

CS251, Spring 2022

Assignment 1: Question 5

Q5a) Create the Karnaugh map, and write down the boolean value of F:

CD \ AB	00	01	11	10
00	0	1	0	0
01	0	0	1	1
11	0	0	1	1
10	0	1	0	0

$$F = \underline{AD} + \overline{A}B\overline{D}$$

Q5b) Create the Karnaugh map, and write down the boolean value of F:

CD \ AB	00	01	11	10
00	0	0	0	0
01	0	1	1	0
11	0	1	1	1
10	0	1	0	0

$$F = \underline{BD} + \overline{A}\underline{BC} + \underline{ACD}$$