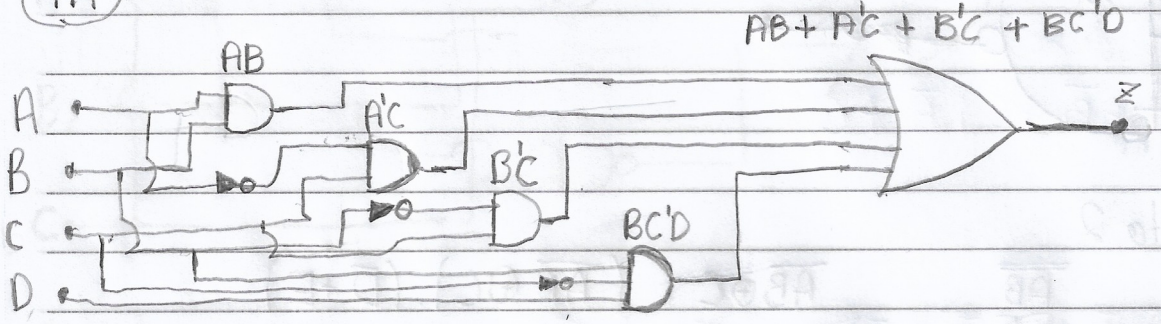
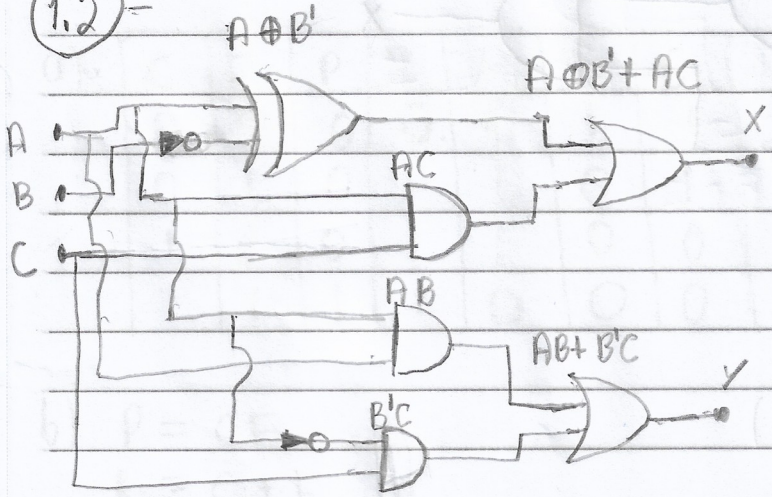
Prática 02 - Portas

