

Exercises

1

Ex.1

Consider the Glove game (N, v) such that $N=L \cup R$, where N and L are two finite sets such that $L \cap R = \emptyset$, and $v(S) = 10 \min\{|L \cap S|, |R \cap S|\}$ for all $S \in 2^N \setminus \{\emptyset\}$. Verify that the glove game is super-additive.

Ex.2

Find a ten-players TU-game with empty imputation set. Is it super-additive?

Ex.3

Find the core of the TU-game $(\{1,2,3\}, v)$ such that $v(1)=v(2)=1$, $v(3)=4$, $v(1,2)=v(1,3)=6$, $v(2,3)=8$, $v(1,2,3)=10$.