

Name: \_\_\_\_\_

# CIS 351 Sample ADD4 Problem

1 September 2025

## ADD4: Recognize Overflow

Given an 4-bit adder, complete the table below to show the carry out and overflow for each pair of inputs.

A	B	$C_{out}$	Overflow
0 (0000)	0 (0000)		
-1 (1111)	-1 (1111)		
5 (0101)	6 (0110)		

# CIS 351 Sample ADD4 Problem Solutions

Tue 2<sup>nd</sup> Sept, 2025

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A	B	$C_{out}$	Overflow
0 (0000)	0 (0000)	0	0
-1 (1111)	-1 (1111)	1	0
5 (0101)	6 (0110)	0	1