

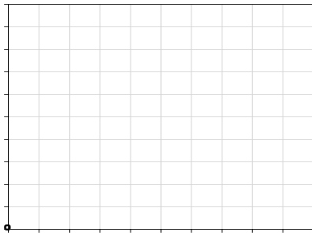
## Pdf Report for Pset4

**Full Name:**

### Reference 1: Taxes and Labor Supply

1. Suppose that you can earn \$20 per hour before taxes and can work up to 168 hours per week. Consider two income tax rates, 5% and 10%. On the same diagram, sketch the two weekly consumption-leisure budget constraints reflecting the two different tax rates.

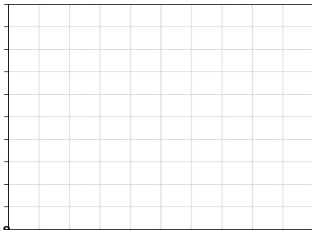
**Answer:**



### Reference 1: Taxes and Labor Supply

2. Using the information in question 1, Sketch a set of representative indifference curves such that the income effect of the tax increase outweighs the substitution effect.

**Answer:**

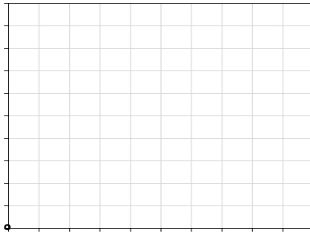


### Reference 1: Taxes and Labor Supply

3 Using the information in question 1 Draw a set of representative indifference curves

or using the information in question 1, draw a set of representative indifference curves such that the substitution effect of the tax increase outweighs the income effect.

**Answer:**



## Reference 2: Interpreting regression results

Suppose that you estimate the following female labor supply relationship:

$$H_i^S = -320 + 85(\text{after-tax wage})_i + 320(\text{college graduate})_i - 120(\text{married})_i,$$

where  $H^S$  is quantity labor supplied measured in annual hours worked and wages are expressed in hourly wages.

4. Interpret the coefficient on after-tax wages. What does this coefficient imply about the effect of increasing wages from \$6 to \$10 per hour on labor supply?

**Answer:**

## Reference 2: Interpreting regression results

Suppose that you estimate the following female labor supply relationship:

$$H_i^S = -320 + 85(\text{after-tax wage})_i + 320(\text{college graduate})_i - 120(\text{married})_i,$$

where  $H^S$  is quantity labor supplied measured in annual hours worked and wages are expressed in hourly wages.

5. What can we learn from this estimate about the income and substitution effects of wages on labor supply?

**Answer:**

## Reference 1: Taxes and Labor Supply

6. Suppose that a person lives for two periods, earning \$30,000 in labor income in period 1, during which she consumes or saves for period 2. What is saved earns interest of 10% per year. Draw that person's intertemporal budget constraint in a world of no taxes (BC1) and then a new budget constraint in a world in which the government taxes interest income at the rate of 30% (BC2) and then in a world in which period 1 labor income is taxed at 30% (BC3).

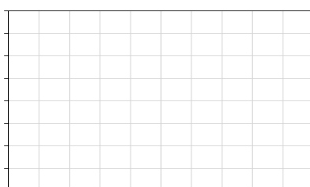
**Answer:**



## Reference 1: Taxes and Labor Supply

7. Refer to the previous question. By drawing the budget constraint and initial indifference curve (hence initial optimal point), show the effect of the tax on interest income on the optimal consumption choice by drawing new budget constraint and new most likely indifference curve.

**Answer:**

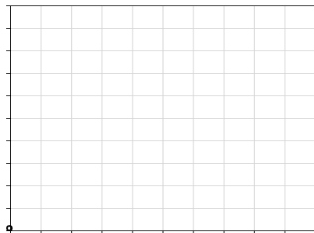




## Reference 1: Taxes and Labor Supply

8. Similar to the previous question, show the effect of tax on labor income on the intertemporal choice of the individual by comparing the optimal points with and without the tax on labor income. Make sure that you draw the two budget constraints and the corresponding two indifference curves.

**Answer:**



9. Based on the last two questions, discuss how saving will change in the two cases. In which case will saving changes will be higher?

**Answer:**