1.1 -



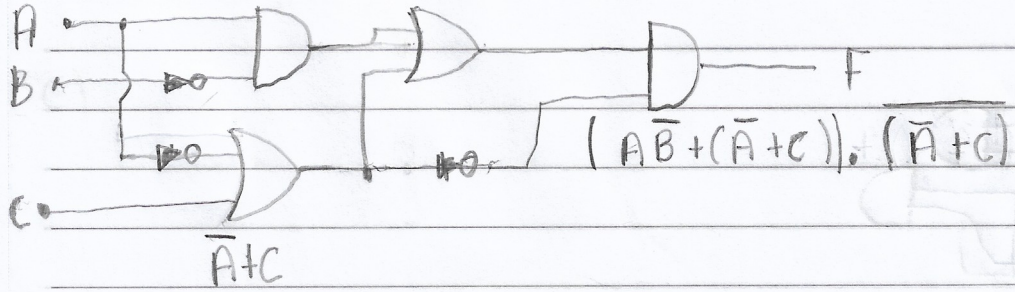
1.2 -



1,3

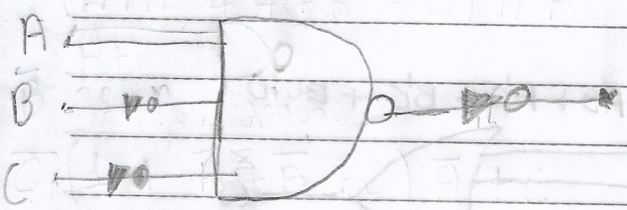
Circuito 1

a) $A\bar{B}$ $A\bar{B}+(\bar{A}+C)$

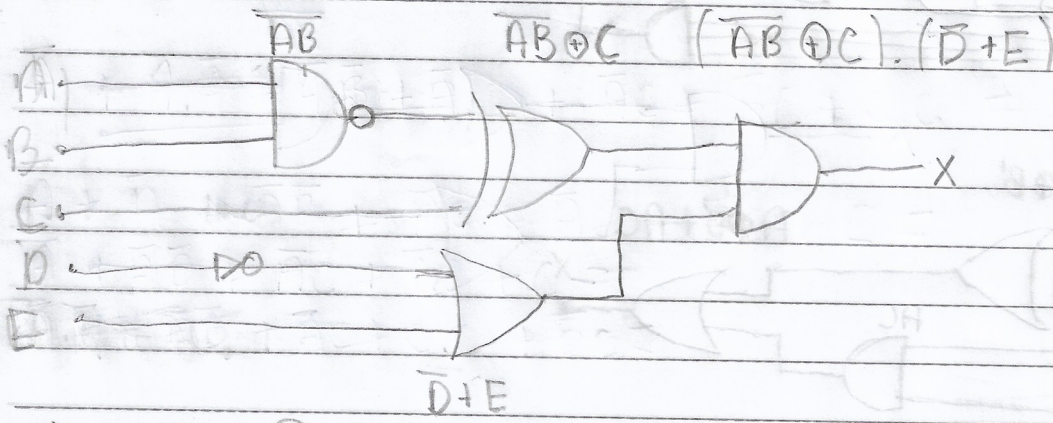


b) $(A\bar{B}+(\bar{A}+C)).\overline{(\bar{A}+C)} = (A\bar{B}+\bar{A}+C).A\bar{C} =$
$A\bar{B}A\bar{C}+\bar{A}A\bar{C}+CA\bar{C} = A\bar{B}\bar{C}+0+0 = A.\bar{B}.\bar{C}.$

c) $A \cdot \overline{B} \cdot \overline{C}$



Circuito 2



a) $X = (\overline{AB} \oplus C) \cdot (\overline{D} + E)$

b) $X = (\overline{AB} \oplus C)(\overline{D} + E)$

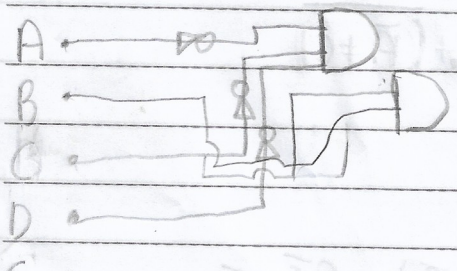
$(\overline{A}BC + A\overline{B}C)(\overline{D} + E)$

$((\overline{A} + \overline{B}) \cdot C + ABC)(\overline{D} + E)$

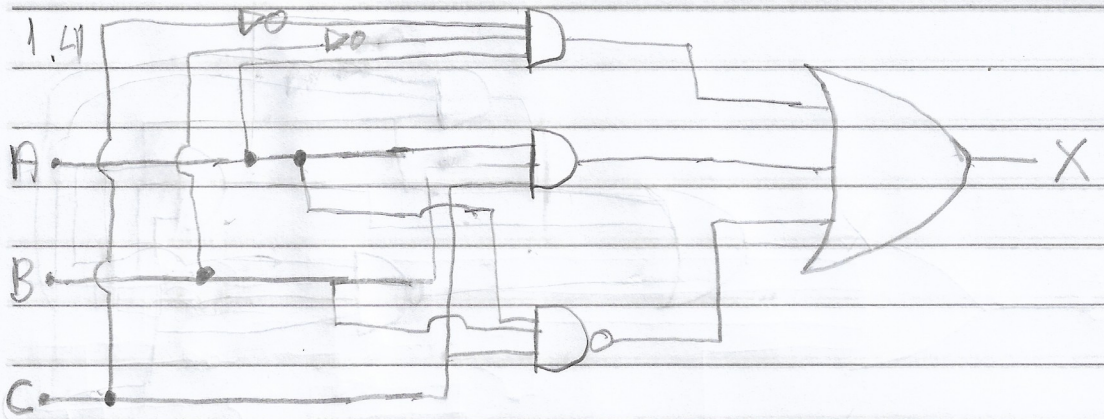
$(\overline{A}C + \overline{B}C + ABC)(\overline{D} + E)$

$\overline{A}C\overline{D} + \overline{B}C\overline{D} + ABC\overline{D} + \overline{A}C\overline{E} + \overline{B}C\overline{E} + ABC\overline{E}$

c)



/ /



1.5

a)

C	F	P	R	M	B	S
0	0	0	0	0	1	1
0	1	0	1	1	0	1
1	0	0	1	1	0	0
1	1	1	1	0	0	0

b) $P = CF$

$R = C + F$

$M = C\bar{F} + \bar{C}F$

$B = \bar{C}\bar{F}$

$S = \bar{C} + F$

c)