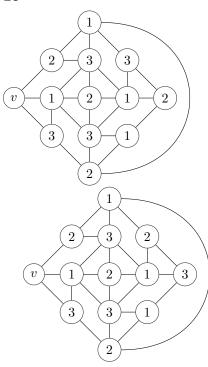
Homework 25

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Define the problem described as VDP (vertex disjoint paths). In order to show that $3SAT \leq_{poly} VDP$, we will first show that VDP is self reducible. That is, given the decision problem for VDP, we can determine the paths connecting each (s_i, t_i) .

 $VDP_{opt} \leq_{poly} VDP_{decision}$