ECONOMIC MECHANISMS ASSIGNMENTS

- DESIGN A VCG MECHANISM (A GIVES MECHANISM WITH CLARKE PIVOT) IN WHICH THERE ARE TWO UNITS OR A SINGLE GOOD AND EACH BUYER IS INTERESTED IN BUYING ONLY ONE UNIT

APPLY THE MECHANISM WITH $N = \{1,2,3,4\}$ $\theta_1 = 3, \theta_2 = 2$ $\theta_3 = 4, \theta_4 = 1$

DESIGN A VCG MECHANISM FOR REVERSE AUCTIONS WITH SINGLE UNIT (THAT IS THE AUCTIONEER IS THE BUYER, AND THE SELLERS ARE THE BIDDERS)

DESIGN A VCG MECHANISM THAT IS STRICTLY BUDGET BALANCED

DESIGN A TRUTHFUL MECHANISM THAT IS: INDIVIDUALLY RATIONAL, AND STRICTLY BUDGET BALANCED (ALLOCATIVE EFFICIENCY IS NOT REQUIRED)

- DESIGN A VCG MECHANISM FOR AUCTIONS WITH TWO DIFFERENT ITEMS (EACH AGENT CAN HAVE DIFFERENT PREFERENCES OVER THE TWO ITEMS)

- PRODUCE A GRAPHICAL PROOF THAT WITH MYERSON PAYMENTS AND MONOTONIC ALLOCATION FUNCTIONS, TRUTHFULLY REPORTING IS OPTIMAL