

CDA 3103 Worksheet-5: Logic Gates, 2-Level AND-OR Circuits

Byte Addition:

$$\begin{array}{r} \mathbf{A} \text{ X X X } \text{ X X X X} \\ + \mathbf{B} \text{ X X X } \text{ X X X X} \\ \hline = \mathbf{S} \text{ X X X } \text{ X X X X} \end{array}$$

Truth Table:

A	B	S	V	C
0	0	0		
0	0	1		
0	1	0		
0	1	1		
1	0	0		
1	0	1		
1	1	0		
1	1	1		

Draw the 2-Level **AND-OR** Circuit implementation for Overflow (**V**) and Carry (**C**) detection