1. Eve can choose the number of hours she works, and hence the number of hours of leisure she enjoys, over the course of a week. Given the wage rate of $5/hr, she maximizes her utility by working 41 hours a week. There are 168 hours in a week.

   a) Using an indifference diagram with leisure hours on the horizontal axis and market goods on the vertical axis, show her weekly consumption of leisure and market goods. Assume that the unit price of market goods is $1.

   b) Suppose that Eve receives an unconditional cash transfer of $200 a week. In the indifference diagram from part a, draw a new budget line which includes this cash transfer.

   c) Assume that leisure is a normal good. With the unconditional cash transfer of $200 a week, does Eve work more or less? Indicate her new consumption point in the indifference diagram from part b.

   d) Now suppose that Eve receives a means-tested cash transfer of $200 a week, instead of the unconditional cash transfer. Assume that the benefit-reduction rate (implicit tax rate) is 100%. In the indifference diagram from part c, draw a new budget line which includes this means-tested cash transfer.

   e) Suppose that, given the means-tested cash transfer of $200, Eve decides not to work at all. Could this be a rational decision? In other words, could she be maximizing her utility by dropping out of the labor market? Explain.

   f) Now suppose that the benefit-reduction rate (implicit tax rate) of the means-tested cash transfer changes from 100% to 50%. The guaranteed income (basic grant) is still $200. How does this change in the benefit-reduction rate (implicit tax rate) change Eve's budget line?

   g) Suppose that, given the change in the benefit-reduction rate (implicit tax rate), Eve decides to work again. Could this be a rational decision? In other words, could she be maximizing her utility by going back to her old job? Explain.

   h) Now suppose that Eve just lost her job, and decided to look for a new job. She faces an increasing marginal search cost (MSC) and decreasing marginal search benefit (MSB). Using MSC-MSB diagram (with weeks unemployed on the horizontal axis), show Eve's optimal job search time $t$.

   i) Now suppose that Eve receives unemployment compensation of $s a week, for up to 26 weeks. How does this change affect Eve's optimal job search time? Explain using MSC-MSB diagram.
2. Means-Tested Transfer Programs
   a) List the three most important means-tested cash transfer programs (as of 1994).
   b) List the three most important means-tested in-kind transfer programs.
   c) What is the largest spending means-tested program?
   d) Who are the beneficiaries of AFDC? Of SSI?
   e) Is there uniform minimum federal guarantee for AFDC? For SSI?
   f) Which means-tested cash transfer program pays benefits only to working families?
   g) Under what condition are food stamps as good as cash transfer for a recipient?

3. Social Insurance (non-means tested) Transfer Programs
   a) List the three most important social insurance programs.
   b) How is social security financed?
   c) The social security program is unfunded. What does this mean?
   d) According to the benefit-to-tax ratio, who are the greatest gainers of the social security program?
   e) How is Medicare financed?
   f) Who are the beneficiaries of Medicare?
   g) How is unemployment insurance financed?
   h) What is the moral hazard problem associated with unemployment insurance?
   i) What is the adverse selection problem associated with private provision of unemployment insurance?

Definitions:
- pay-as-you-go basis
- adverse selection
- moral hazard
- security income program
- poverty line
- poverty gap
- coinsurance rate
- captitation basis of payment