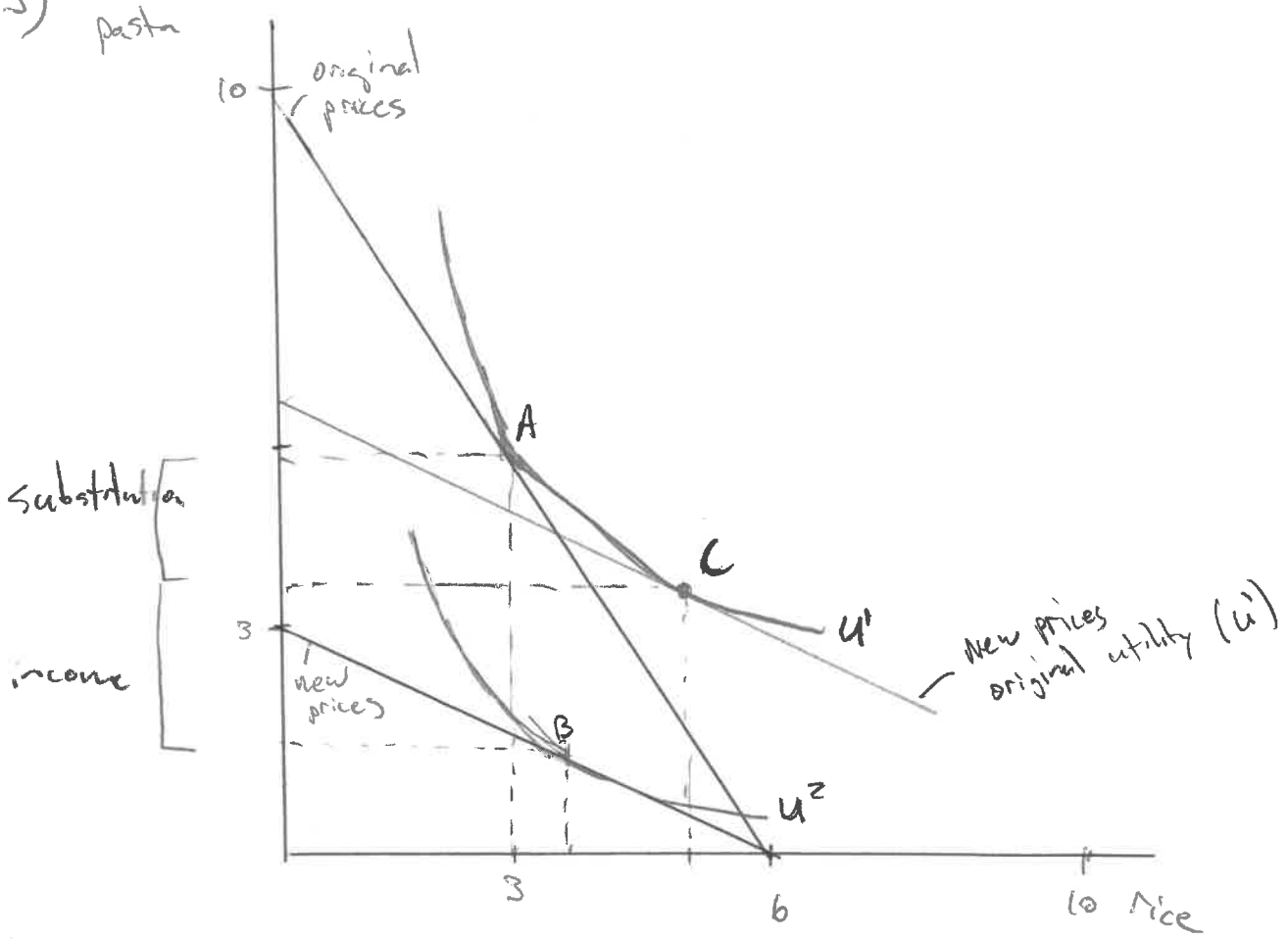
Homework 2

1) The optimal consumption bundle is the bundle on the indifference curve with the largest utility level that the person can afford. This is where the budget constraint and indifference curve are tangent to each other. We can also think about the "bang for our buck" that we get from consumption, such that $\frac{MU_x}{P_x} = \frac{MU_y}{P_y}$

This means the extra utility per $ is the same for both goods. If it was different then we could get more happiness by changing our consumption.

