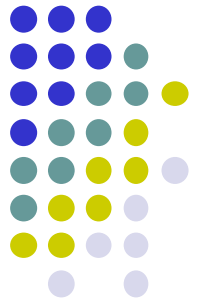
$\boxed{-75}$



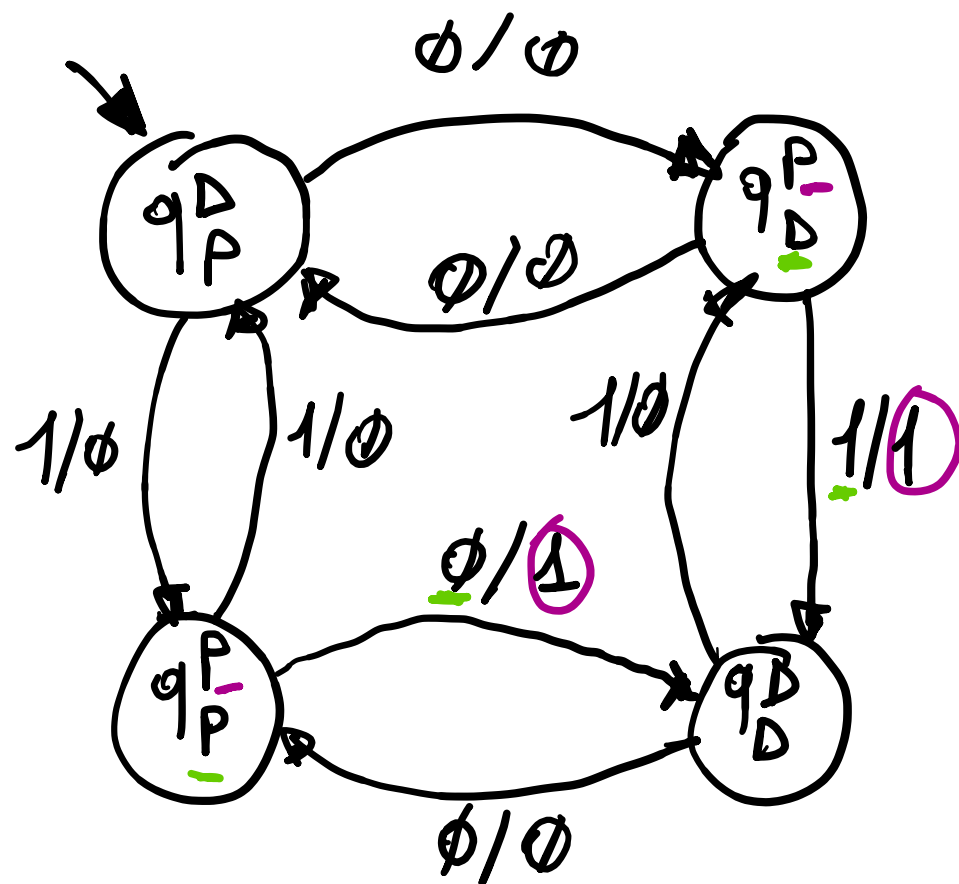
Es 2

		$x_3 x_4$			
		00	01	11	10
$x_1 x_2$	00	1	1	0	1
	01	-	0	-	0
	11	1	1	1	1
	10	1	1	1	1

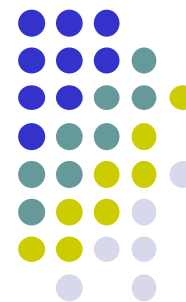
$$f = x_1 + \bar{x}_2 \bar{x}_4 + \bar{x}_2 \bar{x}_3$$



E<sub>3</sub>:



$q$   $\begin{matrix} x \\ y \end{matrix}$   $\begin{matrix} \rightarrow \\ \rightarrow \end{matrix}$   $\begin{matrix} x \\ y \end{matrix}$   $\in V$   $\begin{matrix} x \\ y \end{matrix}$   $\in \{P, D\}$   
 $\neq 0$



