

Ec360 Homework 2 - Word Problems

- Ike's utility function is $U(x, y) = 25xy$. He has 12 units of good x and 8 units of y . Ben's utility function for the same two goods is $U(x; y) = 4x + 4y$. Ben has 9 units of x and 13 units of y .
 - Ike prefers Ben's bundle to his own bundle, but Ben prefers his own bundle to Ike's.
 - Ben prefers Ike's bundle to his own, but Ike prefers his own bundle to Ben's.
 - Each prefers the other guy's bundle to his own.
 - Neither prefers the other guy's bundle to his own.
 - Since they have different preferences, there is not enough information to determine who envies whom.
- Hans has 10 dollars, which he decides to spend on x and y . Commodity x costs \$2 per unit and commodity y costs \$1 per unit. He has the utility function $U(x; y) = x^2 + y^2$ and he can purchase fractional units of x and y . (Hint: $x^2 + y^2 = R^2$ is the equation of a circle of radius R , centered at $(0,0)$.)
 - Hans will choose only x .
 - Hans will choose only y .
 - Hans will choose some of each commodity, but more y than x .
 - Hans will choose some of each commodity, but more x than y .
 - Hans will choose equal amounts of the two commodities.
- Walt consumes strawberries and cream but only in the fixed ratio of three boxes of strawberries to two cartons of cream. At any other ratio, the excess goods are totally useless to him. The cost of a box of strawberries is 10 and the cost of a carton of cream is 10. Walt's income is 200. Which of the following is true?
 - Walt demands 10 cartons of cream.
 - Walt demands 10 boxes of strawberries.
 - Walt considers strawberries and cartons of cream to be perfect substitutes.
 - Walt demands 12 boxes of strawberries.
 - None of the above.

This homework is due in class Tuesday, Sept. 28.
Please show your reasoning along with your answers.