

METU, Department of Economics

ECON 201 – Problem Set 6

- 1- The prices are $(p_1, p_2) = (2, 3)$, and the consumer is currently consuming $(x_1, x_2) = (4, 4)$. There is a perfect market for the two goods in which they can be bought and sold costlessly. Will the consumer necessarily prefer consuming the bundle $(y_1, y_2) = (3, 5)$? Will she necessarily prefer having the bundle (y_1, y_2) ?
- 2- The prices are $(p_1, p_2) = (2, 3)$, and the consumer is currently consuming $(x_1, x_2) = (4, 4)$. Now the prices change to $(q_1, q_2) = (2, 4)$. Could the consumer be better off under these new prices?
- 3- Suppose that by some miracle the number of hours in the day increased from 24 to 30 hours (with luck this would happen shortly before exam week). How would this affect the budget constraint?
- 4- Explain how the individual labor supply curve can become backward-bending at high wage levels. Use the decomposition into income and substitution effects of a wage increase on leisure to show:
 - a) Why the labor supply curve may initially slope upward, and
 - b) Under what conditions it bends backward (i.e., higher wages lead to fewer hours worked).Illustrate your answer with an indifference-curve/budget-constraint diagram.
- 5- If leisure is an inferior good, what can you say about the slope of the labor supply curve?
- 6- Consider a worker who has chosen to supply a certain amount of labor $L^* = R - R^*$ when faced with the wage rate w . Now suppose that the firm offers him a higher wage, $w' > w$, for extra time that he chooses to work. Such a payment is known as an overtime wage. What can you say about the change in the labor supplied for this individual worker?