Prob. 1	Prob. 2	Prob. 3	Prob. 4	Prob. 5

Problem 1.

Problem 2.

Problem 3.

Problem 4.

Problem 5.

Let's use here the maxflow-mincut theorem to be able to reasonne on a minimal cut instead of a flow. Let's consider we have a minimal cut for our problem, this cut is of value F. We denote for now on our cut by $\mathcal{C}$ and its cardinality (i.e. the number of edges in the cut by $\mathcal{C}$