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How to Use Jade

MUX LOGIC DIAGRAMS

7:58 / 7:58   1.0x

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1. CHECK YOUR UNDERSTANDING (1/1 point)

Consider a 4-to-1 Mux that functions as follows:

Input A is connected to the output Out when S_1S_0 = 00

Input B is connected to the output Out when S_1S_0 = 01

Input C is connected to the output Out when S_1S_0 = 10

Input D is connected to the output Out when S_1S_0 = 11

Fill in the table below for Out: (**You only have ONE try for this problem**)

A	B	C	D	S_1	S_0	Out	
0	1	1	0	1	0	1	**Answer:** 1
1	0	0	1	0	1	0	**Answer:** 0
1	1	0	0	0	0	1	**Answer:** 1
0	0	1	1	1	1	1	**Answer:** 1

For the first row, $S_1S_0 = 10$, which causes the value of C to appear at the output. For the second with $S_1S_0 = 01$, B is connected to the output. With $S_1S_0 = 00$ in the third row, the value of A appears at the output. For the fourth row, D is connected to the output since $S_1S_0 = 11$.

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