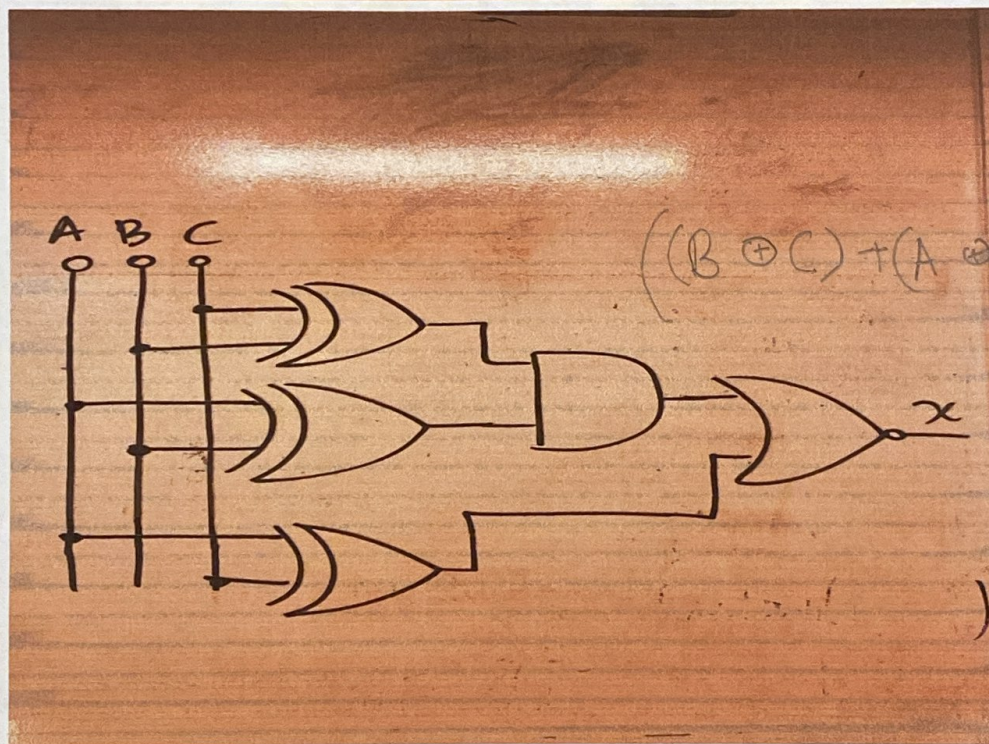
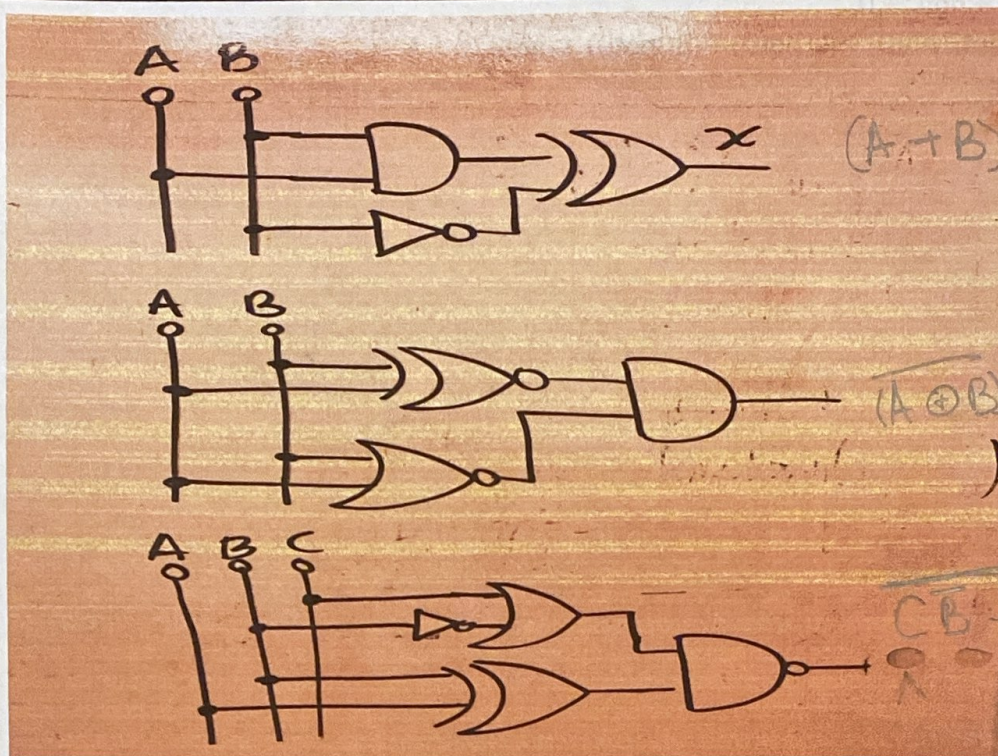


