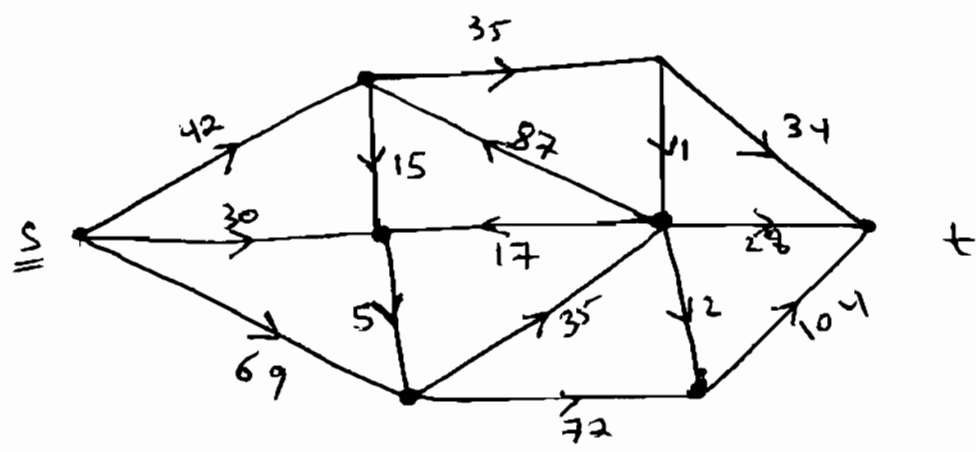


- ① 3.30
 - ② 3.33
 - ③ 3.35
- } Textbook

④ Let $N=(V,A)$ be a network. Also, let (X, \bar{X}) and (Y, \bar{Y}) be minimum cuts in N . Prove that both $(X \cup Y, \overline{X \cup Y})$ and $(X \cap Y, \overline{X \cap Y})$ are minimum cuts in N .

⑤ Use the Ford-Fulkerson Algorithm to find a maximal flow and minimal cut in the following network (with indicated capacities):



MRF