Consider the following consumption Edgeworth box diagram in which $A$ represents the distribution at the intersection of two indifference curves; $B$ and $C$ represent the distributions at tangencies between two indifference curves; $D$, $E$, and $F$ represent the distributions at their adjacent dots; $G$ represents the distribution at the intersection of two dashed lines; and $\mathbb{1}$ and $\mathbb{2}$ represent the respective origins of consumers 1 and 2:

1. What are the total quantities of goods $x$ and $y$ available and what, at distribution $G$, is the distribution of goods $x$ and $y$ between persons 1 and 2?

2. Which, if any, of distributions $A$-$E$ are Pareto optimal or efficient in consumption? In each case, explain why or why not.

3. Which, if any, of distributions $A$-$E$ lie on the consumption contract curve? In each case, explain why or why not.

4. From society's perspective, is
   a) distribution $B$ better than distributions $A$, $C$, $D$, and $E$? Why or why not? 
   b) distribution $F$ better than distributions $A$, $B$, $C$, and $E$? Why or why not?