CS 303 Logic and Digital System Design

In-lab Assignment #0 (A)

Distributive Law in Digital

Prove that addition (+) is distributive over multiplication (\cdot) by constructing two circuits to implement

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- \bullet x + yz
- $\bullet \ (x+y) \cdot (x+z)$

and applying the same inputs x, y and z to the inputs of both circuits. Toggle inputs to generate all possible input combinations and observe that both circuits generate the same result.

Submit the .dig file you have created.