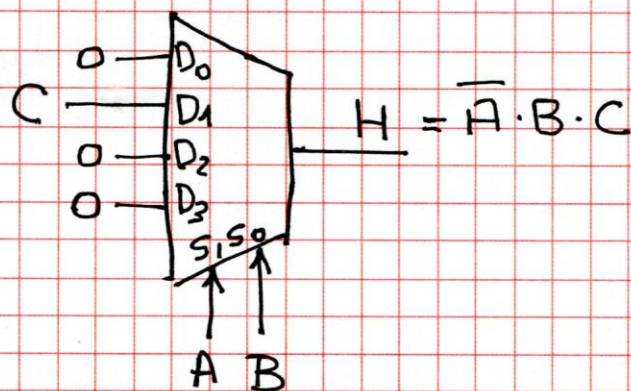


GRUPA

1a) 0110, 0100, 0000

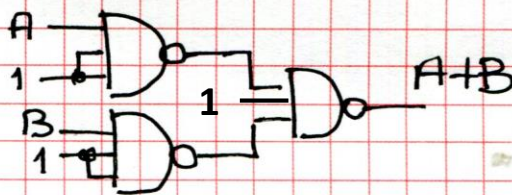
1b) SI

1c)



1d) Tristate 4 : Process (entrez, noE)

1e) $A+B = \overline{\overline{A} \cdot \overline{B}}$



1f) 8ns.

$$2) f_{max} = \frac{1}{t_{pd CLK \rightarrow Q} + t_{pd AND1} + t_{setup}} = 20,40 MHz$$

```
Tristate4.vhd
--Archivo Tristate4.vhd
--Sergio Noriega 2020
library ieee;
use ieee.std_logic_1164.all;

entity Tristate4 is
    Port (entrada : std_logic_vector(3 downto 0);
          nOE      : in std_logic;
          salida   : out std_logic_vector (3 downto 0)
        );
end Tristate4;

architecture Comportamiento of Tristate4 is
    begin
        FFT: process (entrada, nOE)
        begin
            if (nOE = '0') then
                salida <= entrada;
            else salida <= "ZZZZ";
            end if;
        end process;
    end Comportamiento;
end
```