

Addition – Half Adders

- Addition is done in columns
 - Inputs are a bit from X and bit from Y, both from the same column
 - Outputs are the Sum Bit and Carry-Out (Cout)
- Design a Half-Adder (HA) circuit that takes in X and Y and outputs S and Cout
- Use the truth table to find the gate implementation

Addition – Full Adders

- Add a Carry-In input(Cin)
- New circuit is called a Full Adder (FA)

