

1- Encontre as expressões canônicas dos circuitos a seguir

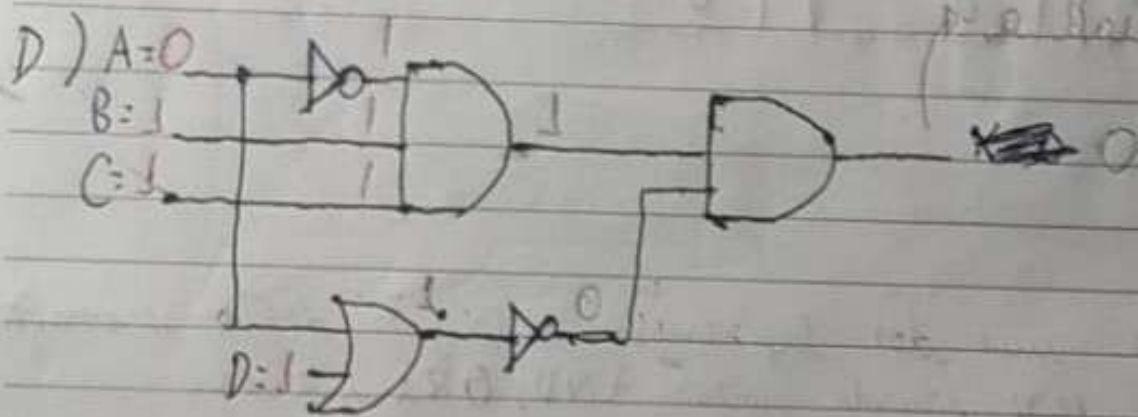
a) $\overline{A} \cdot B \quad (\overline{A} \cdot B) \cdot (C + D) \odot E$

$$S = (\overline{A} \cdot B) \cdot (C + D) \odot E$$

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

c) $\overline{A} \cdot B \cdot C, A + D, (\overline{A} + D)$

$$S = (\overline{A} \cdot B \cdot C) \cdot (\overline{A} + D)$$



2- Circuitos lógicos e expressões booleanas obtendo a expressão de X.

a) $S = (A \cdot B) + C$

b) $S = (A + B) \cdot C$

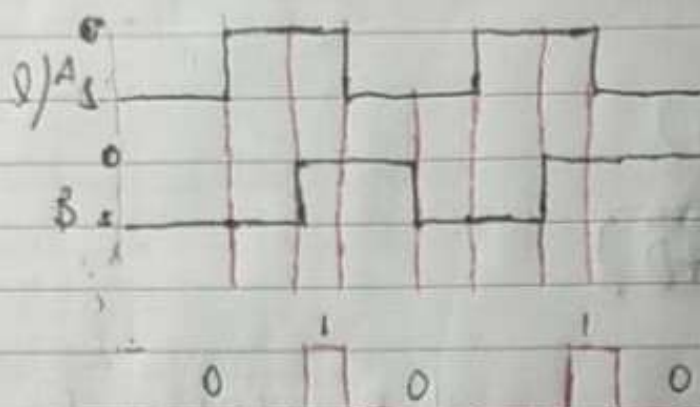
3- Circuitos lógicos e representações lógicas para a expressão de X:

a) $S = \overline{A+B}$

b) $S = \overline{(A+B)}$

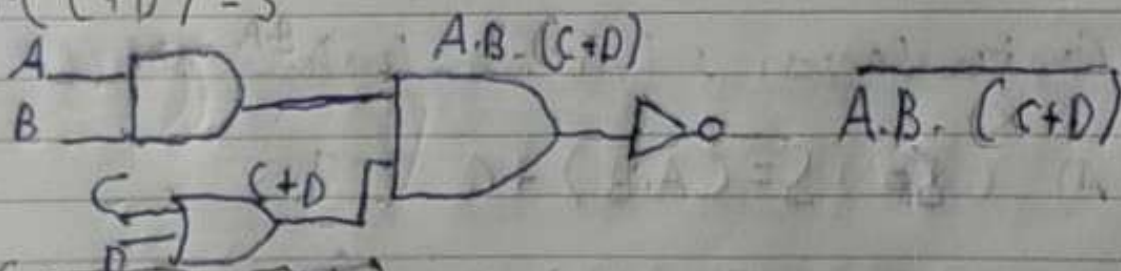
c) $(\overline{A} \cdot B \cdot C) \cdot (\overline{A+D})$

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

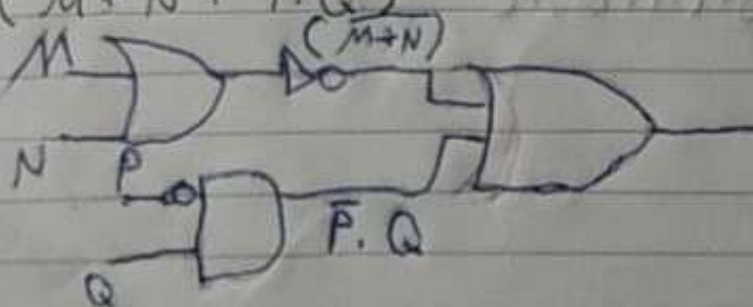


4- Para cada uma das expressões a seguir, desenhe o circuito lógico correspondente usando portas AND, OR e inversas.

A) $A \cdot B \cdot (C+D) = S$



C) $S = (\overline{M+N} + \overline{P} \cdot Q)$

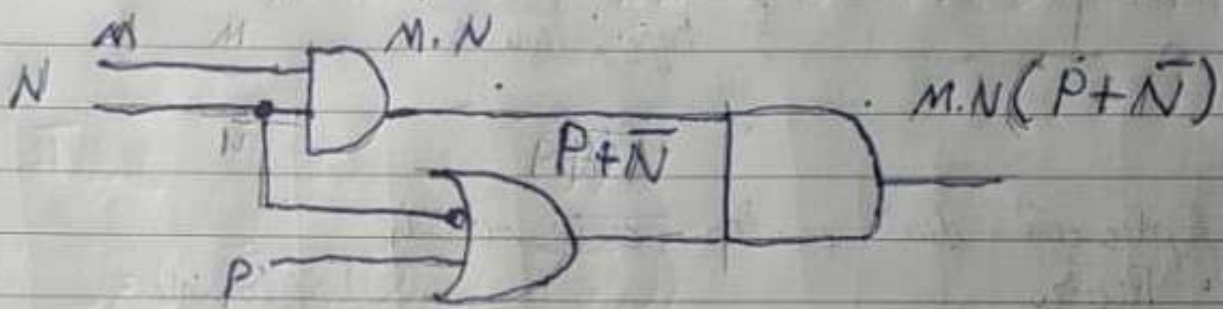


$S = (\overline{M+N} + \overline{P} \cdot Q)$

$$d) S = W + P \cdot \bar{Q}$$



$$e) X = M \cdot N (P + \bar{N})$$



$$f) X = (A + B) (\bar{A} + \bar{B})$$