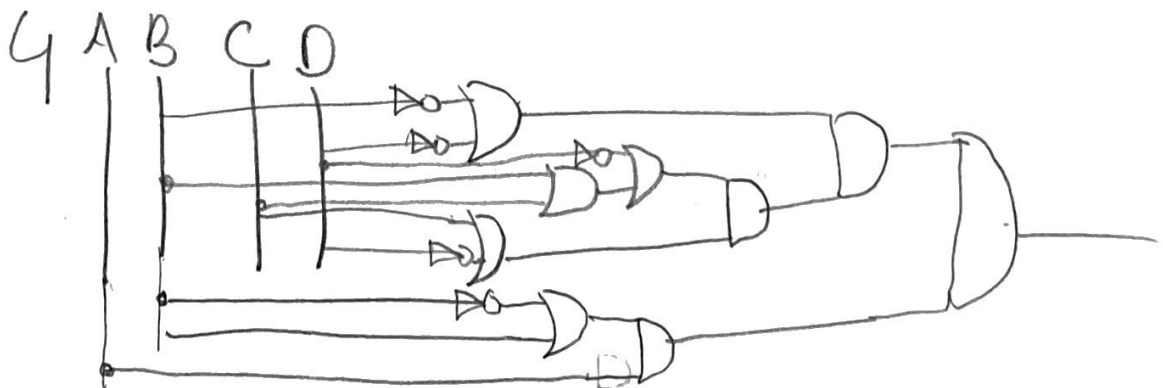
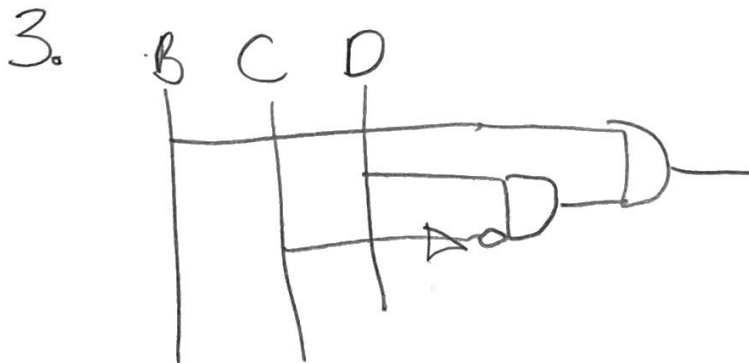
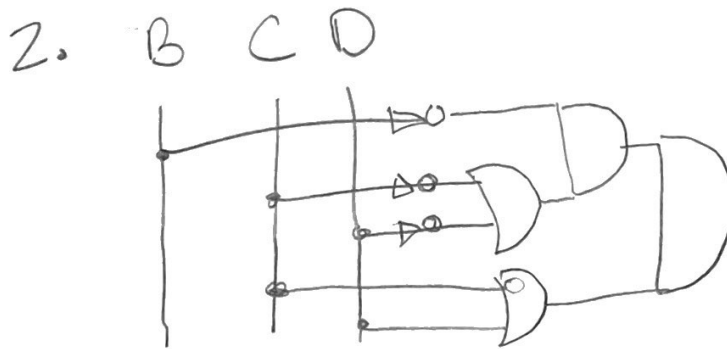
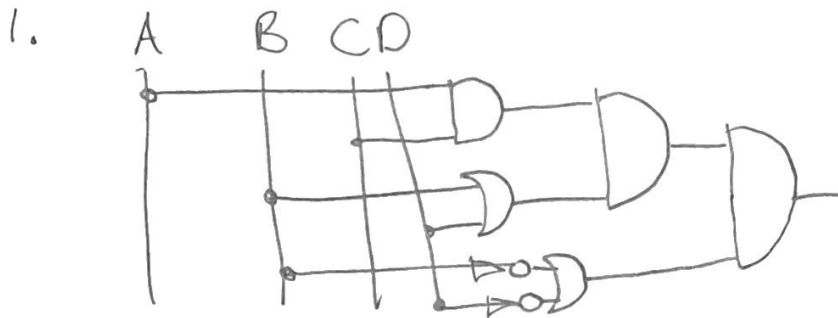
① Write the logic equation for the diagrams below:



② Draw the diagram for the logic equations below:

1. $Out1 = A + C + BD + (\text{not}B \text{ not}D)$

2. $\text{Out2} = \text{not}B + (\text{not}C \text{ not}D) + CD$
3. $\text{Out3} = B + \text{not}C + D$
4. $\text{Out4} = (\text{not}B \text{ not}D) + (C \text{ not}D) + (BC\text{not}D) + (\text{not}B C) + A$



③ Simplify the K-map Tables below and write the logical equations:

Table 1

ab/ c	00	01	11	10
0		1		
1		1	1	

$$\overline{B}C + AC$$

Table 2

ab/ c	00	01	11	10
0		1		1
1		1	1	1

$$\overline{B}C + A\overline{C} + AB + B\overline{C}$$

Table 3

ab/ c	00	01	11	10
0	1			1
1	1			1

$$\overline{B}\overline{C} + B\overline{C} + \overline{A}\overline{C} + A\overline{C}$$

Table 4

ab/ c	00	01	11	10
0	1	1	1	1
1			1	

$$\overline{A}\overline{C} + \overline{A}B + \overline{A}C + \overline{A}B + BC$$

Table 1

ab/ cd	00	01	11	10
00	1			1
01				
11				
10	1			1

$$\overline{A}\overline{B}\overline{D} + A\overline{B}\overline{D} + \overline{B}\overline{C}\overline{D} + B\overline{C}\overline{D}$$