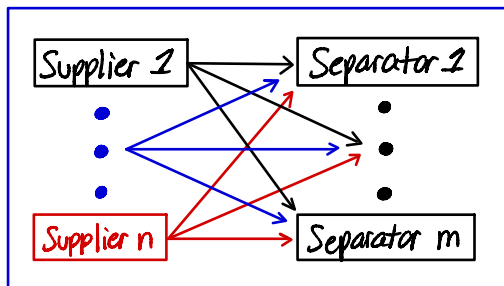
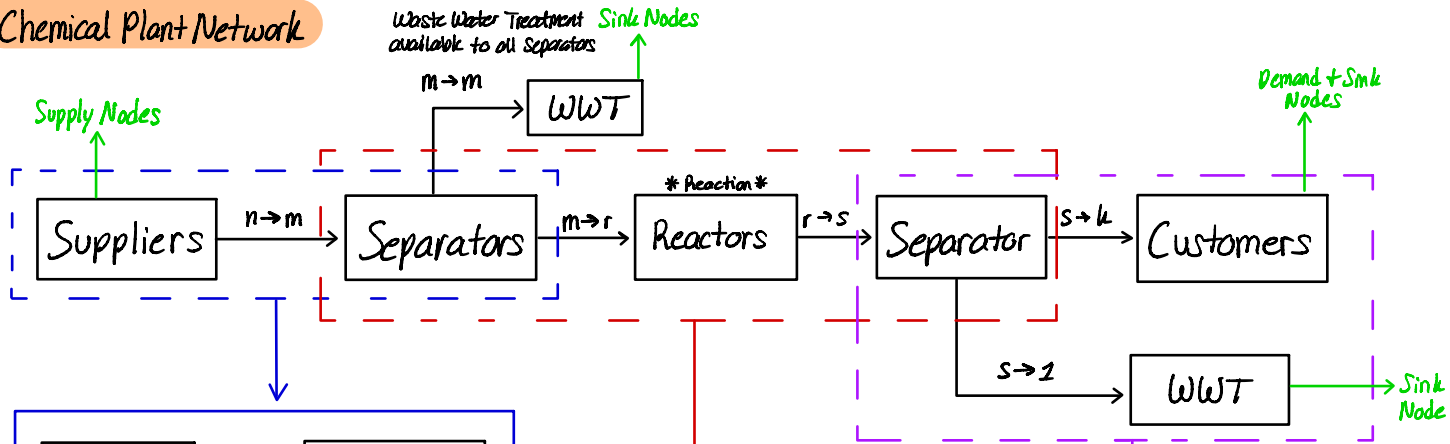
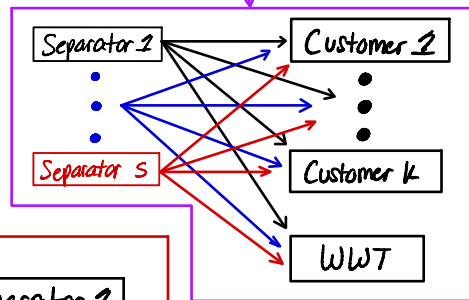


Chemical Plant Network



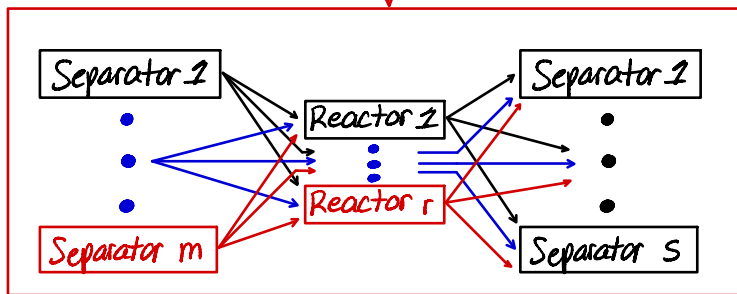
Arcs feature varied cost (from transportation) and different capacities

Note: 2 of these networks, one for DCH, one for NaOH



($s \rightarrow k$) Arcs feature different profits and across all arcs, we must meet customer's requirements

($s \rightarrow 1$) Arcs will export leftover material to waste water treatment at a per unit cost



($m \rightarrow r$) Arcs feature different costs (from transportation) and reactors have varying conversion rates for limiting reactant

($r \rightarrow s$) Arcs feature multiple tradeoffs based on differences in separator purities

All Arcs: must be non-negative, have associated cost (negative cost resembles profit), some have capacity constraints

All Nodes: comes in = comes out