

Recitation 1 (August 23rd, 2019 - Hulbert 23, 11AM)

TA: Imisi Aiyetan (imisi.aiyetan@wsu.edu)

1. **Checking properties of preference relations-I.** For each of the following preference relations in the consumption of two goods (1 and 2): describe the upper contour set, the lower contour set, the indifference set of bundle (2,1), and interpret them. Then check whether these preference relations are rational (by separately examining whether they are complete and transitive), monotone, and convex.

- (a) Bundle (x_1, x_2) is weakly preferred to (y_1, y_2) , i.e., $(x_1, x_2) \succeq (y_1, y_2)$ if and only if $x_1 \geq y_1 - 1$.
- (b) Bundle (x_1, x_2) is weakly preferred to (y_1, y_2) , i.e., $(x_1, x_2) \succeq (y_1, y_2)$, if $x_1 \geq y_1 - 1$ and $x_2 \leq y_2 + 1$.