Problem Set #8 Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

PPA 897

Professor John McPeak Due:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Given our discussion of social welfare functions, identify the best policy according to each of the alternative welfare functions considered in class:

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | Utility person 1 | Utility person 2 | Utility person 3 |  | Utilitarian SWF | Rawlsian SWF | Multiplicative SWF / 1000 |
| Policy A | 14 | 80 | 26 |  |  |  |  |
| Policy B | 20 | 20 | 20 |  |  |  |  |
| Policy C | 25 | 40 | 15 |  |  |  |  |
| Policy D | 1 | 99 | 50 |  |  |  |  |
| Which Policy is best by this SWF? |  |  |  |

Contrast the different findings in terms of the average level of utility and the distribution of utility.

2) Inequality.

a. Draw and interpret a Lorenz curve. Be clear about what is on the x-axis and what is on the y-axis.

b. Draw another Lorenz curve, and note areas A and B that can be used to calculate the Gini coefficient.

c. What range of values for a Gini coefficient is considered relatively equal? What range is considered relatively unequal?

1. Illustrate the deadweight loss of uninformed demand when there is a negative health consequence of consumption that the consumer is not aware of currently.
2. Public goods. There are three people who live in a town. They each have a demand curve for the number of flowers to be planted in the town square (q is the # of flowers). Fran’s demand is $5.50-$0.10\*q. Eloise’s demand is $3.20-$0.40\*q. Madeline’s is $3.25-$0.15\*q.
3. If the marginal cost planting a flower is constant at $4.80 per flower and no effort is made to avoid the free rider problem, what number of flowers will be planted and who will provide these flowers?
4. How much less is this than the socially optimal number of flowers if the cost is $4.80 per flower?
5. Describe why public good provision is different from private good provision using the characteristics of rivalry and excludability.