ECONOMICS 1A: PROBLEM SET 2

Positive versus Normative

1. Which of the following statements are *positive* and which *normative*?

A.   Free trade causes the loss of high paying manufacturing jobs in the US, and reduces unskilled wages in general. **P**

B.   Free trade is undesirable because it reduces unskilled wages and increases welfare costs. **N**

C.   The best way to reduce congestion is to charge tolls for highways. **N**

D.   Highways are congested because the government allows free access to them. **P**

E.   Adding a runway to San Francisco airport would be economically efficient.   **P**

F.   Studies have shown that for moderate risks Americans act as if they valued their lives at $4 million each.   **P**

G.   The government should not institute any safety program that costs more than $4 million per life saved. **N**

H.   Under perfect competition markets achieve economic efficiency.   **P**

I.   The government should not interfere in any market that is competitive. **N**

J.   Professor Clark hates dogs.   **P**

2.   Here are some propositions (from Greg Mankiw's blog), and the percentage of economists who agree to them (in brackets). Which are *normative*, and which *positive*?

A.   A ceiling on rents reduces the quantity and quality of housing available. (93%) **P**

B.   Tariffs and import quotas usually reduce general economic welfare. (93%)   **N**

C.   The United States should not restrict employers from outsourcing work to foreign countries. (90%)   **N**

D.   The United States should eliminate agricultural subsidies. (85%)   **N**

E. Local and state governments should eliminate subsidies to professional sports franchises. (85%) **N**

F. The gap between Social Security funds and expenditures will become unsustainably large within the next fifty years if current policies remain unchanged. (85%) **P**

G. Cash payments increase the welfare of recipients to a greater degree than do transfers-in-kind of equal cash value. (84%)   **P**

H. A large federal budget deficit has an adverse effect on the economy. (83%) **N**

I. A minimum wage increases unemployment among young and unskilled workers. (79%) **P**

J. Effluent taxes and marketable pollution permits represent a better approach to pollution control than imposition of pollution ceilings. (78%) **N**

Efficiency

3. Explain using each of the definitions of efficiency given in class why each of the following outcomes is *inefficient*.

A. A train ticket from Davis to SF costs $25 even though generally not all seats are occupied.

On Any train with empty seats, mc = 0.

B. Café Bernardo charges the same prices at all times of the day, and all days of the week.

MC of meal varies depending how busy the restaurant is, which varies substantially through the week. Sometime the MC is just the cost of the food.

C. It costs $6 to park in the UC parking lots on Fridays even though spaces are abundant then.

With empty spaces, mc = 0

D. It costs the same amount per quarter to take courses at UCD independent of how full the courses you take are.

For a course with empty seats, mc is close to 0. For a course that is full, MC = value of class to the first person excluded, can be very high

E. Because of government subsidies the cost per seat of Opera productions in the Covent Garden Opera House in London is about $200, while the audience would pay on average only $100 per seat if each person was charged the maximum they would be willing to pay.

The average Opera goer would be happy to take $100 instead of the opportunity of going to the Opera, which would save the government $100.

F. Requirements for the same safety standards for workers in poor countries that export goods to the US as in the USA.

Workers in low wage economies would trade lower safety for higher wages.

4. Explain using each of the definitions of efficiency given in class why each of the following programs would be *efficient*.

A. A free market in body parts such as kidneys.

In the free market people would trade kidneys for $.

B. Locating undesirable facilities such as garbage dumps, incinerators, hazardous waste dumps, and prisons in the community that makes the lowest bid on how much monetary compensation it would require.

Poor communities would require the least compensation, so the undesirable site would be located at the least economic cost.

5. It can cost as much as $1 billion to get approval for a new drug in the US. That means that in the 20 years the drug is under patent the manufacturer has to charge high prices to recover these development costs (as well as the costs of all the drug trials that failed to establish efficacy). Patented drugs used to treat rarer conditions can thus costs $10,000-$100,000 a year per patient. Explain why this method of paying for drug development costs is inefficient.

Given that the research and drug trials have already been done, the MC of the drug is just the manufacturing and distribution costs, which will be much lower.

6. Suppose that the British government has to locate a new flight path into Heathrow airport. Four routes are technically feasible. Each lies over a different suburb. The table shows the population of each suburb, and the amount by which local house values would fall if the flight path was imposed there.

Suburb	Richmond	Southall	Staines	Harrow
Population	30,000	80,000	60,000	50,000
Decline in house prices if flights from 6 am to 12 pm	$1,200 m.	$600 m.	$300 m.	$900 m.
Decline in prices if 24 hour flights	$1,500	$800	$500	$1,000

(a) Assuming only daytime flights which choice of flight path would do the minimum damage to people measured in terms of the aggregate "annoyance" from noise.

Richmond

(b) Which flight path for daytime would do the least dollar value of damage?

Staines

(c) What is the efficient choice of flight path?

Staines

(d) If no compensation is paid what would justify choosing the efficient flight path?

Income distribution is already optimal, so that $ costs measure true social costs

(e) Suppose that the government will compensate the suburb that ends up under the flight path with a sum of money. It asks for bids as to how much compensation each suburb would require to accept the noise. The compensation will be raised by auctioning off landing rights on the new runway. Show that the runway will only be built if everyone is at least as well off as before.

Staines will bid for $300m+. If the airlines will bid $300m+ for the landing rights then it is possible to do a trade that makes both the airlines and Staines better off => efficiency.

(f)   Suppose the government can auction the landing rights for night landings to airlines for an additional $150 m. Are night flights efficient?

NO