Tutorial : Combinational Timing

Combinational Timing

1/1 point (ungraded)

Is it possible for an inverter to have a contamination delay that is greater than it's propagation delay?

- ○ Yes
- ◉ No
- ○ Can't Tell

✔

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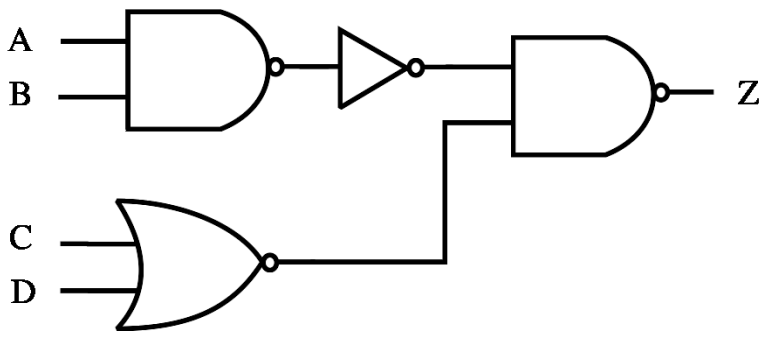
Combinational Timing

2/2 points (ungraded)



Here's a table showing the t_{CD} and t_{PD} for each of the components in the circuit above. Please compute t_{CD} and t_{PD} for the circuit as a whole.

	t_{CD}	t_{PD}
Inverter	2 ns	4 ns
NAND	3 ns	8 ns
NOR	4 ns	7 ns

Contamination delay (ns): 7 ✔

Propagation delay (ns): 20 ✔

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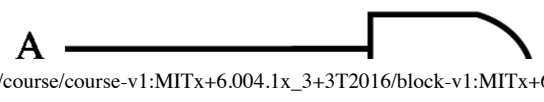
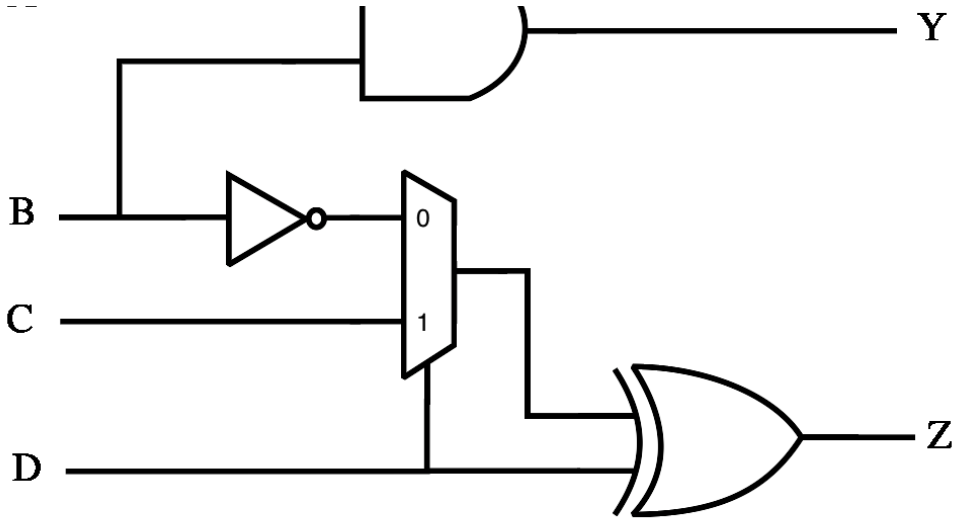
Combinational Timing

2/2 points (ungraded)



Calculator



Here's a table showing the t_{CD} and t_{PD} for each of the components in the circuit above. Please compute t_{CD} and t_{PD} for the circuit as a whole.

	t_{CD}	t_{PD}
Inverter	0.1 ns	0.3 ns
AND2	0.2 ns	0.5 ns
XOR2	0.6 ns	2.4 ns
MUX2	0.3 ns	1.5 ns

t_{CD} (ns): 0.2 ✔

t_{PD} (ns): 4.199999999999999 ✔

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[STAFF] there is no E in 2nd graph! **2**

Also too many paragraphs in the answer to 2nd circuit. It is a simple concept 2 paragraphs should be enough

Combinational Timing Part 1 **6**

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