1. a. Cite two major differences between AFDC and TANF.

- **TANF** has a time limit for benefits no more than five years. **AFDC** had no such limit.
- **TANF** gives states the power to experiment. **AFDC** had no such provision.
- **TANF** had a welfare requirement, but **AFDC** did not.
- **TANF** gave states a fixed amount with grants. **AFDC** was an entitlement and gave funds to states based on quality. **TANF** tended to have a lower reduction in benefits for each dollar earned.

b. I was reading a book this weekend about women on AFDC; *American Dream* by Jason DeParle. One of the women, Angie, who lived in Milwaukee in 1991, received about $150 per week in AFDC. Angie did not graduate from high school, so let us assume she earned $5.00 per hour (a bit more than the minimum wage of $4.25 at the time.) The author noted that AFDC reduced her benefits by about 60 cents for every dollar she earned. In the space to the right, draw her budget line using the labor-leisure model. Label it AB. Very carefully label and number the axes.

c. Draw an indifference curve showing her working zero hours.

d. Like many people in the book, Angie did not tell the welfare office she was employed. If that were the case, draw her actual budget line and label it CD. For clarity, draw ++++ along CD so I know which line it is.

e. If someone followed the rules and reported their earnings to the welfare office, and as a result had their payment adjusted, would this have a positive or negative impact on the hours they work? Explain. (In other words, what impact did AFDC have on people’s employment compared to no such program?) Please use the diagram above to help explain your answer.
2. The United States Social Security System is a pay-as-you-go system.

a. Explain what this means.

b. Who gets a higher return on their social security contributions; high income or low income workers? Explain why.

c. Cite one group in the population that receives a higher than average return on their social security contributions?

d. What impact do social security benefits have on labor supply? Explain, using the labor leisure model diagram. Carefully label and explain all parts of the graph.

e. If social security in the United States were to be privatized, we would face the transition issue. Please explain what the transition issue is.
3. Suppose the City of Delaware is considering doing a cost-benefit analysis to dam up the Olentangy River and build a lake for recreation.

   a. In class we noted there are direct benefits and indirect benefits from such a project. Please give an example of each within the context of this example of a dam and lake.

   Direct (what project is attempting to do) Add'1 utility from recreation: boating, swimming

   Indirect - occurs second. People who sell boats, swimming shoes, lunch

   b. We noted in class and Rosen notes in the text that the government frequently uses a discount rate of seven percent net of inflation. Rosen notes that there is a more appropriate rate and also as discusses some of the factors that enter into the picture in choosing a social discount rate for government projects. State either what he suggests might be used as the appropriate government discount rate or one of the factors to be considered in setting the social discount rate.

   More appropriate - Rate of return in the private sector

   or

   Other factors that affect social discount rate

   Concern for future generations

   - Externalities

   c. If we examine the cost and benefits we find

<table>
<thead>
<tr>
<th>Year</th>
<th>Benefits</th>
<th>Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>0</td>
<td>$50,000</td>
</tr>
<tr>
<td>2007</td>
<td>$30,000</td>
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</tr>
<tr>
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<td>$10,000</td>
</tr>
<tr>
<td>2009</td>
<td>$30,000</td>
<td>$10,000</td>
</tr>
</tbody>
</table>

   Using a ten percent discount rate, please calculate the present value of both the costs and benefits.

   \[
   PV_{\text{Benefits}} = \sum_{k=0}^{3} \frac{B_m}{(1.10)^k} = \frac{0}{(1.10)^0} + \frac{30,000}{(1.10)^1} + \frac{30,000}{(1.10)^2} + \frac{30,000}{(1.10)^3} = 74,665.56
   \]

   \[
   PV_{\text{Costs}} = \sum_{k=0}^{3} \frac{C_m}{(1.10)^k} = \frac{50,000}{(1.10)^0} + \frac{10,000}{(1.10)^1} + \frac{10,000}{(1.10)^2} + \frac{10,000}{(1.10)^3} = 74,864.52
   \]

   d. Should the dam be built? Explain why.

   No, \( PV_{\text{Benefits}} < PV_{\text{Costs}} \)
4. a. Please explain the difference in populations served by Medicare and Medicaid.

Medicare, for the most part, serves the elderly and some disabled.

Medicaid serves low income individuals who are either disabled, elderly or families with children.

b. How is each program funded?

Medicare - general tax dollars (federal and state)

Medicaid - specific payroll tax + user contributions (some federal money from general revenue fund)

c. We have noted the six market failures and two other reasons for government intervention in the economy. Please give two of these as reasons for the government to intervene in the market for health care. Explain each.

Answers will vary

d. We have noted in class the health care expenditures are a large share of GDP and will be increasing. Please take one of the methods we have discussed in class for limiting health care expenditures and explain it. Would you favor the adoption of this method? Explain why, including the impact that the chosen method would have on health care and health care expenditures.

Possible plans:

- Oregon plan
- Single-payer
- Medical Savings Accounts
Reading Problem. Four points.

5. Summarize either of the two Leonhardt readings on health care.

People are paying a larger share of their income on health insurance. In return, though, we are living longer. There might be waste, but this is still a trade-off: people want to make $15 for longer life.

Shorter problems. Six points each. Do all.

6. There are two main methods to determine the value of a life in a Cost-Benefit Analysis. Briefly describe both.

Human capital / lost earnings. The value of the life is the lost earnings the person who died by $12. If they would pay $10,000 to reduce the probability of death by $12, the value of a full life is $10,000.$12.

7. Briefly describe how the Unemployment Insurance system works in the U.S., i.e., how it is funded, who runs it, who is eligible. What impact does the program have on unemployment? Explain why.

The Unemployment Insurance system is a joint federal/state program. It is funded by a payroll tax. The tax varies with the degree to which firms let workers go. Unemployment as a now workers will draw UI increases will searching and search longer.

8. What is meant by moral hazard in the terms of health insurance?

The fact that people are insured might cause them to alter their behavior. You might not take as good care of yourself or engage in risky behavior if insurance will pay the cost.
9. I mentioned in class the idea of Jon Gruber that we can view the marginal benefit of health care and the fact that the US is on the flat end of the curve. Please recreate the diagram, label the axes and explain why this is important in terms of explaining overall health care expenditures.

![Graph showing marginal benefit of health care](image)

**MB** is marginal benefit, what people are willing to pay for a $ of health care services.

3rd party pays reduce what people have to pay for a procedure. If 3rd party picks up 90% of cost, they will pay only 10% of cost and will consume more. This increase overall spending.

10. Give an example of an in-kind transfer. From our discussion in class, cite one reason why in-kind transfers are used as opposed to cash transfers.

*In-kind transfer - give good instead of cash.
- Food stamps, medical assistance, wish of donors,
- Make sure money is spent on what it is intended for.
- Externalities: Food stamps help farmers if money spent on ad

11. a Briefly explain what the Earned Income Tax Credit (EITC) is.

*This is a program that gives a refundable tax credit to low income workers whose primary source of income is employment.*

b. What is the phase-out under the EITC?

To prevent giving money in all, the tax credit is reduced as income rises beyond a certain level.

c. Suppose the phase-in range of the EITC was increased from its current level of 40% up to 60%. What impact would this have on the supply of labor? Why?

*This would mean an increase in the tax credit. The wage would increase. In all likelihood, a low income individual would respond to this increased net wage by working more.*