

### Lab #3

#### Ejercicio 1

##### Tabla 1

$$SOP: \bar{A} \cdot \bar{B} \cdot \bar{C} + \bar{A} \cdot B \cdot \bar{C} + A \cdot \bar{B} \cdot \bar{C} + A \cdot \bar{B} \cdot C + A \cdot B \cdot C = Y_1$$

$$POS: (A+B+\bar{C}) \cdot (A+\bar{B}+\bar{C}) \cdot (\bar{A}+\bar{B}+C) = Y_1$$

##### Tabla 2

$$SOP: \bar{A} \cdot \bar{B} \cdot C + A \cdot B \cdot \bar{C} + A \cdot B \cdot C = Y_2$$

$$POS: (A+B+C) \cdot (A+\bar{B}+C) \cdot (A+\bar{B}+\bar{C}) \cdot (\bar{A}+B+C) \cdot (\bar{A}+B+\bar{C}) = Y_2$$

##### Tabla 3

$$SOP: \bar{A} \cdot \bar{B} \cdot \bar{C} \cdot \bar{D} + \bar{A} \cdot \bar{B} \cdot \bar{C} \cdot D + \bar{A} \cdot \bar{B} \cdot C \cdot \bar{D} + \bar{A} \cdot \bar{B} \cdot C \cdot D + A \cdot \bar{B} \cdot \bar{C} \cdot \bar{D} + A \cdot \bar{B} \cdot C \cdot \bar{D} + A \cdot B \cdot C \cdot \bar{D} = Y_3$$

$$POS: (A+\bar{B}+C+D) \cdot (A+\bar{B}+C+\bar{D}) \cdot (A+\bar{B}+\bar{C}+D) \cdot (A+\bar{B}+\bar{C}+\bar{D}) \cdot *$$

$$(\bar{A}+B+C+D) \cdot (\bar{A}+B+C+\bar{D}) \cdot (\bar{A}+B+\bar{C}+D) \cdot (\bar{A}+B+\bar{C}+\bar{D}) \cdot (\bar{A}+\bar{B}+\bar{C}+\bar{D}) = Y_3$$

##### Tabla 4

$$SOP: \bar{A} \cdot \bar{B} \cdot \bar{C} \cdot \bar{D} + \bar{A} \cdot \bar{B} \cdot C \cdot \bar{D} + \bar{A} \cdot \bar{B} \cdot C \cdot D + \bar{A} \cdot B \cdot C \cdot \bar{D} + \bar{A} \cdot B \cdot C \cdot D + A \cdot \bar{B} \cdot C \cdot \bar{D} + A \cdot B \cdot C \cdot \bar{D} = Y_4$$

$$POS: (A+B+C+\bar{D}) \cdot (A+B+C+D) \cdot (A+B+\bar{C}+\bar{D}) \cdot (\bar{A}+B+C+\bar{D}) \cdot (\bar{A}+B+C+D) \cdot$$

$$(\bar{A}+\bar{B}+C+D) \cdot (\bar{A}+\bar{B}+C+\bar{D}) \cdot (\bar{A}+\bar{B}+\bar{C}+D) \cdot (\bar{A}+\bar{B}+\bar{C}+\bar{D}) = Y_4$$

