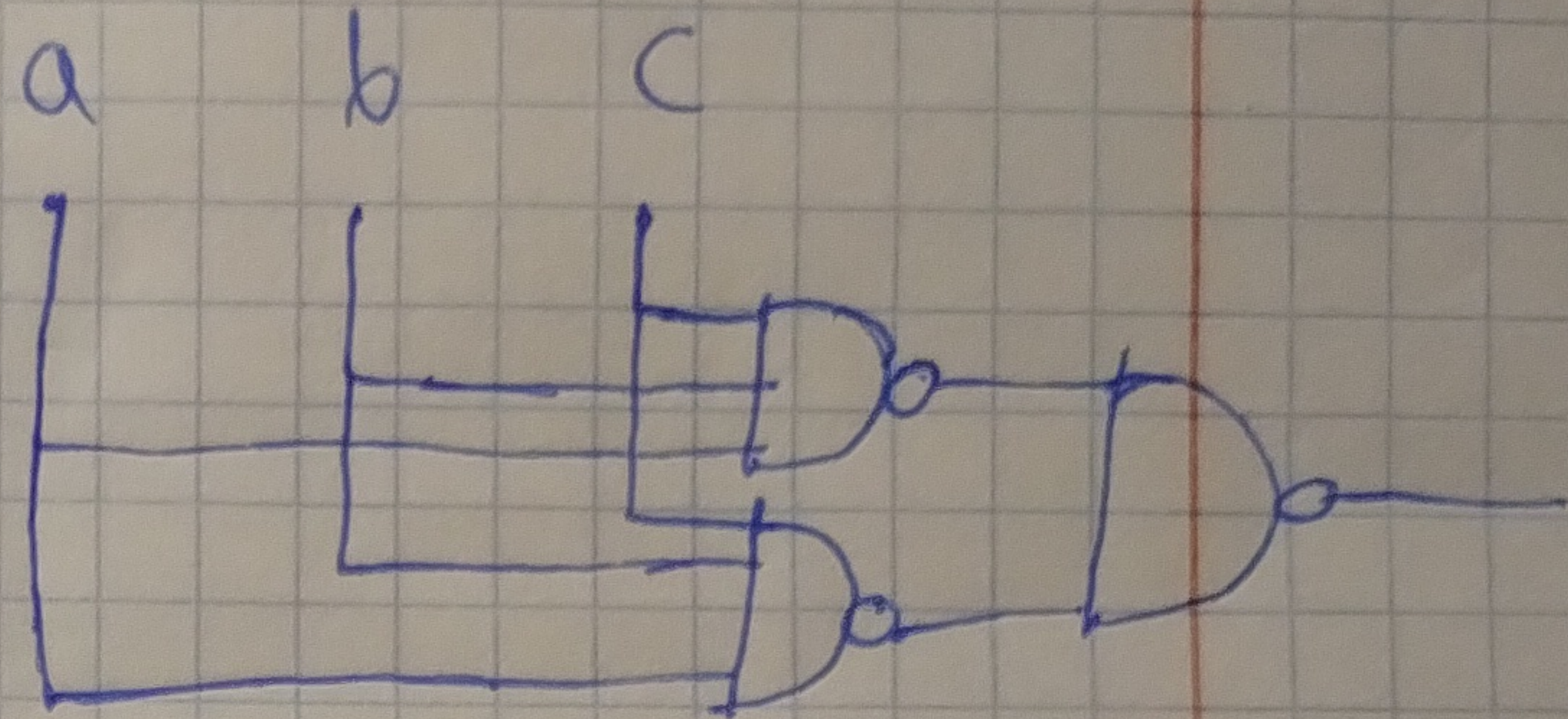


Zad. dom 1

a)  $f(a,b,c) = (a \wedge b \wedge c) \vee (\neg a \wedge b \wedge c) \vee (a \wedge b \wedge \neg c)$

