

1. (a) The slope of any point on the PPF shows, at that point, how much honey Jack must give up if he is to produce an additional unit of yogurt. Jack's PPF is illustrate in figure 1.

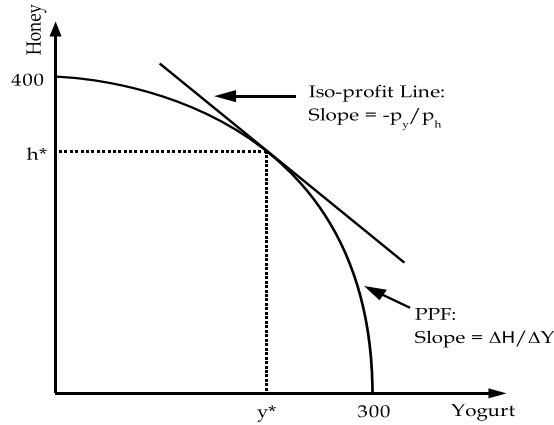


Figure 1: Jack's Optimal Bundle

- (b) Jack's goal is to maximize his profit. The further an iso-profit line is from the origin, the higher the profit associated with it. Jack's goal is therefore to get onto the highest iso-profit line possible. The goal is achieved at the tangency between his iso-profit line and the PPF illustrated in figure 1.

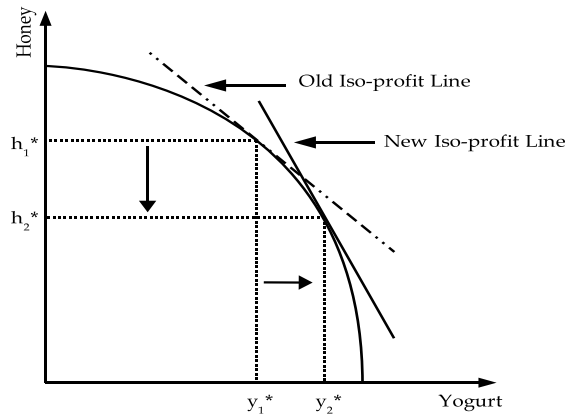


Figure 2: A Rise in the Price of Yogurt

- (c) The rise in the price of yogurt will decrease Jack's production of honey, as shown in figure 2.
- (d) As figure 2 shows, a rise in the price of yogurt decreases the supply of honey *holding* the price of honey constant. Thus, the supply curve of honey shifts to the left when the price of yogurt rises: for a fixed price of honey, supply is now lower than it was before the price of yogurt changed. Figure 3 illustrates the situation.

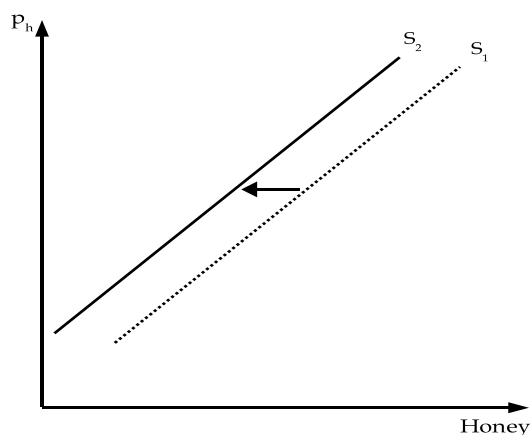


Figure 3: A Shift in Honey's Supply Curve

- 2. (a) Cressida's indifference curves must slope downward, bow inward, and not intersect.
- (b) Figure 4 shows Cressida's optimal consumption bundle. Note that her indifference curves are L-shaped because she views honey and yogurt as perfect complements.
- (c) Figure 5 depicts a rise in Cressida's income. Her new consumption bundle must be located between points *A* and *B* (any other bundle yields lower utility than points *A* and *B*). All of these bundles imply increased consumption of both honey and yogurt. If an increase in income increases consumption, both honey and yogurt must be normal goods.
- (d) Figure 6 depicts a decrease in the price of honey. Cressida's new consumption bundle must be between points *A* and *B*. All of these bundles imply increased consumption of yogurt. Cressida's demand curve for yogurt shifts to the right: the price is unchanged and she is demanding more yogurt.

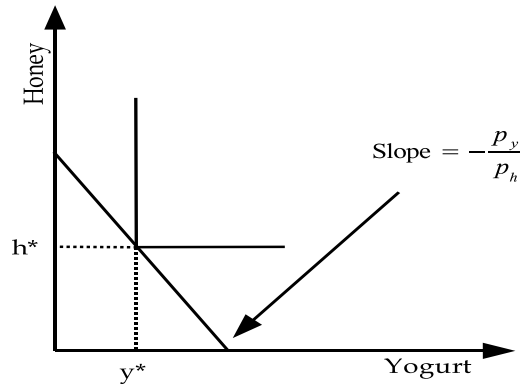


Figure 4: Cressida's Optimal Consumption Bundle

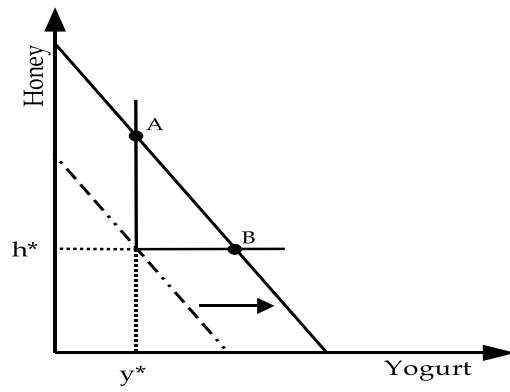


Figure 5: An Increase in Cressida's Income

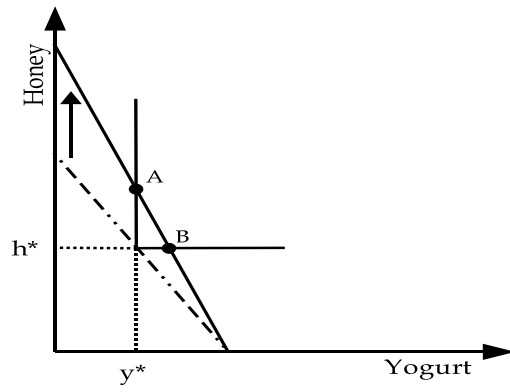


Figure 6: A Fall in the Price of Honey