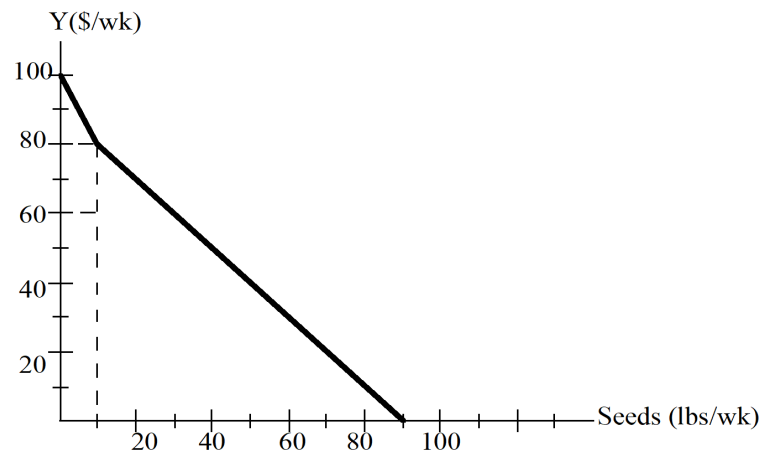**Problem Set 2**

Name:(last)_Jackson_____(first)_Grant_____

Acme Seed Company charges $2/lb for the first 10 lb you buy of marigold seeds each week and $1/lb for every pound you buy thereafter. If your income is $100/wk, draw your budget constraint for the composite good and marigold seeds.

Explain in your own words how the slope of an indifference curve provides information about how much a consumer likes one good relative to another.

The slope of the indifference curve represents the marginal rate of of substitution (MRS). A steeper slope means the consumer values the good on the y-axis more relative to the good on the x-axis at that point.

If Monique were given $10, she would spend none of it on tuna fish. But when asked, she claims to be indifferent between receiving $10 worth of tuna fish and a $10 bill. How could this be?

This could be due to Monique having a very low reservation price for tuna fish. The indifference between $10 cash and $10 of tuna indicates she would not buy the tuna, but sees value in it when given it for free.

When the price of gasoline is $1/gal, you consume 1,000gal/yr. Then two things happen: (1) The price of gasoline rises to $2/gal and (2) a distant uncle dies, with the instruction to his executor to send you a check for $1,000/yr. If no other changes in prices or income occur, do these two changes leave you better off than before?

Before: 1000 gal × 1 = 1000 spent
after: 1000 × 2 = 2000 - 1000 = 1000 spent

You can still afford the same amount of gas, plus you have more flexibility with the inheritance. You are better off after these changes.

Antonio and Isabella are economists. In an attempt to limit their son Hector's use of the family car, they charge him a user fee of 20 cents/mile. At that price he still uses the car more than they would like, but they are reluctant to antagonize him by simply raising the price further. So Antonio and Isabella ask him the following question: what is the minimum increase in your weekly allowance you would accept in return for having the fee raised to 40 cents/mile? Hector, who is known a truth-teller and has conventional preferences, answers $10/wk.

    a. If Antonio and Isabella increase Hector's allowance by $10/wk and charge him 40 cents/mile, will he drive less than before? Explain.

    b. Will the revenue from the additional mileage charges be more than, less than, or equal to $10/wk? Explain.

a) Hector will likely drive less than before. The price per mile increase creates a substitution effect encouraging less driving. Allowance increase by $10 is not likely to fully offset this.

b) The revenue from additional mileage charges will be likely be less than $10 per week. If it were more, Hector would have requested a larger allowance increase. The $10 request indicates Hector expects to reduce his driving enough that the higher per-mile cost won't exceed $10 per week extra.