# TRACCIA B

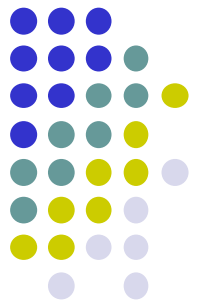
$$1.a) \quad \begin{array}{cc} 3 & 6 \\ \downarrow & \downarrow \\ 011 & 110 \end{array}$$

$$\begin{array}{ccc} 2 & 0 & 1 \\ \swarrow & \downarrow & \downarrow \\ 010000 & 001 \end{array}$$

$$1.b) \quad \begin{array}{ccccc} 8 & & 4 & & 2 \\ \boxed{1} & 00 & 10 & 100 \end{array}$$

$$4.s.: \quad 16 + 4 = 20 \Rightarrow \boxed{-20}$$

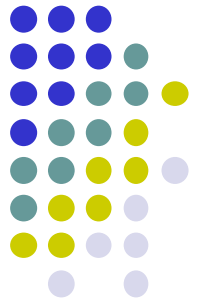
$$C2: \quad \begin{array}{ccccc} 6 & 5 & 3 & 2 \\ 0 & 11 & 01 & 100 \end{array} = 4 + 8 + 32 + 64 = 108 \Rightarrow \boxed{-108}$$



Es2:

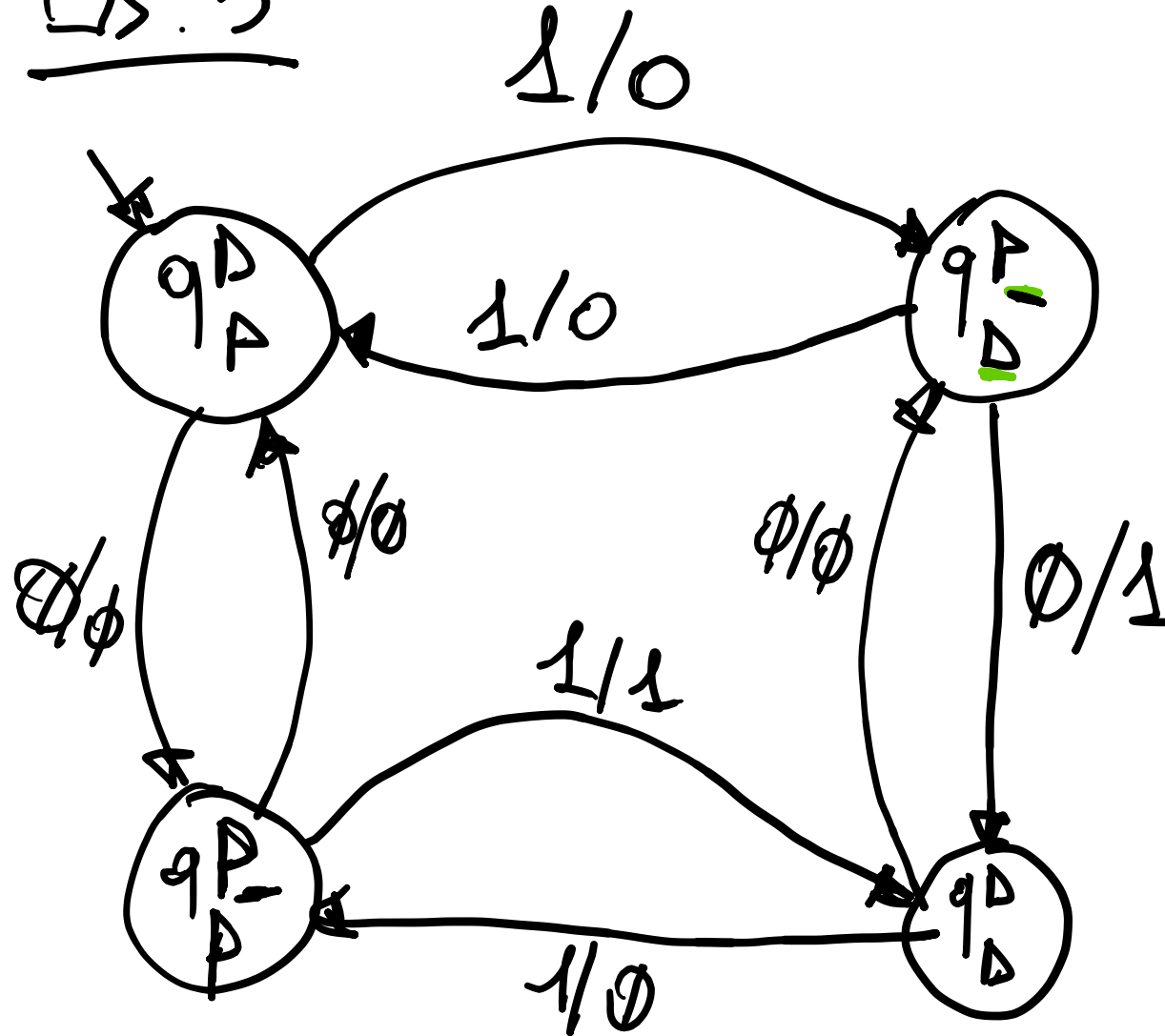
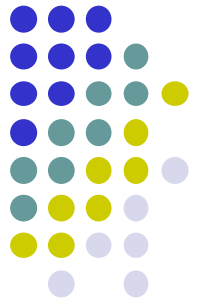
$x_3 x_4$					
$x_1 x_2$		00	01	11	10
	00	1	1	1	1
	01	0	0	0	0
	11	1	1	1	1
	10	1	1	1	1