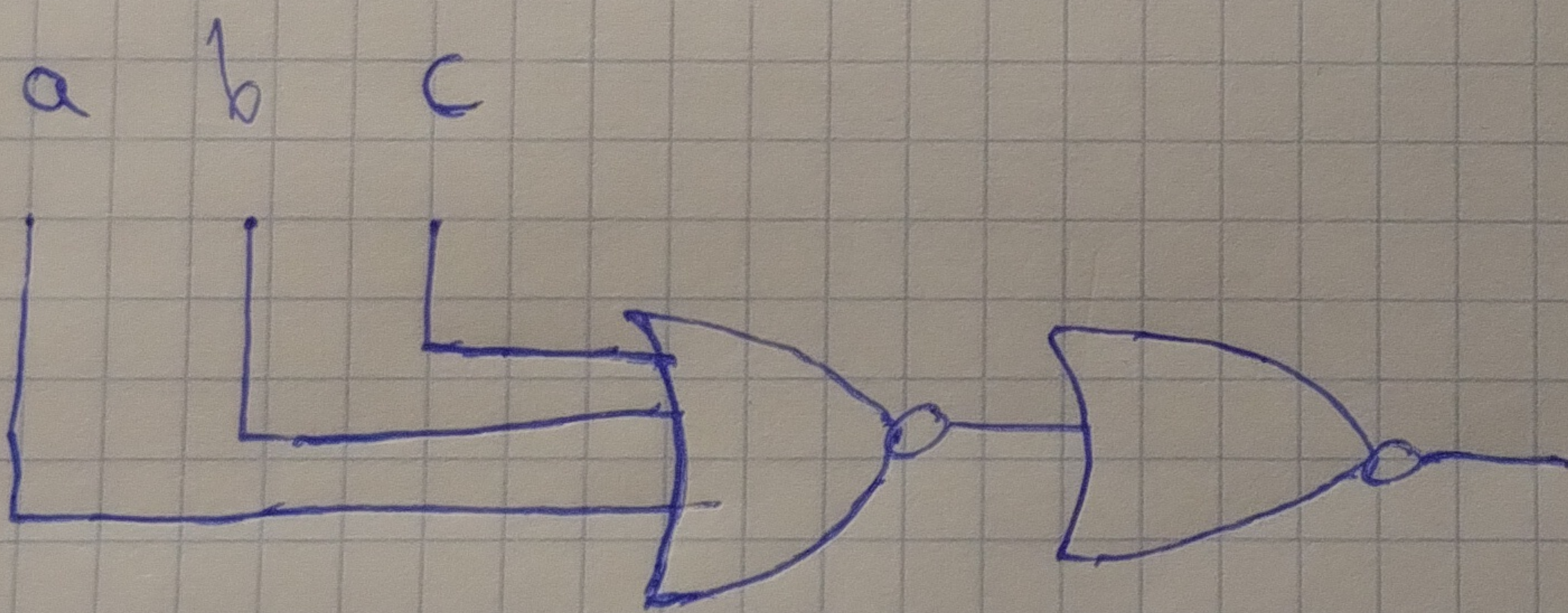
$f(a,b,c) = \sim(\sim(a \wedge b \wedge c) \wedge \sim(a \wedge b \wedge c))$

| a b c | <sup>①</sup><br>$\sim(a \wedge b \wedge c)$ | $\text{AND} \quad \text{①} \wedge \text{①}$ | $\sim(\text{AND} \quad \text{①} \wedge \text{①})$ |
|-------|---|---|---|
| 0 0 0 | 1   | 1   | 0   |
| 0 0 1 | 1   | 1   | 0   |
| 0 1 1 | 1   | 1   | 0   |
| 0 1 0 | 1   | 1   | 0   |
| 1 1 0 | 1   | 1   | 0   |
| 1 1 1 | 0   | 0   | 1   |
| 1 0 1 | 1   | 1   | 0   |
| 1 0 0 | 1   | 1   | 0   |



b)  $f(a,b,c) = (a \wedge b \wedge c) \vee (a \wedge b \wedge \neg c) \vee (a \wedge \neg b \wedge c)$

$f(a,b,c) = \sim(\sim(a \vee a) \vee \sim(b \vee b) \vee \sim(c \vee c))$



| a b c | <sup>①</sup><br>$\sim a$ | <sup>②</sup><br>$\sim b$ | <sup>③</sup><br>$\sim c$ | $\text{①} \vee \text{②} \vee \text{③}$ |
|-------|--------------------------|--------------------------|--------------------------|--|
| 0 0 0 | 1                        | 1                        | 1                        | 1                                      |
| 0 0 1 | 1                        | 1                        | 0                        | 1                                      |
| 0 1 1 | 1                        | 0                        | 0                        | 1                                      |
| 0 1 0 | 1                        | 0                        | 1                        | 1                                      |
| 1 1 0 | 0                        | 0                        | 1                        | 1                                      |
| 1 1 1 | 0                        | 0                        | 0                        | 0                                      |
| 1 0 1 | 0                        | 1                        | 0                        | 1                                      |
| 1 0 0 | 0                        | 1                        | 1                        | 1                                      |

| $\sim(\text{①} \vee \text{②} \vee \text{③})$ |
|--|
| 1  |
| 0  |
| 0  |
| 0  |
| 0  |
| 0  |
| 1  |
| 1  |
| 1  |