2) The substitution effect has to do with the change in consumption from the prices changing, but utility level being held constant. i.e. we are changing the budget constraint, but staying on the same indifference curve. The income (purchasing) power effect has utility levels change (different ~~budget~~ indifference curves) but the same prices.

3)



A) A → B is the total effect

A → C substitution effect

C → B income effect

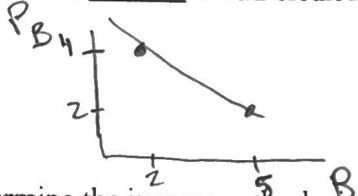
B) The size of the changes in quantity dictates which effect is larger.

4) Consider the indifference curves and budget constraint for consuming beer and pizza on the graph provided. Initially, the consumer income is \$16 and a slice of pizza is \$4 and a pint of beer is \$4.

A. Given budget constraint BC^0 show on the graph provided the optimal consumption decision of beer and pizza and in the space below explain the rationale why this is the optimal decision.

$\frac{MU_P}{P_P} = \frac{MU_B}{P_B}$ The "bang for your buck" in consuming each good is the same. Any other bundle from (2,2) would be either unaffordable or lower utility

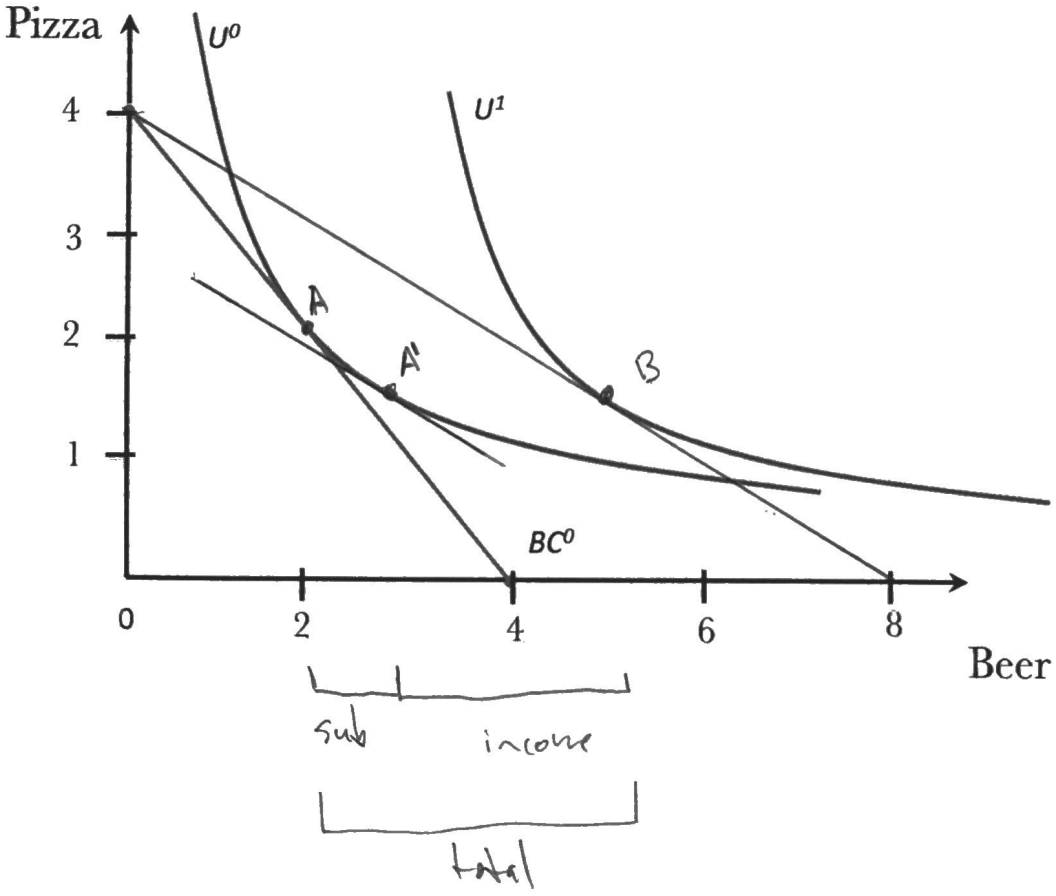
B. Suppose that the price of beer falls to \$2. On the graph draw the new budget line and find the new optimal bundle of beer and pizza. In the space below, explain how you would trace out the demand curve for beer. Extra credit if you draw the demand graph for beer.

