

Question 1

A	B	C	D	A' (1)	B AND C (2)	A' AND D (3)	(A' AND D) '(3)'	1 AND 3' (4)	(1 AND 3') (4)'	1 OR 2 (5)	4' AND 5 (F)	5 AND 3' (G)
0	0	0	0	1	0	0	1	1	0	1	0	1
0	0	0	1	1	0	1	0	0	1	1	1	0
0	0	1	0	1	0	0	1	1	0	1	0	1
0	0	1	1	1	0	1	0	0	1	1	1	0
0	1	0	0	1	0	0	1	1	0	1	0	1
0	1	0	1	1	0	1	0	0	1	1	1	0
0	1	1	0	1	1	0	1	1	0	1	0	1
0	1	1	1	1	1	1	0	0	1	1	1	0
1	0	0	0	0	0	0	1	0	1	0	0	0
1	0	0	1	0	0	0	1	0	1	0	0	0
1	0	1	0	0	0	0	1	0	1	0	0	0
1	0	1	1	0	0	0	1	0	1	0	0	0
1	1	0	0	0	0	0	1	0	1	0	0	0
1	1	0	1	0	0	0	1	0	1	0	0	0
1	1	1	0	0	1	0	1	0	1	1	1	1
1	1	1	1	0	1	0	1	0	1	1	1	1

F:

$$1 - (A' \cdot 3')' \rightarrow (A' \cdot (A' \cdot D)')'$$

$$2 - (A' + 2) \rightarrow A' + (B \cdot C)$$

$$F = [(A' \cdot (A' \cdot D)')'] \cdot [A' + (B \cdot C)]$$

$$G: [(A' \cdot D)'] \cdot [A' + (B \cdot C)]$$

Question 2

A	C	D	D' (1)	A AND D (2)	A OR C (3)	A AND C (4)	A AND D' (5)	2 OR 5 (6)	6 AND 3 (7)	4 OR 7 OR C (Y)
0	0	0	1	0	0	0	0	0	0	0
0	0	1	0	0	0	0	0	0	0	0
0	1	0	1	0	1	0	0	0	0	1
0	1	1	0	0	1	0	0	0	0	1
1	0	0	1	0	1	0	1	1	1	1
1	0	1	0	1	1	0	0	1	1	1
1	1	0	1	0	1	1	1	1	1	1
1	1	1	0	1	1	1	0	1	1	1

