4) For any $x_0 \in \Omega \setminus M$ such that $\varphi(x_0) = \ominus < \infty$, there exists a sequence $\{x_k\}_1^\infty \subset \Omega$ for which $\varphi(x_k) < \varphi(x_0)$ and $x_k \to x_0$ as $k \to \infty$.

Then

$$\varphi(x) = T(x; M), \quad x \in \Omega.$$

For the illustrating example, all the conditions of the theorem are fulfilled. Therefore, the tested function coincides with the value function of the game in the set Ω.