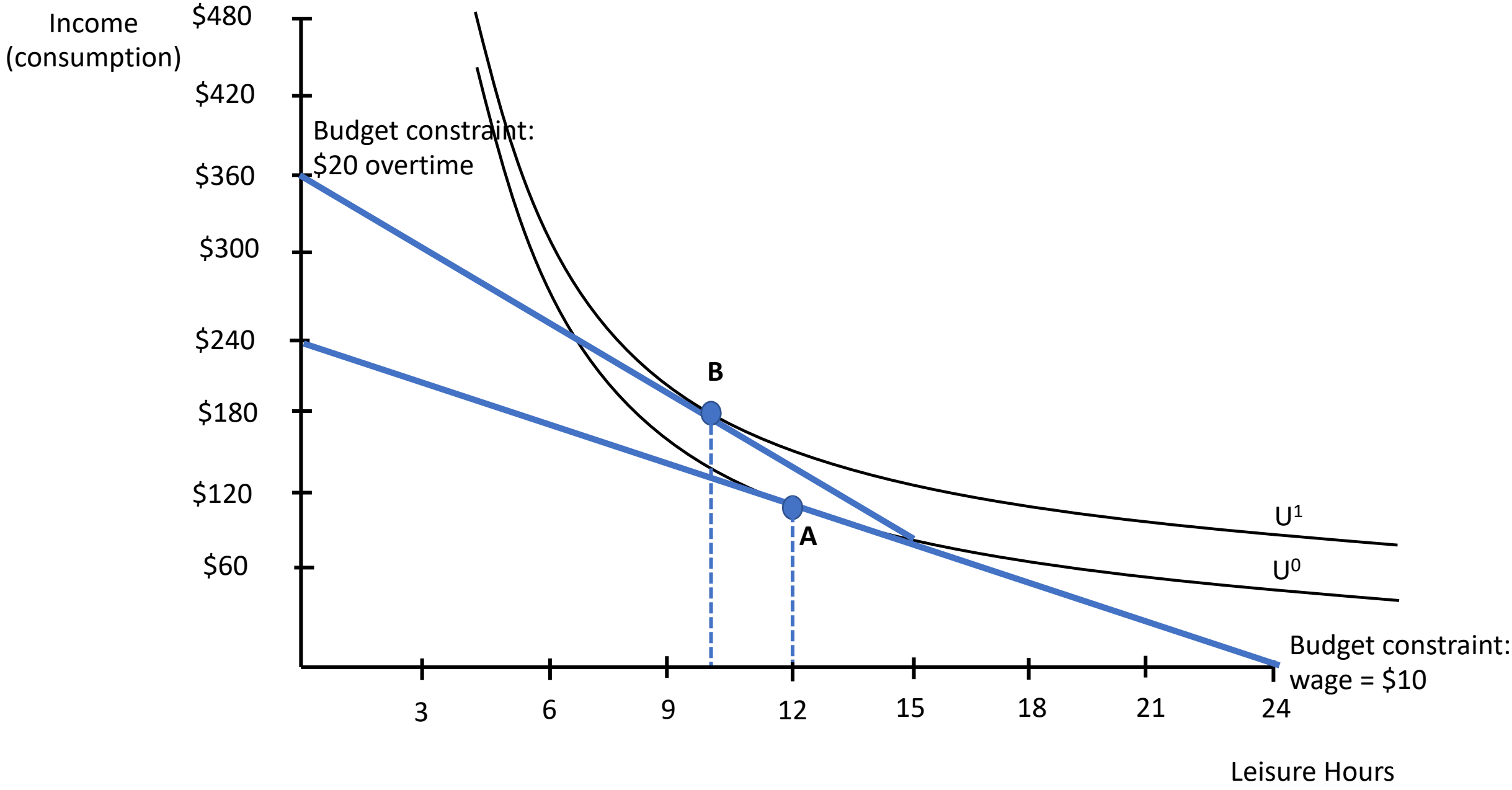


continue changing the price and look at the new optimal quantity.

C. Determine the income and substitution effect for the price change in part B (the price of beer falling by \$2). Show each effect on the graph provided.

D. Is beer a normal or inferior good? Explain how you know.





Based on my preferences, I'd end up working more hours, due to the higher pay