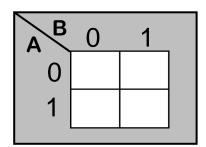
K-Maps

Directions: Simplify the Boolean Expressions using a Truth Table and a K-map.

1.
$$Q = A + (\overline{A*B})$$

Truth Table

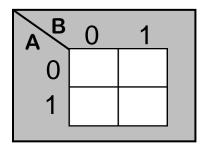
Α	В
0	0
0	1
1	0
1	1



Boolean Expression:

2.
$$Q = (\overline{A*B})(\overline{A} + B)(B + \overline{B})$$

Α	В
0	0
0	1
1	0
1	1



Boolean Expression:

3. Q = (A + C)(A*B + A*B) + A*C + C

Α	В	С
0	0	0
0	0	1
0	1	0
0	1	1
1	0	0
1	0	1
1	1	0
1	1	1

ABO	c ₀₀	01	11	10	
0					
1					
					J

Boolean Expression:

4.
$$Q = A(A + \overline{B} * C) + A(\overline{B} + C)$$

Α	В	С
0	0	0
0	0	1
0	1	0
0	1	1
1	0	0
1	0	1
1	1	0
1	1	1

ABO	c ₀₀	01	11	10
0				
1				
1				

Boolean Expression: