

Economics 150A - Labor Economics

Assignment #1 Answers

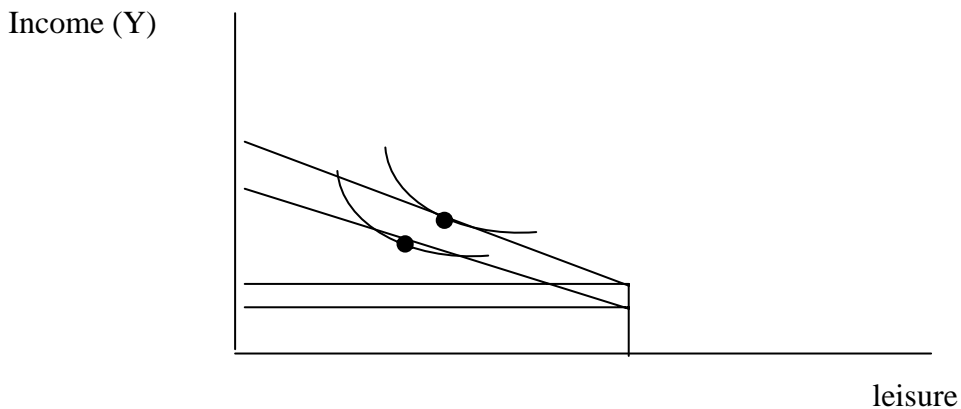
Question 1

Sue is currently working 40 hours per week at a wage rate of \$15 per hour. Sue also has \$40 of non-wage income per week. The employer decides to institute a uniform cleaning fee of \$100 per week. Does this affect her hours of work choice? If so, does she work more or less?

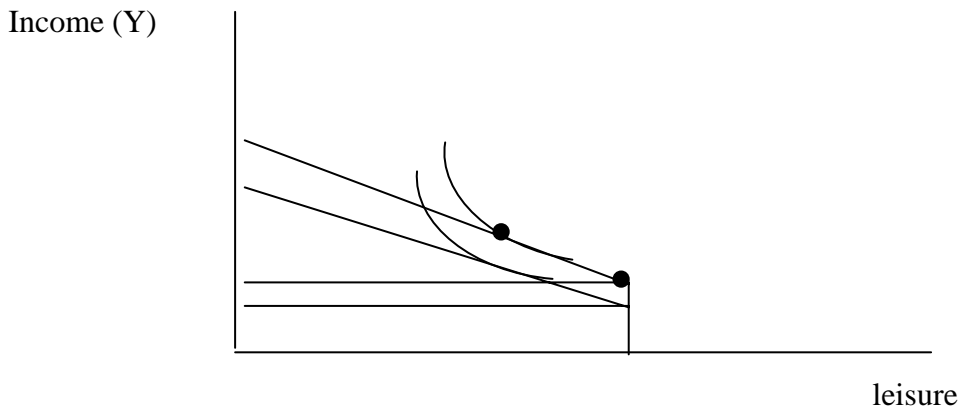
Answer

Since there is only an income effect, she will work more hours if she continues to work or she will drop out of the labor market. Given the small size of the fixed cost, it is most likely that she will stay in the market and work more hours.

Possibility 1. Works More



Possibility 2. Leaves the Labor Market

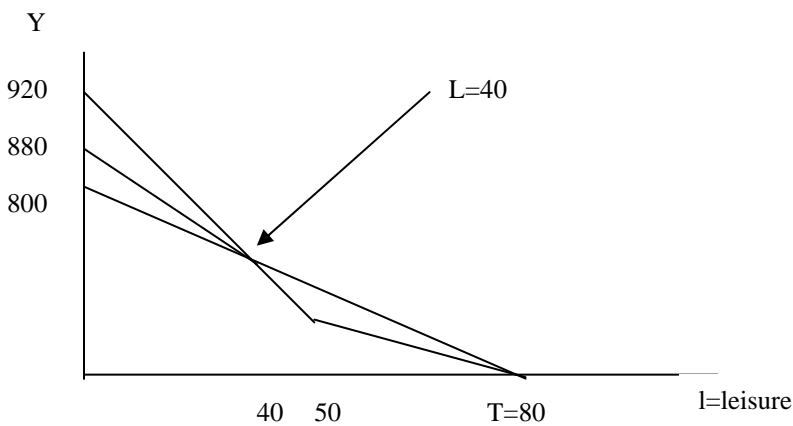


Question 2

Nora is presently facing a wage of \$10 per hour and is choosing to work 40 hours per week. Given the described preferences, which of the following two wage contracts will cause Nora to work the most hours?

- (a) A straight over-time contract that pays \$10 per hour for every hour up to 40 hours and \$12 for every hour thereafter.
- (b) A contract that pays \$9 per hour for each hour up to hour 30 and then \$13 for every hour thereafter.

Answer



Let's assume that the maximum hours available for work and leisure are 80 ($T=80$) - you can pick at different T if you'd like, nothing will be different.

Under the going wage of \$10 per hour she could earn \$800 if she worked all 80 hours and took no leisure. But we're told that she chooses to work 40 hours.

Under contract A she can earn \$880 if she works 80 hours. Under contract B she can earn \$920 if she works 80 hours.

Given the structure of contract A and B, we know that both pass through the 40 hours for \$400, so we know that contract B is the best contract.

Question 3

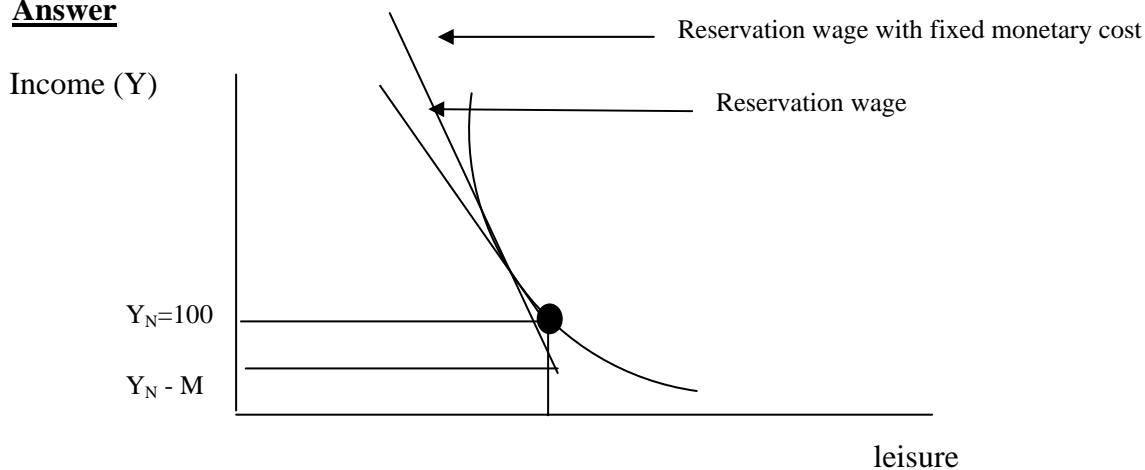
Among single, college-educated women aged 22-25, average annual hours worked is 2,160 and the average wage is \$22.50. If the average wage increases to \$25 per hour, average annual hours worked increase to 2,340. What is the elasticity of labor supply for this group of workers?

$$\eta = \frac{\% \Delta L_s}{\% \Delta w} = \frac{\frac{2,340 - 2,160}{2,160}}{\frac{25.00 - 22.50}{22.50}} = \frac{1/12}{1/9} = 0.75$$

Question 4

Does forcing a worker to pay a fixed monetary cost of work increase or decrease his reservation wage? Assume that he has a non-wage income of \$100 per day and that the going market wage rate (i.e. the wage he can earn if he chooses to work) is \$10 per hour. (6 points)

Answer



Since the worker can always choose to not work and simply collect their non-wage income, a fixed monetary cost of work will always increase their reservation wage.