

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 2nd Sept, 2025

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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)	0	0
-1	(1111)	-1	(1111)	1	0
5	(0101)	6	(0110)	0	1