

South Westphalia University of Applied Sciences
Bachelor of Business Administration with Informatics
Economics a) – Microeconomics
Prof. Dr. Dina Dreisbach

Summer Semester 2025

Exercise Sheet 1

Task 1 – Answer the Following Questions

- a) What is Economics?
- b) What is the difference between Micro- and Macroeconomics? Between Microeconomics and Business Administration?
- c) What does the “Invisible Hand” of the marketplace do?

Task 2 – Division of Labour

Country A and B produce sunglasses and smart watches. In country A one worker can produce 20 pairs of sunglasses or 10 smart watches at maximum per day. In country B one worker can produce 50 pairs of sunglasses maximum or 50 smart watches per day. There is initially no trade between the countries. In country A 10000 pairs of sunglasses and 5000 smart watches are produced every day. In country B 25000 pairs of sunglasses and 25000 smart watches are produced every day. Both countries have 1000 workers each. Both countries intend to cooperate and start trading with each other.

- d) Show the transformation curve of both countries in the initial situation without trade.
- e) What does the transformation curve look like with optimal division of labour?
- f) Assume both countries want to consume the same number of sunglasses as under a), but now have the option to trade. Demonstrate the potential welfare gain through free trade.

Task 3 – Absolute and Relative Cost Advantage

Alex and Christina share a flat. They want to renovate it and plan to dye the walls and to lay a new carpet. To dye $1m^2$ of the wall takes Alex 5 minutes, Christina needs 6 minutes for this. To lay $1m^2$ carpet takes Alex 10 minutes, Christina 15 minutes. Assume both have 9 hours of time each.

- a) Determine the absolute and relative costs Alex and Christina have for their respective activities.
- b) Depict the transformation curve for Alex and Christina.
- c) What does the transformation curve look like with an optimal division of labour?