8. (3 points) Given that each XOR gate has a delay of A ns, each AND gate has a delay of B ns, and each OR gate has a delay of C ns, what is the propagation delay of the worst case path in an N bit ripple carry adder? Assume that the delays between the elements are close enough that the worst case path is the one that contains the most elements along it.

XOR + A

AND · (B + C)

N bit ripple carry

N * (B + C) + A