

Midterm 1 Solutions

MC

1. b) and c) Both B^0 and B^1 have the same intercept on the G_1 axis. They have different intercepts on the G_2 axis. So, p_2 is changing. Since p_2 falls, real income declines.
2. b) The substitution effect keeps you on the same indifference curve.
3. b) The budget lines B^C and B^1 are parallel. Thus, the move from B^C to B^1 is like a reduction in money income.
4. a) Both B^0 and B^C allow the consumer to attain the original indifference curve. Thus, real income is held constant.
5. c) The compensated demand curve measures the substitution effect.
6. b) The area under the compensated demand curve between the original and the new price is the compensating variation.
7. b) If a good is normal, the income effect supports the substitution effect. This makes ordinary demand more elastic than compensated demand.
8. d) The consumer surplus exceeds the compensating variation when the good is normal and price is being reduced.
9. b) If labor supply slope up, then leisure consumption falls as the wage rises.
10. d) If labor supply is perfectly inelastic, then so is leisure consumption.

Economics for the Noneconomist Question - A suggested answer

A cash transfer from the government is an increase in money income by the recipient. A person will work less under such a transfer if that person's labor supply declines with unearned income (leisure is a normal good) or if there are strings attached that create a disincentive to work. Two examples of the latter are AFDC and unemployment benefits. In both cases the benefits to the recipient are reduced, or entirely eliminated, as the person works more. A person will work more under such a transfer if labor supply rises with unearned income (either leisure is inferior or work is itself a good) and there are no strings attached to the transfer.

Can leisure be inferior or work be a benefit in itself? Regarding the former, if non-market work such as housekeeping or childcare count as leisure, then it is sensible to think that an

individual might devote less time to these activities as income rises - instead, the individual obtains these services in the market. Regarding the latter, anyone who has spent time around academics knows that many live for their research. Given a release from day-to-day obligations these people would work more. Surely this is also true for some outside the academic sphere. So it is sensible to think labor supply rises with unearned income, in some cases. Are there cash transfers without strings attached? Winning the lottery comes to mind. There are other transfers with eligibility requirements, to be sure, but where eligibility is not income based. Examples are disaster relief assistance and some payments to farmers. Thus, the statement is false.

Part III - Problem

This is essentially the same problem as the normal labor supply problem, where the two commodities are leisure and consumption (all other goods) with the exception that research should take the place of leisure as the good on the horizontal axis.