BurkeyAcademy **Why Subsidies Suck, with Substitution and Income Effects**

Suppose the utility from Gasoline (**G**) and "All other Goods" (**Y**) is $U=G^{.2}Y^{.6}$

1) Initially, B=\$100, P_G=0.60, P_y=1. Maximize this person's utility. (Solve for optimal G, Y, U)

2) Now, B=\$100, P_G=\$1, P_y=\$1. Maximize this person's utility. (Solve for optimal G, Y, U)

3) Now determine the hypothetical decomposition basket, where people would get the same old utility as before, but at the new prices.

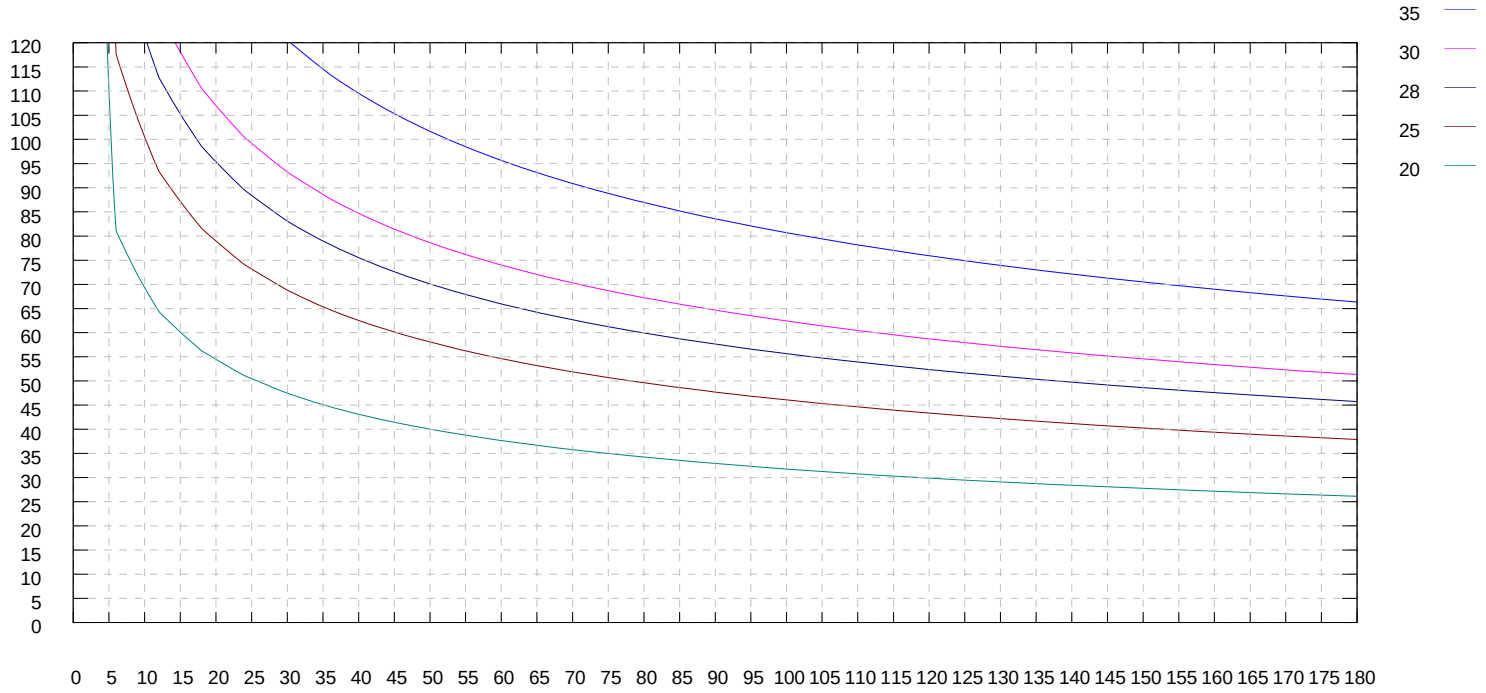
4) Determine how much of the total decrease in gasoline consumption is due to the income effect, and how much is due to the substitution effect.

5) What is the compensating variation? Explain what this means.

6) One last point: The compensating variation is LESS than what it would cost to keep the price of gasoline at 0$.60 with subsidies. Calculate this.

G is on the X axis, Y on the Y Utility from Gasoline (**G**) and "All other Goods" (**Y**) is $U=G^{.2}Y^{.6}$

Plot the three solutions, labeling them along with their budget lines.



Extra copy of indifference curves, just in case.