Advanced Microeconomics

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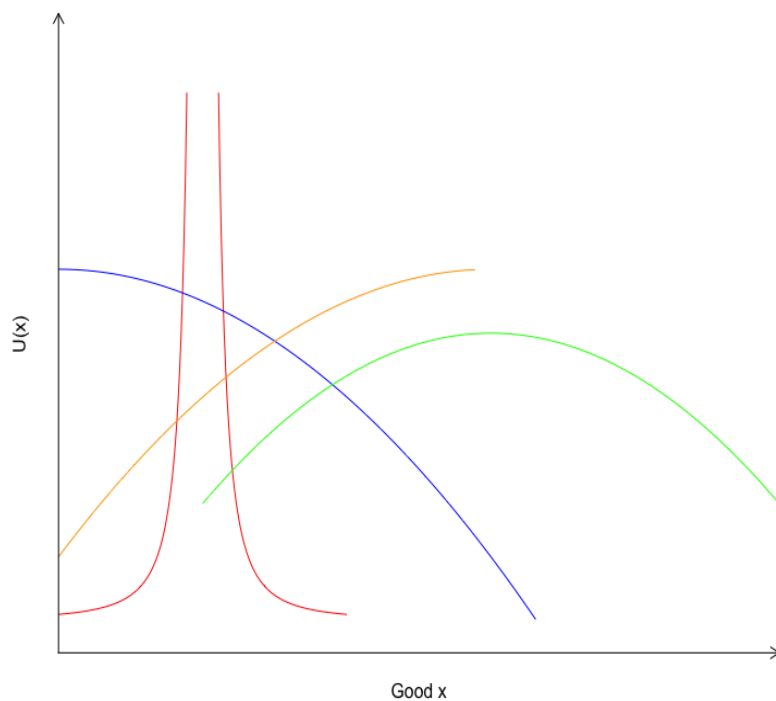
2. Preferences

a) Provide brief definitions for the following preference relations:

$$\succsim; \quad \succ; \quad \sim$$

b) Consider a rational preference relation ($\succsim$). Describe verbally which requirements (axioms) $\succsim$ has to satisfy.

c) The Figure below shows curves of utility dependent on a good x. Assess whether the utility functions represent rational preferences. Explain which preferences satisfy the axioms of completeness, transitivity and monotonicity.

d) Sketch the indifference curves of the preferences depicted in the examples below. Name which type of goods are presented. Highlight the direction in which utility increases (e.g. IC1 < IC2).

i) Anne loves cheese. In fact, she doesn't care about which kind of cheese she eats. Her closest supermarket offers only two kinds of cheese, Mozzarella and Parmegiano.

ii) Mary loves milk. However, she only enjoys milk if she also has cookies to dip in the milk. In fact, Mary insists on eating three cookies for every glas of milk she drinks. What is her utility function?

iii) For Christmas employees of Papa Joe's Pizza company receive coupons for books and visiting a stake house restaurant. However, John is vegetarian and therefore doesn't care about visits to stake restaurants. He does enjoy reading books though.

iv) More and more coal factories settle around the city of H. On one hand, this does benefit the population as the factories bring a lot of jobs. However, the increased industrial activity also causes air pollution.

v) Tom is an introverted person. Mostly he enjoys places where there are no cars and no people. Are the indifference curves convex or concave and why?