

Question 1

A cooperative game is described by the following marginal contribution net:

$$a \wedge b \rightarrow 10$$

$$a \rightarrow 4$$

$$b \rightarrow 5$$

$$b \wedge c \rightarrow 2$$

Let v be the characteristic function defined by these rules.

- a) Calculate the v values of all possible coalitions.
- b) Could you draw the weighted graph representing this game?
- c) Evaluate if this game is stable.
- d) For each player in this game, calculate the Shapley value.