LECON2112 Advanced Microeconomics II

- Assignment 9 -

(SOLUTIONS)

Professor Benoît Decerf Academic Year: 2023/2024

TA: Thomas Eisfeld Spring term

Exercises¹

11Ba. We have two agents (1 and 2). We also have two goods, one private good in which both have an endowment (w_1 and w_2 respectively) and pollution. Their utility functions are $u_1 = x_1 + (-(h-5)^2)$ and $u_2 = x_2 - h$ where x is the amount of the private good they enjoy and h the amount of pollution they experience. 1 is the one choosing the level of h.

(a) What will happen if only the private good is transferable from one agent to the other? Is it Pareto efficient?

SOLUTION. See solutions from class.

¹Inspired by Mas-Colell, Whinston, & Green, 1995. "Microeconomic Theory," Oxford University Press.