



## Practice Questions

1. Two consumers in an endowment economy have utility  $u_1(a, b) = a^2b$ ,  $u_2(a, b) = ab^2$ , and initial endowments for both  $(a_i, b_i) = (6, 6)$ . Is the initial endowment Pareto efficient? If not, give an example allocation that is a Pareto improvement. If  $P_a = P_b$  in equilibrium, find the competitive equilibrium allocation.
2. Consider the economy of Economowoc, Wisconsin, in which there lives 2 people, Isaac and Joe. Isaac and Joe can trade 2 goods, beer  $b$  and cheese  $c$ , with preferences given by  $u_i(b, c) = \min\{b, c\}$  and  $u_j(b, c) = b + 2c$ . Isaac has an endowment of  $(y_i^b, y_i^c) = (6, 3)$  and Joe has an endowment of  $(y_j^b, y_j^c) = (2, 4)$ . Graph the indifference curves and endowment for Isaac and Joe in the Edgeworth Box. Characterize the set of Pareto efficient allocations, as well as the competitive equilibrium.