Quiz #2

Andy purchases only two goods, apples (A) and kumquats (K). He has an income of $40 and can buy apples at $2/pound and kumquats at $4/pound. His utility function is $u(A, K) = 3A + 5K$.

1. Draw a picture containing Andy's budget line and a couple of his indifference curves.

2. Solve mathematically for Andy's utility-maximizing bundle of apples and kumquats.

3. A person with an income of $1,000 receives $200 worth of food stamps. Draw his budget line if he can sell food stamps on the black market for 50 cents on the dollar (i.e. he can exchange $X of food stamps for $\frac{X}{2}$ cash).

4. In a new picture below, redraw your budget line from question 3, as well as a set of indifference curves for someone who would decide not to trade any food stamps for cash.

5. Linda loves buying shoes and going out to dance. Her utility function for shoes (S) and the number of times she goes out dancing per month (T) is $u(S,T) = 3ST$, so $MU_S = 3T$, and $MU_T = 3S$. It costs Linda $100 to buy a new pair of shoes and $50 to go out dancing. She has $1000 to spend on clothing and dancing. Solve for Linda's utility-maximizing bundle of S and T.