Ejercicio 2

TABLA 1

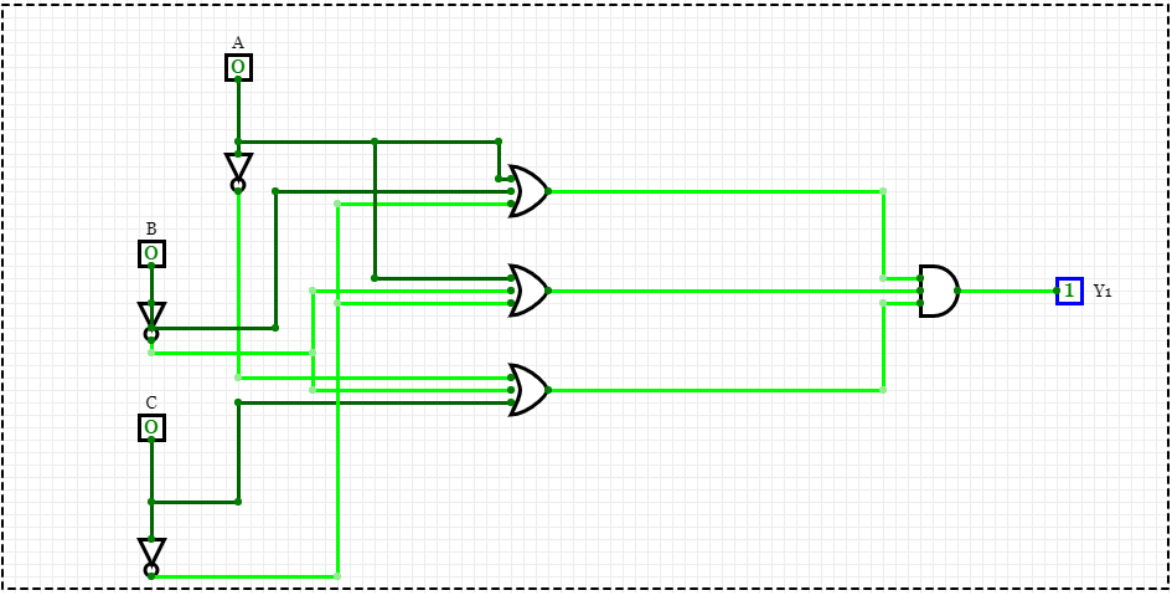


TABLA 2

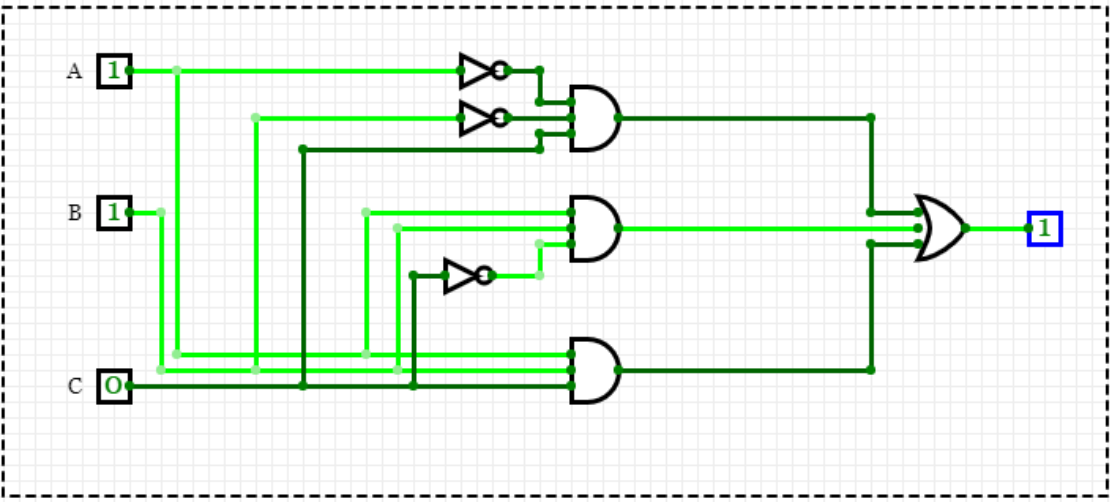


TABLA 3

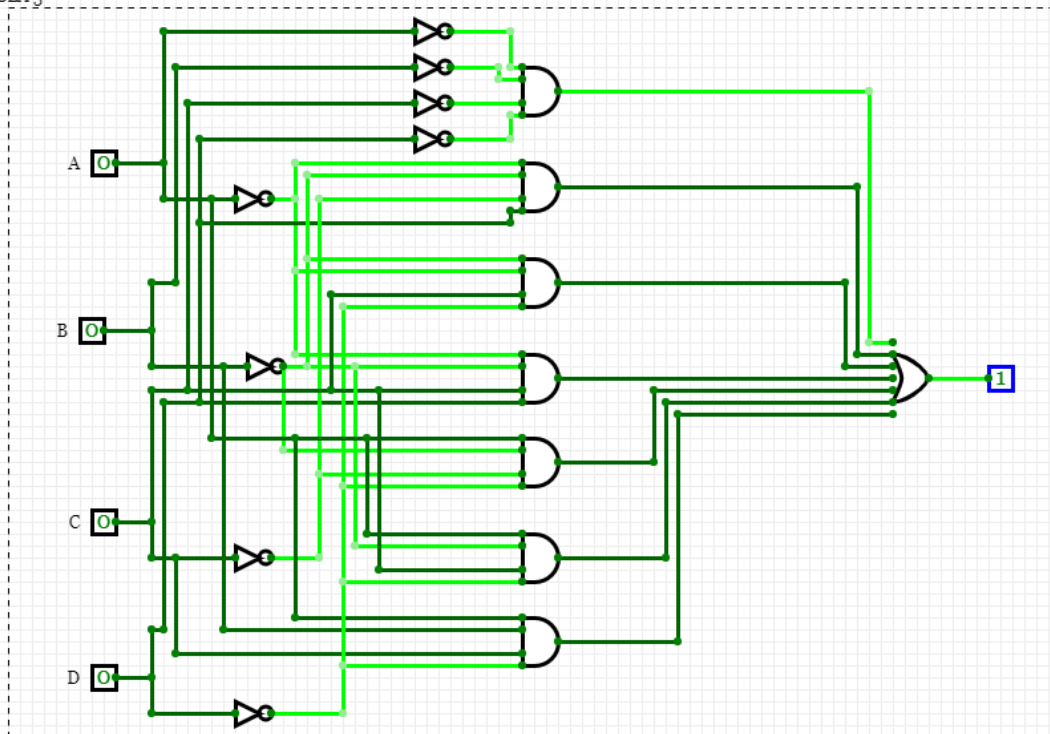
