



Minimização lógica:

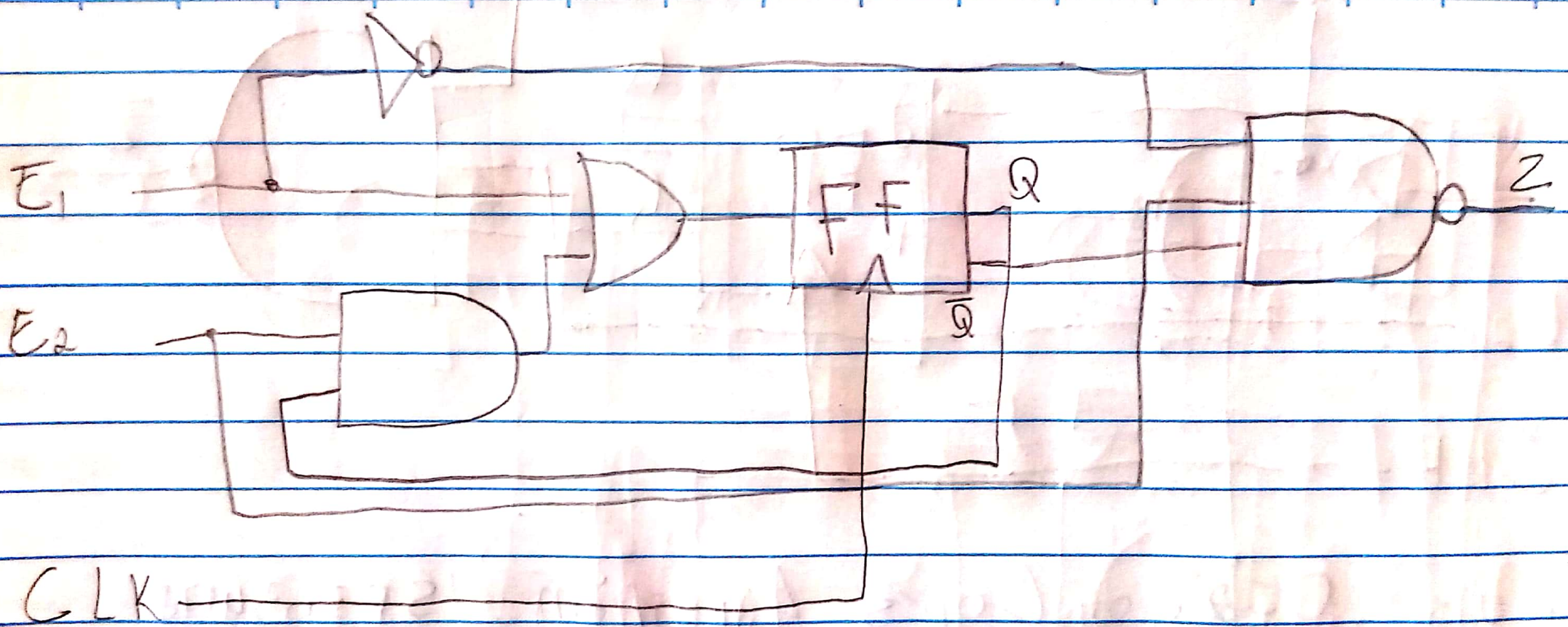
| Q \ E <sub>1</sub> E <sub>2</sub> | 00 | 01 | 11 | 10 |
|-----------------------------------|----|----|----|----|
| 0                                 | 0  | 0  | 1  | 1  |
| 1                                 | 0  | 1  | 1  | 1  |

$$D = E_1 + Q E_2$$

| Q \ E <sub>1</sub> E <sub>2</sub> | 00 | 01 | 11 | 10 |
|-----------------------------------|----|----|----|----|
| 0                                 | 1  | 0  | 1  | 1  |
| 1                                 | 1  | 1  | 1  | 1  |

$$Z = \overline{Q} \overline{E_1} E_2$$





b) FFs JK

Tabela de excitação

Os estados foram assinalados igual na leitura a...

| $Q(t) \rightarrow Q(t+1)$ | J | K |
|---------------------------|---|---|
| $0 \rightarrow 0$         | 0 | x |
| $0 \rightarrow 1$         | 1 | x |
| $1 \rightarrow 0$         | x | 1 |
| $1 \rightarrow 1$         | x | 0 |



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J:

| Q \ E <sub>1</sub> E <sub>2</sub> | 00 | 01 | 11 | 10 |
|-----------------------------------|----|----|----|----|
| 0                                 | 0  | 0  | 1  | 1  |
| 1                                 | x  | x  | x  | x  |

$$J = E_1$$

K:

| Q \ E <sub>1</sub> E <sub>2</sub> | 00 | 01 | 11 | 10 |
|-----------------------------------|----|----|----|----|
| 0                                 | x  | x  | x  | x  |
| 1                                 | 1  | 0  | 0  | 0  |

$$K = \overline{E_1} \overline{E_2}$$

Z:

| Q \ E <sub>1</sub> E <sub>2</sub> | 00 | 01 | 11 | 10 |
|-----------------------------------|----|----|----|----|
| 0                                 | 1  | 0  | 1  | 1  |
| 1                                 | 1  | 1  | 1  | 1  |

$$Z = \overline{Q} \overline{E_1} \overline{E_2}$$

