

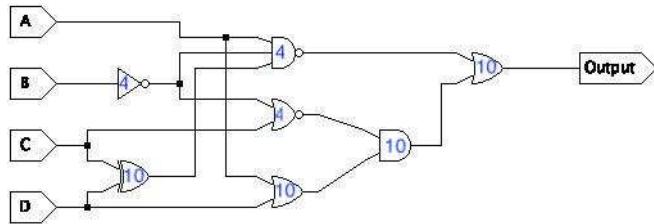
Name: \_\_\_\_\_

# CIS 351 Sample CL4 Problem

1 September 2025

## CL4: Propagation Delay

Compute the propagation delay of the circuit below given the individual gate delays:



$$\text{Circuit: } \overline{A}\overline{B}(C \oplus D) + (\overline{B} + C)(A + D)$$

Delay 4: NAND, NOT, NOR

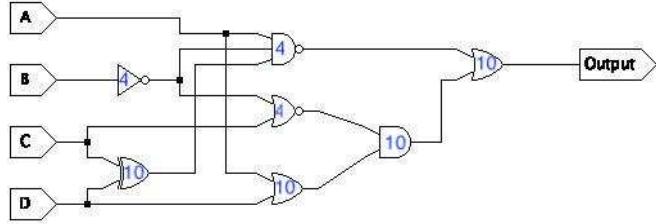
Delay 10: AND, OR, XOR

# CIS 351 Sample CL4 Problem Solutions

Fri 13<sup>th</sup> Feb, 2026

## CL4: Propagation Delay

Compute the propagation delay of the circuit below given the individual gate delays:



30

Circuit:  $\overline{A}\bar{B}(C \oplus D) + (\bar{B} + C)(A + D)$

Delay 4: NAND, NOT, NOR

Delay 10: AND, OR, XOR