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Expressões obtidas de circuitos lógicos

1) $S = (A + B) \cdot (C + D)$
 $S = (1 + 1) \cdot (1 + 1)$
 $S = 1 \cdot 1$
 $S = 1$

2) $S = (A \cdot B) + 1C + (1C \cdot D)$
 $S = (1 \cdot 1) + 0 + (0 \cdot 1)$
 $S = 1 + 0 + 0 =$
 $S = 1$

3) $S = 1(A \cdot B) \cdot (1B \cdot C) \cdot (1B \cdot D)$
 $S = 1(1 \cdot 1) \cdot (0 \cdot 0) \cdot (0 \cdot 0)$
 $S = 1(1) \cdot (0) \cdot (0)$
 $S = 1(0)$
 $S = 1$

4) $S = (1(A \cdot B) + (1(A \cdot B))) + 1C \cdot (C + D)$
 $S = (1(1 \cdot 1) + (1(1 \cdot 0))) + 0 \cdot (1 + 1)$
 $S = (1(1) + (1(0))) + 0 \cdot (1)$
 $S = (0 + 1 + 0) \cdot (1)$
 $S = 1 \cdot 1$
 $S = 1$

$$5) S = 1(A + B) + 1(C \cdot 1D)$$

$$S = 1(1 + 1) + 1(1 + 0)$$

$$S = 1(1) + 1(1)$$

$$S = 0 + 0$$

$$S = 0$$

$$6) S = (A + B) \cdot 1(A \cdot C) + 1(1D + C)$$

$$S = (1 + 1) \cdot 1(1 \cdot 1) + 1(1D + C)$$

$$S = (1) \cdot 1(1) + 1(0 + 1)$$

$$S = (1) \cdot 0 + 1(1)$$

$$S = (1) \cdot 0 + 0$$

$$S = 0 + 0$$

$$S = 0$$

$$7) S = (B \cdot C) + (B \cdot 1C) + 1(A \cdot B \cdot C)$$

$$S = (1 \cdot 1) + (1 \cdot 0) + 1(1)$$

$$S = (1) + (0) + (0)$$

$$S = (1)$$

$$8) S = A + 1(B \cdot 1C) + (B \cdot C)$$

$$S = 1 + (0 \cdot 0) + (1 \cdot 1)$$

$$S = 1 + (0) + (1)$$

$$S = 1$$

$$9) S = 1(A \cdot 1B) + (A \cdot C) \quad S = 1$$

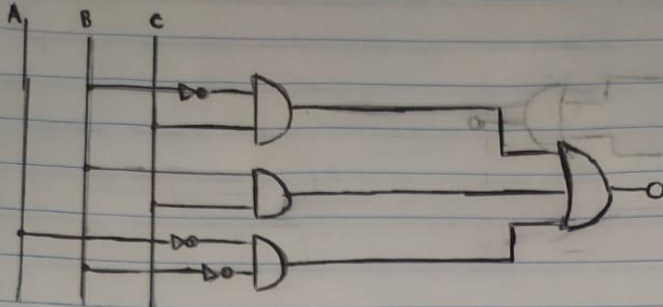
$$S = 1(1 \cdot 1) + (1 \cdot 1)$$

$$S = (0 \cdot 0) + (1 \cdot 1)$$

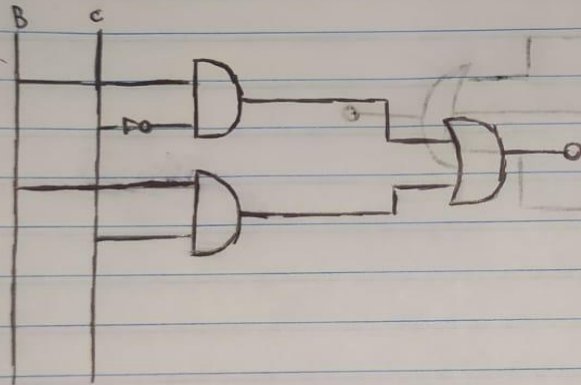
$$S = (0) + (1)$$

Circuitos lógicos obtidos de expressões

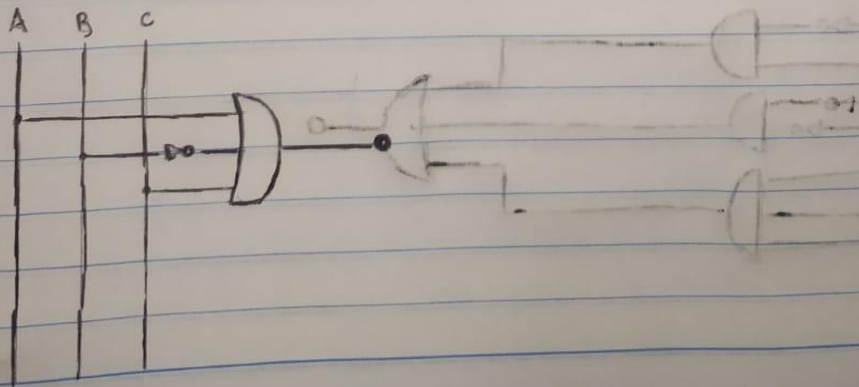
1) $(\neg B \cdot c) + (B \cdot c) + (A \cdot \neg B)$



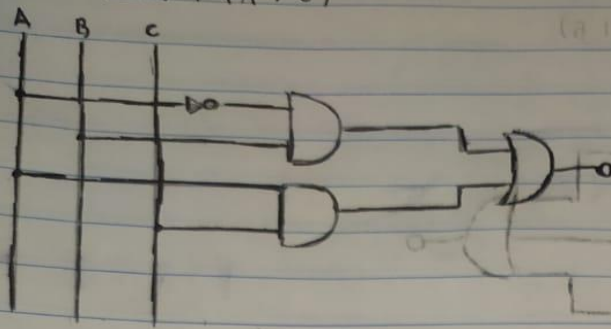
2) $(B \cdot \neg c) + (B \cdot c)$



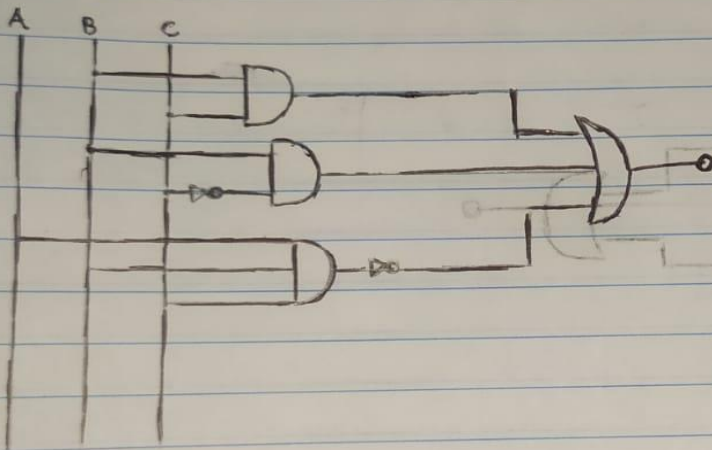
3) $A + \neg B + c$



4) $(\neg A \cdot B) + (A \cdot \neg C)$



5) $(B \cdot C) + (\neg B \cdot \neg C) + \neg(A \cdot B \cdot C)$



6) $(\neg B \cdot C) + (\neg A \cdot \neg B) + (A \cdot B \cdot C)$

