

Exad. 1

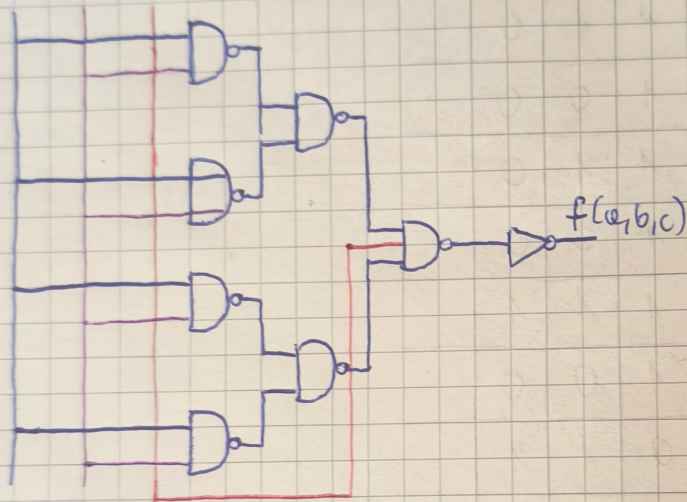
$$f(a, b, c) = (a \wedge b \wedge c) \vee (a \wedge b \wedge \bar{c}) \vee (a \wedge \bar{b} \wedge c) = a \wedge b \wedge c$$

a) NAND $\bar{\wedge}$

$$x \wedge y = (x \bar{\wedge} y) \bar{\wedge} (x \bar{\wedge} y)$$

$$f(a, b, c) = \sim(((a \bar{\wedge} b) \bar{\wedge} (\bar{a} \bar{\wedge} b)) \bar{\wedge} ((a \bar{\wedge} b) \bar{\wedge} (\bar{a} \bar{\wedge} b)) \bar{\wedge} c)$$

a b c



b) NOR $\bar{\vee}$

$$f(a, b, c) = (a \bar{\vee} a) \bar{\vee} (b \bar{\vee} b) \bar{\vee} (c \bar{\vee} c)$$

a b c

