- 1. Consumers A and B. Goods x and y. $U_i = x_i y_i$ (i=A,B). Equilibrium: $x_A = 9$, $y_A = 9$, $x_B = 1$, $y_B = 1$, and $p_x/p_y = 1$.
- (a) Compute the welfare levels according to the Utilitarian, Rawlsian and Cobb-Douglas social welfare functions.

Assume a new Equilibrium, $x_A = 5$, $y_A = 5$, $x_B = 5$, $y_B = 5$, and $p_x/p_y = 1$.

- (b) What can be done from the perspective of the Government to achieve this equilibrium?
- (c) Would this change be a Pareto Improvement?
- (d) Under which of the social welfare functions in a) would society be better off?

2. Two agents (s and m), goods x and y. Endowments $x_s = 10$, $y_s = 10$, $x_m = 10$, $y_m = 10$. Utility functions: $U_s = 10x_s$ and $U_m = x_m y_m$.

- (a) Find the Contract Curve.
- (b) Find the utility possibility set and frontier.
- (c) State the choices of society for allocations under the Utilitarian, Rawlsian and Cobb-Douglas social welfare functions.