$$f = x_1 + \overline{x_2}$$

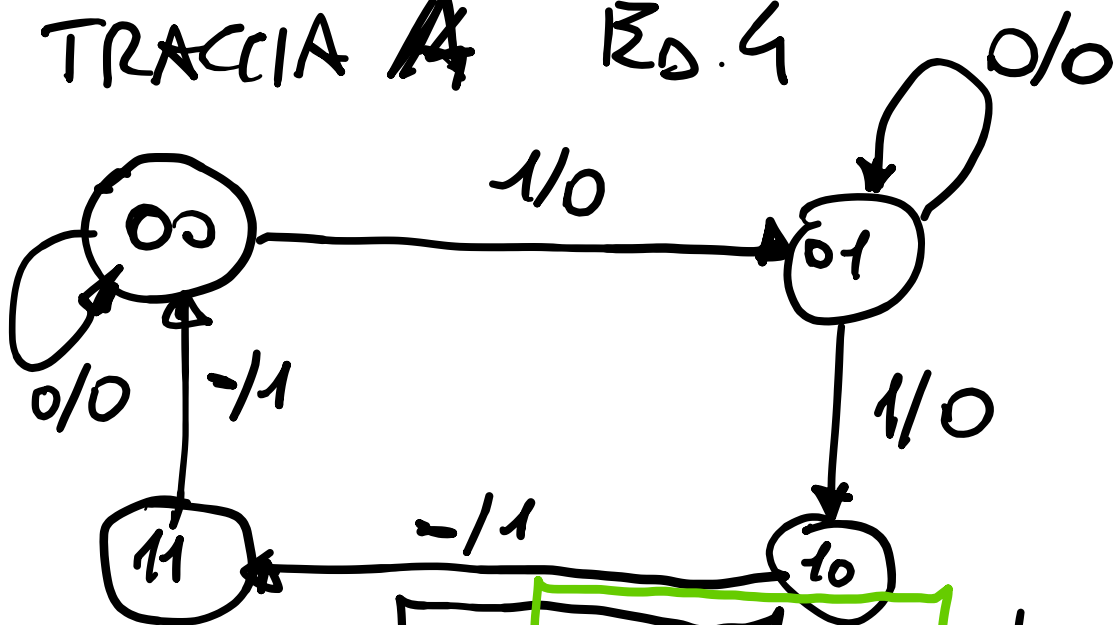


Ex. 3

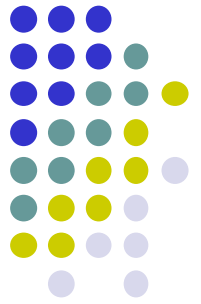
9 is Vaut. P/D  
#1 P/D



TRACCIA ~~A~~ E.D. 4



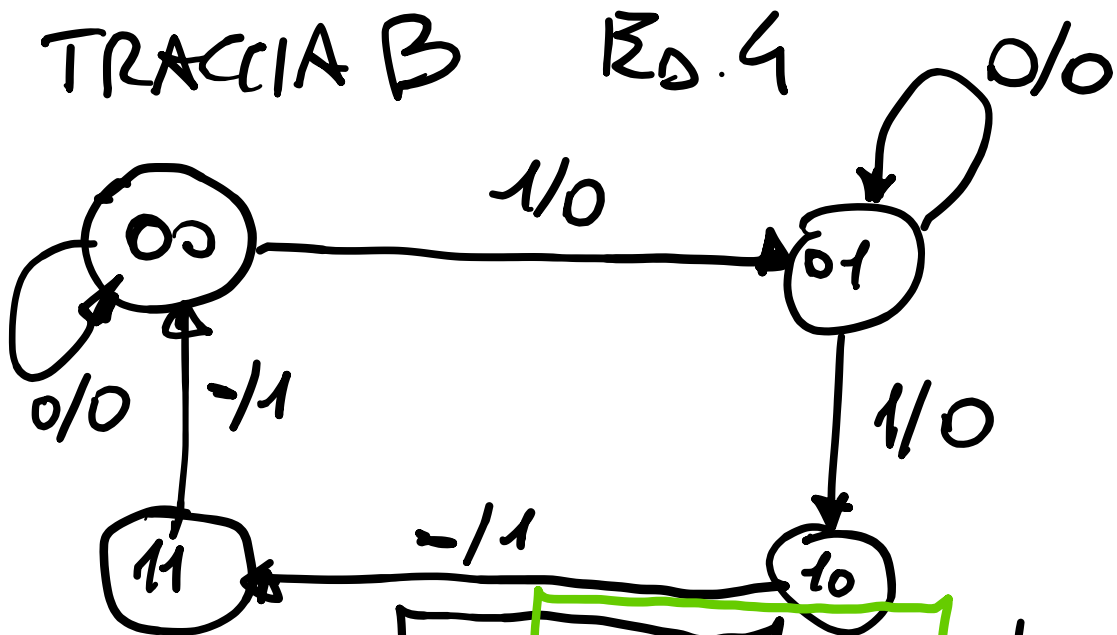
FLIP FLOP  
J/K



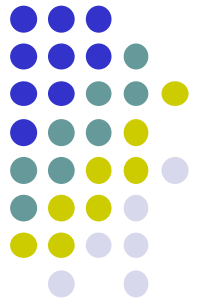
X	Y <sub>1</sub>	Y <sub>2</sub>	Z	Y <sub>1</sub>	Y <sub>2</sub>	J <sub>1</sub>	K <sub>1</sub>	J <sub>2</sub>	K <sub>2</sub>
0	0	0	0	0	0	0	1	0	1
1	0	0	0	0	1	0	1	1	1
0	0	1	0	0	1	0	1	1	0
1	0	1	0	1	0	1	1	1	1
0	1	0	1	1	1	1	0	1	1
1	1	0	1	1	0	1	0	1	1
0	1	1	1	0	0	1	1	1	1
1	1	1	1	0	0	1	1	1	1



TRACCIA B E.D. 4



FLIP FLOP  
S/R



X	Y <sub>1</sub>	Y <sub>2</sub>	Z	Y <sub>1</sub>	Y <sub>2</sub>	S <sub>1</sub>	R <sub>1</sub>	S <sub>2</sub>	R <sub>2</sub>
0	0	0	0	0	0	0	-	0	-
1	0	0	0	0	1	0	-	1	0
0	0	1	0	0	1	0	1	-	0
1	0	1	0	1	0	1	0	0	1
0	1	0	1	1	1	-	0	1	0
1	1	0	1	1	0	0	1	0	1
0	1	1	1	0	0	0	1	0	1