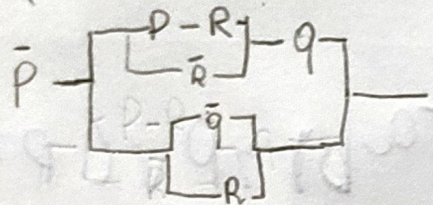


3 a) $\bar{P} \cdot (((P \cdot R) + \bar{R}) \cdot Q) + (\bar{Q} + R)$



$\rightarrow \neg P \wedge [((P \wedge R) \vee \neg R) \wedge Q] \vee (\neg Q \vee R)$

b)

						A		B			
P	R	Q	$\neg P$	$\neg R$	$\neg Q$	$P \wedge R$	$(P \wedge R) \vee \neg R$	$((P \wedge R) \vee \neg R) \wedge Q$	$\neg Q \vee R$	$A \vee B$	$\neg P \wedge (A \vee B)$
1	1	1	0	0	0	1	1	1	1	1	0
1	1	0	0	0	1	1	1	0	1	1	0
1	0	1	0	1	0	0	1	1	0	1	0
1	0	0	0	1	1	0	1	0	1	1	0
0	1	1	1	0	0	0	0	0	1	1	1
0	1	0	1	0	1	0	0	0	1	1	1
0	0	1	1	0	0	0	0	0	0	0	0
0	0	0	1	0	1	0	0	0	1	1	1