

Q

$\overline{A}\overline{B}/CD$	$\overline{C}\overline{D}$	$\overline{C}D$	$CD$	$C\overline{D}$
$\overline{A}\overline{B}$	1	X	1	X
$\overline{A}B$	1	X	1	X
$AB$	1	X	1	X
$A\overline{B}$	1	X	1	0

$$G_1 = \overline{A}\overline{B}\overline{C}\overline{D} + \overline{A}\overline{B}\overline{C}D + \overline{A}\overline{B}C\overline{D} + \overline{A}\overline{B}CD + \overline{A}B\overline{C}\overline{D} + \overline{A}B\overline{C}D + \overline{A}BC\overline{D} + \overline{A}BCD$$

$$= \overline{C}(1) = \overline{C}$$

$$G_2 = \overline{A}\overline{B}\overline{C}D + \overline{A}\overline{B}C\overline{D} + \overline{A}\overline{B}CD + \overline{A}B\overline{C}\overline{D} + \overline{A}B\overline{C}D + \overline{A}BC\overline{D} + \overline{A}BCD$$

$$= D(1)$$

$$G_3 = (\overline{A}\overline{B}C\overline{D}) + \overline{A}BC\overline{D}$$

$$G_3 = C\overline{D}(1)$$

$$G_4 = ABCD + ABC\overline{D} \Rightarrow ABC$$

$$\Rightarrow \overline{C} + D + C\overline{D} + ABC$$