>= (min)

* If both layers fully constrained, the sum of the table must be less than the sum of the first capacity constraint
* Fully constrained input node sum must be less than its capacity
* Fully constrained output node sum must be less than its capacity
* Fully constrained input node sum must be less than its max input
* Fully constrained output node sum must be less than its max input
* Each edge must be less than the capacity of the input node
* Each edge must be less than the capacity of the output node
* Each edge must be less than the maximum input of the input node
* Each edge must be less than the maximum input of the output node
* Fully constrained node sum + sum of demand requirements of all other nodes in its layer must not exceed the initial flow capacity

<= (max)

* If both layers fully constrained, the sum of the table must be greater than the sum of the final demand constraint layer
* Fully constrained input node sum must be greater than its minimum output
* Fully constrained output node sum must be greater than its minimum output
* Fully constrained input node sum must be greater than its demand
* Fully constrained output node sum must be greater than its demand

>= (min)

* Fully constrained node:
  + Must be less than its capacity

<= (max)

* Fully constrained node:
  + Must be greater than its demand

<= (max)

>= (min)

**Finding invalid maximum edge constraints**

* We’re on node W3.
  + demand = W3 demand
  + required = W3 demand - sum of W3 max constraints
  + available = list of Distributor nodes that don’t have maximum constraint on their edge with W3
  + capacity = sum of the capacity of those Distributor nodes
  + if capacity < W3 demand, throw error
  + **Notes:**
    - Question: does it matter if the distributor capacity is different from the network capacity? Does it matter if the warehouse demand is different from the network demand?