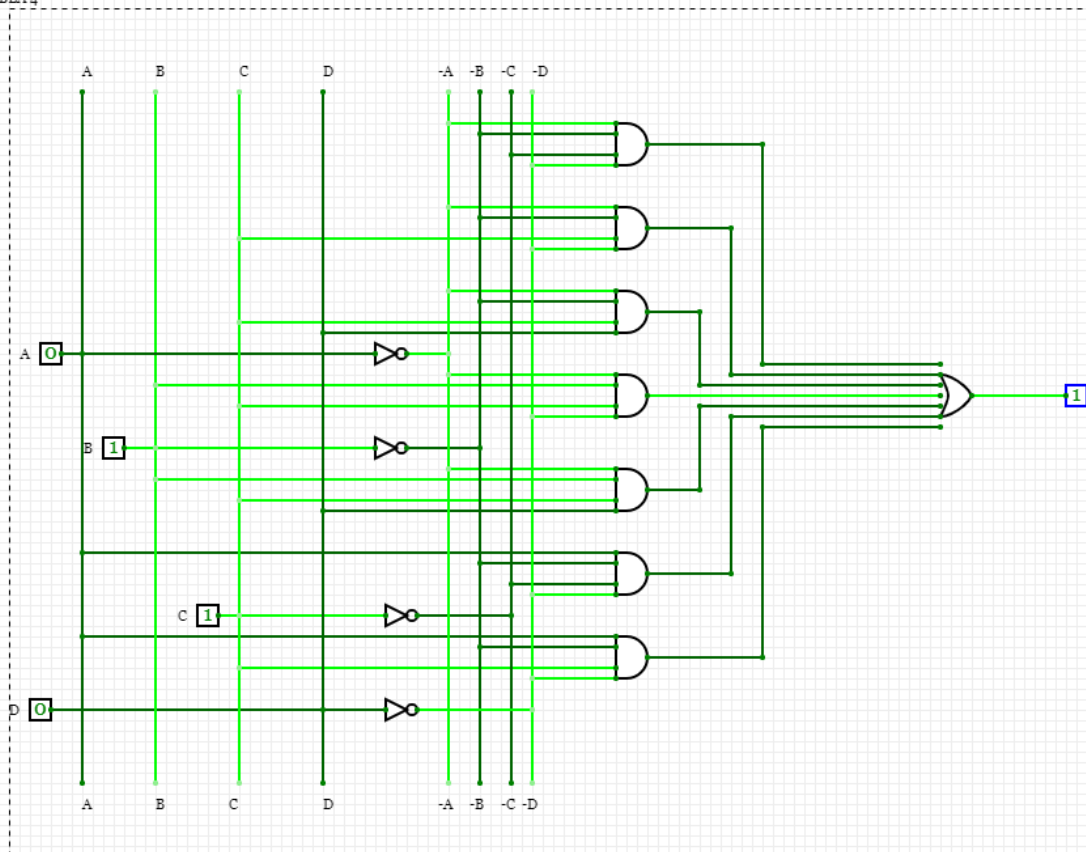


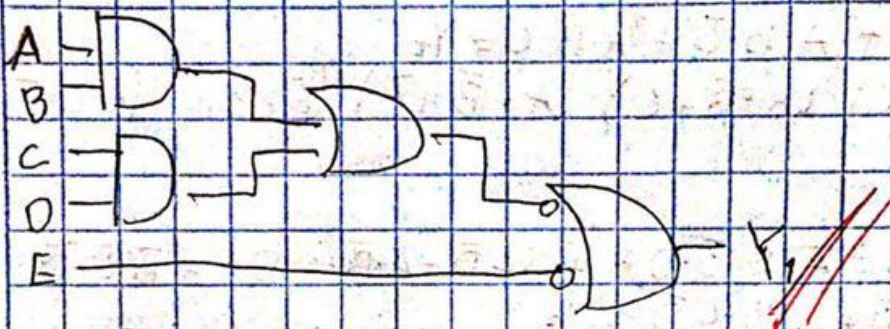
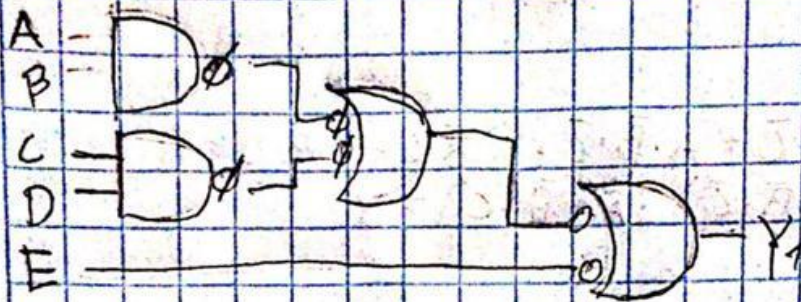
TABLA 4





