Jalen Powell   08/27/21
Elec 2200
                Hw 4

1. The function is "OR".

2.

a	b	ab
0	0	0
0	1	0
1	0	0
1	1	1

This function is AND.

3. $x + (y\bar{z}) = x + (y\bar{z})$

x	y	z	$\bar{z}$	$y\bar{z}$	$x+(y\bar{z})$
0	0	0	1	0	0
0	0	1	0	0	0
0	1	0	1	1	1
0	1	1	0	0	0
1	0	0	1	0	1
1	0	1	0	0	1
1	1	0	1	1	1
1	1	1	0	0	1

4. $wz + w\bar{y}\bar{z} + wx + \bar{w}\bar{x}\bar{y} = ?$

$= wz + wx + w\bar{y}\bar{z} + \bar{w}\bar{x}\bar{y}$

$= wz + (1+x) + (w+\bar{w}) + \bar{y}\bar{z} + (1+\bar{x})$

$= wz + \bar{y}\bar{z}$

$= w + \bar{y}$

300	$\bar{y}$	$W + \bar{y} = Q$
0	0	0
0	1	1
1	0	1