

# Quiz

September 19, 2012

INSTRUCTIONS: This is question 1 from your midterm. Show all relevant work. You have 30 minutes to do this. You may use a copy of Mas-Colell, Whinston and Green and of Rubinstein (and NOTHING ELSE) for reference. Cross out all answers you DON'T want me to consider. Don't forget to write your name and ID number - I'd hate to give your grade to someone else! GOOD LUCK!

Let  $X$  be a consumption space over which two rational preference relations  $\succsim_1$  and  $\succsim_2$  are defined and  $\mathcal{B} \subset 2^X \setminus \emptyset$  be the set of budget sets. Consider the choice structure, such that for every  $B \in \mathcal{B}$

$$C(B) = C_1(B) \cup C_2(B)$$

where  $C_j(B) = \{x \in B : x \succsim_j y \text{ for every } y \in B\}$

a) would such a choice structure satisfy WARP

b) consider the Sen's  $\alpha$  axiom which says that for every  $A, B \in \mathcal{B}$  such that  $A \subset B$ ,  $x \in A \cap C(B) \implies x \in C(A)$ . Does the above choice structure satisfy  $\alpha$ ?