

Date: \_\_\_\_/\_\_\_\_/20\_\_\_\_

Day: M/T/W/T/F/S/S

The most simple SOP expression which can be obtained from the K-map illustrated is

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

$$\begin{aligned}
 \text{Group 1st} &= \bar{A}(\bar{B} + B) + AB \\
 &= (\bar{A} + A)B \\
 &= B
 \end{aligned}$$

$$\text{Group 2nd} = \text{In Rows} = A(B + \bar{B}) = A$$

$$\text{In Columns} = \bar{C}(\bar{D} + D) + CD$$

$$= D$$

✓  
(AB)

$$\text{Group} = AD$$

$$f(A, B, C, D) = B + AD$$