

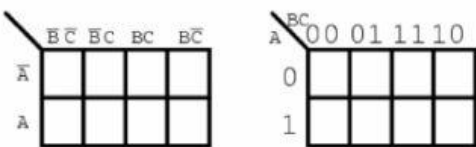
Watch the video in the link then in groups answer the following questions.

https://actvet-my.sharepoint.com/personal/baha_saleh_ath_s_ac_ae/_layouts/15/onedrive.aspx?id=%2Fpersonal%2Fbaha%5Fsaleh%5Faths%5Fac%5Fae%2FDocuments%2FAY%2D2020%2D21%2FENI713%20Electronics%2FHow%20to%20group%20terms%20in%20KMAP%20%5F%20Don%27t%20care%20Conditions%20%5F%20DE%2E17%2Emp4&parent=%2Fpersonal%2Fbaha%5Fsaleh%5Faths%5Fac%5Fae%2FDocuments%2FAY%2D2020%2D21%2FENI713%20Electronics&originalPath=aHR0cHM6Ly9hY3R2ZXQtbXkuc2hhcmVwb2ludC5jb20vOnY6L2cvcGVyc29uYWwvYmFoYV9zYWxlaF9hdGhzX2FjX2FIL0VUUUx2OTRQRGV0TWthR2NweWVBMVhRQmY0N1NJY1lPeWJuN19YZjFE M05QMkE_cnRpbWU9Q19mUzlgdUlyRWc

Use Karnaugh's map to simplify the following Boolean expressions.

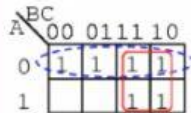
1. You need first to enter the values in the map then
2. work out the simplification, then
3. write your final answer in the last column.

No.	Boolean expression	K-map	Simplified expression
1	$A'B'C' + A'B'C + A'BC + A'BC'$		
2	$A'B'C + A'BC + AB'C + ABC$		
3	$A'B'C'AB'C' + A'BC' + ABC'$		
4	$A'BC + ABC$		
5	$A'B'C' + A'B'C + A'BC + AB'C$		

No.	Boolean expression	K-map	Simplified expression
6	$A'BC+ABC+AB'C'+AB'C+ABC+ABC'$		

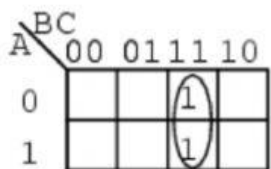
Solved examples:

Out = $\bar{A}\bar{B}\bar{C} + \bar{A}\bar{B}C + \bar{A}B\bar{C} + \bar{A}BC + ABC + ABC'$



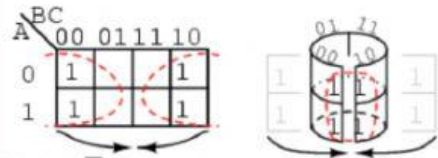
Out = $\bar{A} + B$

Out = $\bar{A}BC + ABC$



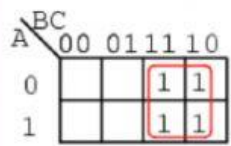
Out = BC

Out = $\bar{A}\bar{B}\bar{C} + A\bar{B}\bar{C} + \bar{A}B\bar{C} + AB\bar{C}$



Out = \bar{C}

Out = $\bar{A}BC + \bar{A}B\bar{C} + ABC + AB\bar{C}$



Out = B