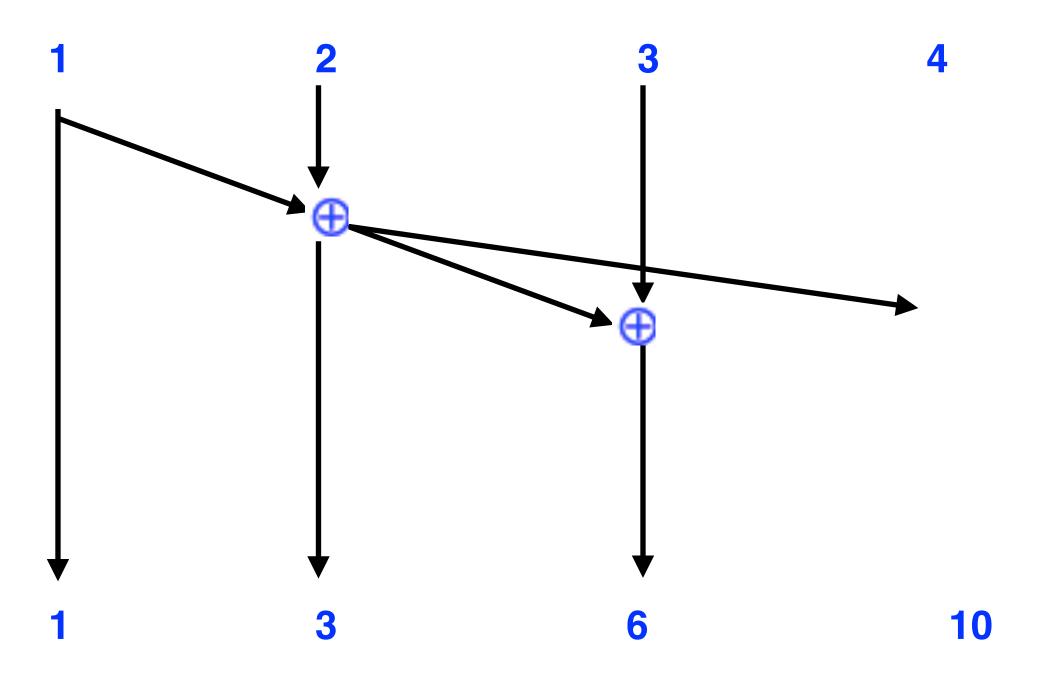# Worksheet: Creating a Circuit for Parallel Prefix Sums

Assume that you have a full adder cell, ⊕, that can be used as a building block for circuits (no need to worry about carry's). Create a circuit that generates the prefix sums for 1, … 6, by adding at most 5 more cells to the sketch shown below, while ensuring that the CPL is at most 3 cells long. Assume that you can duplicate any value (fan-out) to whatever degree you like without any penalty.