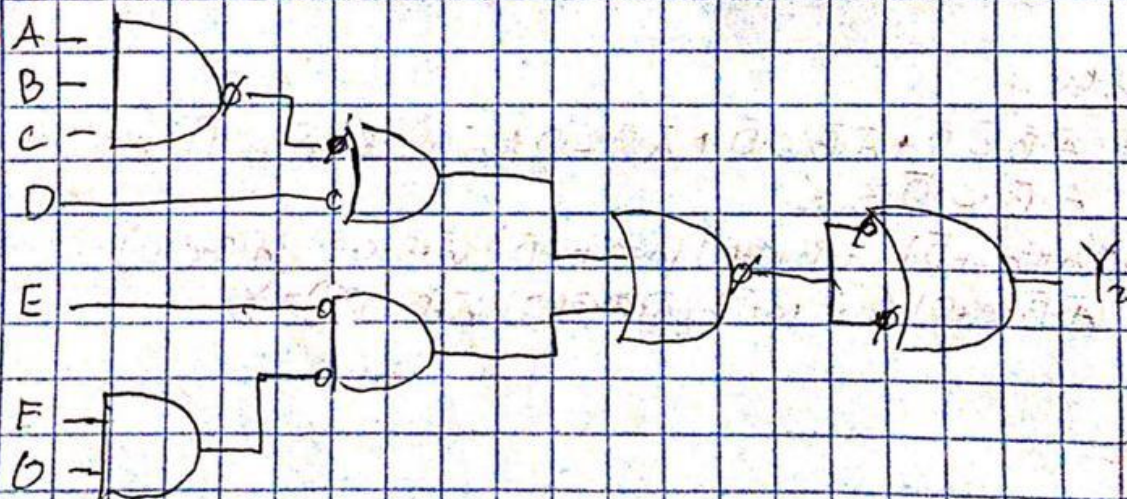
# Ejercicio 4

1

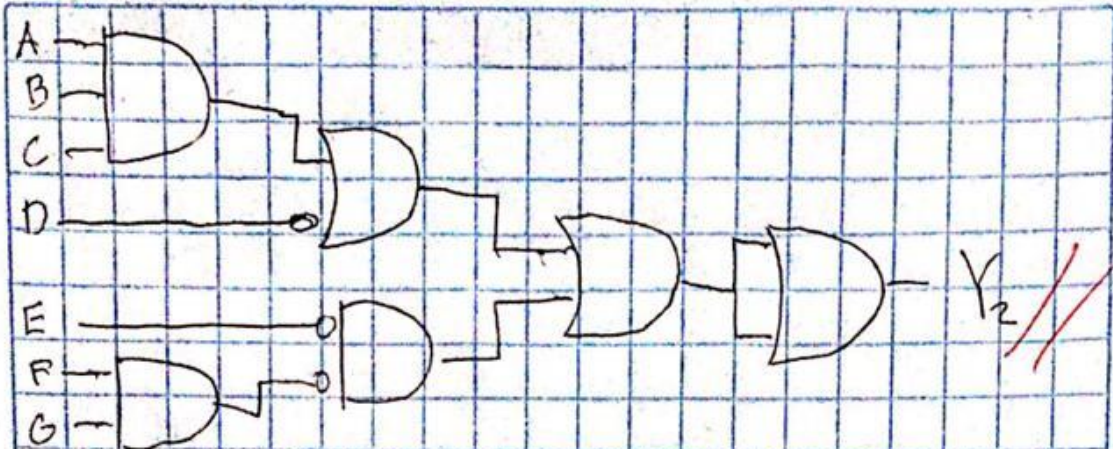


$$Y_1 = (AB) + (CD) + B$$

2







$$Y_2 = [(ABC + \bar{D}) + (\bar{F}G \cdot \bar{E})] + [(ABC + \bar{D}) + (\bar{F}G \cdot \bar{E})]$$